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NEAX[®] 2000 IVS

CallCenter*WorX*
ACD Features and Specifications

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NEC America, Inc.

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CallCenterWorX
ACD Features and Specifications
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INTRODUCTION

The intent of this document is to provide factual reference material pertaining to the features, operating characteristics and service conditions of CallCenterWorX which operates on the NEAX1000 and NEAX2000 switching systems. In order to effectively utilize this document the reader should have a reasonable working knowledge of a generic ACD system and the manner in which ACDs are deployed. The reader should then be able to refer to a specific ACD feature and read about its exact implementation on the NEC ACD. Inasmuch as a dictionary can be used to learn a language this document can be used to learn what an ACD is and how it operates.

Who should use this document

A salesperson required to respond to quotations for ACD systems can read this document and learn about which features are available without having to concentrate on exact functionality of each feature. He could limit his reading to the General Description so as to have a basic understanding of the product.

On the other hand, a sales engineer may need to know more specific information on exact features operation in order to decide how best to solve a certain call handling problem. The Sales Engineer would most likely need to read entire sections to understand the operating characteristics of ACD features.

Support technicians will also need to refer to this document when ACD problem solving is needed in order to understand whether the ACD is performing “according to spec”.

How this document is organized

This document has been sorted into alphabetical order by feature title. An index is available at the back to aid in cross-referencing certain ACD terminology to the feature(s) which implement the function.

Programming instructions are not present in this document. For latest information on these subjects refer to the ACD System Manual.

INTRODUCTION

Other related documents

These related documents can provide substantial additional information on the ACD components and how to construct an entire ACD system. They can be ordered by calling NEC Customer Service at 1-800-752-6275 and requesting the NEC Part Number referred to in the second column.

Table 1: Related Documents

ND / NDA #	NEC Part #	Title
N/A	188171	D ^{term} Series E Supervisor Console User's Guide
N/A	188172	D ^{term} Series E Agent Console User's Guide
N/A	185065	D ^{term} Series III 24 Button Agent User's Guide
N/A	185067	D ^{term} Series III Supervisor Console User's Guide
NDA 94101	241758	Abacus User's Guide
NDA 24186	241681	Navigator Configuration Guide
NDA 24188	241680	Navigator Reports Manual
NDA 24187	241682	Navigator Real Time Screen Manual
NDA 24213	151947	CallCenterWorX System Manual
N/A	151954	CallCenterWorX MIS Quick Reference Guide

CAPACITIES

The following table outlines the maximum programmable capacities of the ACD. Please be sure to check the hardware compatibility charts in Chapter 2, “System Requirements,” of the *CallCenterWorX System Manual* (stock # 151947) to verify minimum hardware level required for each version of software.

Table 2: ACD Configuration

System Component	Maximum
Announcements (routes)	57
Calls Active (simultaneous calls)	300
Call Control Vectors (20 steps each)	60
Holiday Schedules per Tenant	30
Logon IDs	300
MIS I/O Ports per System	2
MIS I/O Ports per Tenant	2
Multi-splits per Agent	16
Personal Pilot Numbers	300*
Pilot Numbers	200*
Positions	80**
Priority Levels	250
Splits	30
Station Calls	50
TCP/IP Clients (Infolink or MIS)	8
Tenants	9
Transfer-to PBX Numbers	120
Trunk Groups	63
Week Schedules	30
Busy Hour Call Attempts (BHCA)	<i>See Note</i>

* The NEAX2000 IVS PBX supports 128 personal pilot numbers and pilot numbers.

** The number of the positions available is dependent upon the security key.

Note: See the “NEAX2000 IVS² Business/Hotel/Data Features and Specifications Manual” for this information.

CAPACITIES

This page is for your notes.

ABANDONED CALL SEARCH

General Description

This feature prohibits abandoned incoming calls from being connected to agent / supervisor positions. Any trunk call disconnected during ringback tone is considered an abandoned call and is automatically removed from all queues. Trunk calls disconnecting after the first announcement must provide disconnect supervision to be classified as an abandoned call and to be removed from all queues. Once the ACD has answered a call, some central offices are unable to inform the ACD when a trunk is no longer in use. In these cases, the ACD is unable to recognize that the trunk has been abandoned and will connect the idle trunk to an agent / supervisor position.

Operating Procedure

1. A caller has dialed into the ACD and is waiting in queue since no agents were available. While waiting the calling party hears either ringback tone, a message, or music on hold.
2. The caller disconnects prior to being connected to an agent. This could be either while hearing an announcement, listening to music on hold, or even while the agent's phone is ringing. At this time the abandoned call is detected and the caller will be removed from all queues he was waiting in.
3. If the abandon occurred while ringing at an agent's position the agent will be assigned a new call from queue if there are additional callers waiting.

Service Conditions

1. An ACD call is registered as an abandoned call under the following conditions:
 - a. The ACD incoming call is placed in queue and disconnects after hearing ringback tone.
 - b. The ACD incoming call disconnects while it is in queue at both the overflow source and the overflow destination.
 - c. The ACD incoming call disconnects during the first delay announcement.
 - d. The ACD incoming call disconnects while hearing music or silence between the first and second announcements.
 - e. The ACD incoming call disconnects during the second delay announcement.
 - f. The ACD incoming call disconnects after the second delay announcement and before connection to an agent position.
 - g. The caller disconnects while the ACD call is being terminated to the ACD agent position and ringback tone is being provided.
2. If the C.O. trunk is a loop start trunk (unsupervised), the ACD cannot detect the release of a call by the C.O. after the trunk has terminated or is connected to the first delay announcement. Thus, the ACD cannot detect an abandoned call.

ACD CALL

General Description

ACD CALL

General Description

Only calls connected to the ACD through a pilot number or personal pilot number are considered ACD calls and therefore tracked by the MIS system as ACD calls.

Service Conditions

1. Agent ACD lines cannot be restricted from receiving direct calls by the IVS.
2. ACD lines should:
 - Not be members of Call Pickup Groups
 - Not have CFA, CFNA, or CFB programmed
 - Not appear as virtual lines on any other telephone instrument
 - Not get dialtone except when performing call transfer

AGENT PERSONAL QUEUE

General Description

Incoming ACD calls wait in queues until an agent is available to take the call. There are two types of queues for waiting callers: Split Queues and Agent Personal Queues. When a call is waiting in a split queue the next agent who becomes available in the entire split will be assigned the longest waiting call, assuming the call priorities are the same. When a call is waiting in an Agent Personal Queue it can only be assigned to a single agent. A variety of overflow timeout, unavailability, and full queue parameters can be programmed for each agent personal queue to provide for alternate call handling when the designated agent does not get to the call in time or is unavailable.

A call is directed to a normal split queue by way of the dialed Pilot Number. A call is directed to an agent's personal queue by way of a Personal Pilot Number. The personal pilot number is associated with the agent's logon ID and is valid whenever and wherever the agent is logged onto the ACD system.

Calls (internal, external, ACD agent transfers, CCV transfers, emergency, assist, etc.) to the agent's ACD line are made by calling the personal pilot number. If and only if the agent is on an ACD call or is in Work mode, the call will be queued to the agent's personal queue. The **LOGON** lamp functions as the call waiting indicator for the personal queue. Calls in the agent's personal queue have priority over calls in any split queue.

Six pieces of data may be programmed independently for each agent's personal queue.

- **The Personal Pilot Number:** this is the number dialed in order to call to the personal queue.
- **Call Waiting Chime:** alerts the agent when calls arrive in queue, may be off, on first, on always.
- **Maximum Queue Depth:** how many calls may be waiting in the agent's personal queue.
- **Forward / Full CCV:** how to handle calls when the queue is full or when the agent is not available. Not available includes the two states of a) not logged into the ACD and b) on Break.
- **Personal Queue Timeout:** how long a call may wait in queue before overflowing.
- **Overflow CCV:** how to handle calls which overflow on timeout.

AGENT PERSONAL QUEUE

Operating Procedure

Each call that is added to the personal queue, abandons the personal queue, or overflows from the queue invokes a display on the agent's console. The display indicates the current depth of the personal queue; for example, **PERS. QUEUE: 4**.

A call in a personal queue does not have an associated priority. A call in a split queue does have an associated priority because the handling of a call in a split queue is based on the call's priority and elapsed time in the queue. When a call overflows from a personal queue or is forwarded from a personal queue, and the call is then queued to a split, the call must have a priority assigned to it. Calls that overflow/forward from a personal queue are placed in one of two categories for the purpose of assigning a priority:

- Calls that were received on an ACD trunk are given the priority of the trunk.
- Calls that were not received on an ACD trunk are given a priority that is programmed in the ACD database. The single priority is set on a tenant-wide basis.

Operating Procedure

The agent is handling an ACD call or is in Work mode, when a non-emergency / non-assist call to the agent's personal pilot number is received:

1. The call is queued to the agent's personal queue.
2. The agent's display shows **PERS. QUEUE: 1**, which indicates that a single call (in this example) is in the agent's personal queue.
3. The **LOGON** lamp, functioning as the call waiting lamp for the personal queue, begins flashing.
4. If programmed to do so, a chime (personal queue chime) will sound as an audio alert to the agent. The chime can be programmed to sound only for the first call queued, to sound for each call queued, or not to sound.
5. The calling party may be immediately connected to an announcement (personal queue announcement). This announcement, which is specifically for agent personal calls, is programmed on a tenant-wide basis. All calls to any personal queue will hear the same announcement.
6. The call to the agent's personal pilot number will have a higher priority than any non-emergency / non-assist call queued to a split. When the agent becomes Ready the personal queue call will connect to the agent.
7. When the call is ringing and when the agent answers the call, the display shows **PRS ORDERS**, for four (4) seconds, followed by **TIME IN Q: 0:28** (for example). The consecutive displays indicate that the call is from the personal queue, identify the source of the call (trunk / party, etc.), and provide the amount of time the call spent in the queue.
8. If the timer expires, the call will be handled by the overflow (Forward / Full) CCV step indicated in the ACD database. If another ACD agent subsequently

receives the overflowed call, that agent's display will indicate that the call overflowed from a specific personal queue; for example **PRS OVF SAM**.

9. If the agent logs off or enters Break mode, the call will be handled by the overflow (Forward / Full) CCV step indicated in the ACD database.

The supervisor is handling an ACD call or is in Work mode, when an emergency / assist call to the supervisor's personal pilot number is received:

1. The call is queued to the supervisor's personal queue.
2. The supervisor's display shows **PERS QUE: EMERG** or **PERS QUE: ASSIST**, for an emergency call or an assist call, respectively.
3. The **ASSIST** key, functioning as the call waiting lamp for the personal queue, begins flashing. The lamp flashes when the queue depth is one (1) or two (2); it winks when the queue depth is three (3) or greater. The flash and wink thresholds are set in the System software.
4. A chime (personal queue special chime) will sound as an audio alert to the supervisor. The chime will always sound; it is not programmable. The sound pattern of the personal queue special chime is distinct from the sound pattern of the personal queue chime.
5. An emergency call in the personal queue has a higher priority than any other call in the personal queue or any call in any split queue (even an emergency call). An assist call in the personal queue has a higher priority than any other call in any split, with the exception of emergency calls. Requests for the **MONITOR ME** feature have the same priority as assist calls. Refer to [“MONITOR ME” on page 67](#) for related details.
6. When the call is ringing and when the supervisor answers the call, the display shows **EMR 4248 CCSA 22** or **ASSIST GWEN** (for example) for an emergency call or an assist call, respectively. The emergency call display shows the extension of the agent who made the request, and the identity of the trunk or party connected to the agent. The assist call display shows the name of the agent who is requesting assistance.

NOTE: Personal queue overflow and Full / Forward are not applicable for Monitor Me or Emergency calls.

Service Conditions

1. The personal queue announcement is connected to each call as soon as the call is queued. The announcement is only played once. Therefore, it is suggested that the announcement informs the caller that additional announcements will not be forthcoming and that the call will be handled elsewhere (if the called agent does not answer, and the personal queue timeout is used and expires). If the personal queue timeout is not used, the call will remain in the personal queue until it is either handled by the agent, or the agent logs off or goes into Break mode. In the latter case, the call will go to the personal queue forward step.

NOTE: The overflow timer for personal queue calls which use the personal queue announcement is set to a minimum of 20.

AGENT PERSONAL QUEUE

Service Conditions

2. A personal queue overflow step and a personal queue forward step both point to a step (instruction) in a particular Call Control Vector. The indicated steps can be any CCV instruction.
3. The flash and wink thresholds for the **LOGON** lamp are not programmable. The **LOGON** lamp will flash when the queue depth is one or two calls; it will wink when the queue depth is three or more calls.

ALTERNATE NIGHT CCV

General Description

Alternate Night CCV provides custom routing on a per Pilot Number basis for incoming ACD calls which encounter splits in the night mode. This feature is activated only when a split is in night mode. Consequently, if a split is in Call Forward mode the Alternate Night CCV assigned to the Pilot Number will not be checked.

Several incoming Pilot Numbers can be directed to a common split for answering of calls during the daytime. When the split is placed in Night Mode, a new Night CCV is specified to handle the calls. Calls to Pilot Numbers which do not specify an Alternate Night CCV will be routed to the split's Night CCV.

Operating Procedure

1. An ACD position puts the split into night mode via the **NIGHT** key.
2. New calls arriving at this time will route to the Alternate Night CCV specified for the Pilot Number dialed.
3. If the Pilot Number dialed does not have an Alternate Night CCV then the split's night destination is used as a default.

Service Conditions

1. Alternate Night CCV will be used only if the call is not yet queued to any split and the current split being checked is in the Night Mode.
2. Alternate Night CCV cannot be CCV **Index 1, Step1**. Any other Index / Step combinations are allowed.
3. Incoming calls to Pilot Numbers without an Alternate Night CCV will follow the Night Mode programmed for the split.
4. A pilot in Tenant 1 will not send a call to an Alternate Night CCV which is in Tenant 2.

ANNOUNCEMENTS

General Description

ANNOUNCEMENTS

General Description

Variable length announcements (2-60 seconds) are provided for ACD callers by customer-provided announcement hardware using digital announcement trunk circuits. Announcements are designed to be heard for one complete cycle from the beginning of the message. Since multiple connections to each announcement channel are possible, an appropriate delay may be inserted to wait for the beginning of the spoken announcement, if necessary.

Operating Procedure

1. The ACD system recognizes the termination of an ACD incoming call.
2. The ACD calling party hears ringback tone (RBT).
3. Announcement connections are made by properly programming a Call Control Vector (CCV). Refer to [“CALL CONTROL VECTOR” on page 23](#) for additional information.
4. When the predetermined ring delay timing parameter set before the delay announcement has passed, the system sends answer supervision to the central office and connects the caller to the announcement. During this process, the ACD call retains its queue position if a “queue to” step has been specified.
5. At any point after a “queue to” step (including during the delay announcements), if an agent becomes available, the ACD call is immediately connected to the agent.

Service Conditions

1. Announcements are connected only when the transfer is completed.
2. All new calls that are detected within a six-second block of time will receive the message simultaneously. Additional calls that arrive in the next six-second block of time must wait for that message to end, unless additional announcement equipment is made available. The block of time is configured in CM 41 Y=0 function 67.
3. This feature is applicable to ACD incoming calls from a C.O., transferred from an attendant, agent, or PBX station.
4. The announcement source connection method can be a multiple (up to 8) connection with start point seek. This is configured in CM08, feature 124, setting 0.
5. The announcement length timer is programmed in the System data on a per-announcement basis.
6. Announcements numbers 2 - 58 can be used, announcement number 1 is unavailable.

ASSISTANCE - ACD AGENT

General Description

This feature allows an agent to call a supervisor for assistance. Activation of this feature, by the **ASSIST** key during an ACD call, automatically places the active call on hold and places an assistance call to a pre-programmed number. This number can be any station in the PBX, an attendant, an individual supervisor, a pilot number for a split of supervisors, a pilot number for a group hunt (either UCD or secretarial), a system speed number, etc. If the target extension of the assistance request has display capabilities, then display information identifying the call as a call for assistance will accompany the call.

Operating Procedure

To place an assistance request:

The following example assumes that an assistance request is sent to a split of supervisors, named "RESCUE", whose split is programmed for Manual Answer.

1. While on an ACD call, the agent whose extension is 4302, presses the **ASSIST** key. The **ASSIST** lamp lights and **ASSIST RESCUE** is displayed at the agent position.
2. The ACD call is placed on hold and an automatic transfer to the designated split of supervisors is initiated.
3. The agent hears ringback tone and one of the supervisors is rung. If no supervisor is available to take the call, the call waiting indication is provided to each supervisor position. The first supervisor to respond is connected to the agent.
4. The assistance call will connect on the supervisor's ACD line and will display either **ASSIST NAME** or **ASSIST 4302**, depending on whether the agent's name is programmed with their logon ID. Refer to "[FLEXIBLE ID CODES](#)" on page 52 for more information.
5. After consulting with the supervisor, one of three things may happen:
 - a. The agent may release from the call, thereby completing the transfer of the ACD call to the supervisor.
 - b. The supervisor may release from the call. This will reconnect the agent and the ACD call.
 - c. The agent may press the **CONF** key and invoke a three-way conference between the supervisor, the agent and the ACD calling party.

ASSISTANCE - ACD AGENT

Service Conditions

6. When either the agent or the supervisor disconnects from the assistance call, the **ASSIST** lamp is extinguished and the displays return to their original status.

To cancel an assistance request:

1. After initiating an assistance request and before being answered by a supervisor, the agent may cancel the request by pressing the **TRANSFER** key.
2. The lamp associated with the **ASSIST** key will be extinguished, the agent will be reconnected with the ACD calling party, and the display will return to the original display.

Queuing of Assistance Requests:

1. Assistance requests may be routed to a split of supervisors or an individual supervisor. In the case of a split of supervisors, multiple assistance requests can be queued. All the features which apply to [CALL TRANSFER TO SPLIT QUEUE](#) also apply to assistance requests to a split of supervisors.
2. If assistance requests are being routed to a split of supervisors, they will also appear on the supervisor's ACD line. If the calls are routed directly to an individual supervisor, they will appear on the pre-programmed line (e.g., the supervisor's non-ACD line).

Service Conditions

1. During an assist call, either the agent or the supervisor can display the source of the original ACD call and the queue depth by pressing the **LOGON** key. Refer to [“CALLING PARTY IDENTIFICATION” on page 42](#) for additional information.
2. The directory number used for assistance requests may not contain a “*” or a “#”.
3. Supervisors may be members of the split when it is necessary for them to handle regular split calls. In this case, assist requests should be routed to one supervisor's non-ACD line. This non-ACD line can be arranged as a group hunt or have multi-line appearances if assistance calls are required to be handled by more than one supervisor.
4. Assist requests will be ignored while talking on a non-ACD line or during an emergency call.
5. The **ASSIST** key can be dedicated to this feature (ASSISTANCE - ACD AGENT) or to the MONITOR ME feature. The choice is made on a split-wide basis. If the **ASSIST** key is not dedicated to the MONITOR ME feature, the MONITOR ME feature can be invoked when the agent presses the **TALLY** key and enters 006#. Please refer to [“MONITOR ME” on page 67](#) and [“TALLY-OH CODES” on page 103](#) for related information.
6. When the Assist Destination is a “Personal Pilot” number, the Assist feature does not activate the Personal Pilot overflow feature.

AUTOMATIC ANSWER

General Description

This feature gives an agent the ability to determine whether calls should be automatically connected to the headset or handset, or manually answered after ringing. When in Automatic Answer mode, calls are announced using a special tone signal called Zip Tone. All normal calls are preceded by a single burst of tone. Calls which may require special handling (forwarded or overflow calls) are preceded by two bursts of tone.

Operating Procedure

To set AUTOMATIC ANSWER from the Manual Answer mode:

1. The agent or supervisor presses the **AUTO/MAN** key.
2. The Dterm display shows **AUTO ANSWER**. The **AUTO/MAN** lamp lights steadily.
3. All subsequent calls are introduced by a Zip Tone at the agent's or supervisor's headset, and then the caller is automatically on-line.

To set Manual Answer from the AUTOMATIC ANSWER mode:

1. The agent or supervisor presses the **AUTO/MAN** key.
2. The Dterm display shows **MANUAL ANSWER**, and the **AUTO/MAN** lamp is extinguished.
3. All subsequent calls are introduced by the normal ringing of the Dterm set.

Service Conditions

1. The **AUTO/MAN** key can be pressed at any time as long as the agent or supervisor is logged onto the ACD system.
2. If the supervisor or agent is engaged in a call when the **AUTO/MAN** key is pressed, the answering mode change will take effect upon the completion of the call in progress.
3. If the agent or supervisor is in the Auto mode and hears Zip Tone (introducing the next call), and presses the **AUTO/MAN** key at that moment, the next call will not be answered until after the current call is completed. Refer to [“ZIP TONE” on page 120](#) for related information.
4. When the agent console is set for AUTOMATIC ANSWER, normal ACD calls are introduced by one burst of tone (i.e., Zip Tone). Overflowed calls and calls

AUTOMATIC ANSWER

Service Conditions

which arrive at the agent position as a result of forwarding from another split are announced by two bursts of tone.

5. **AUTOMATIC ANSWER** applies only to ACD calls. It does not apply to calls which terminate to an agent's or supervisor's LINE key.
6. **AUTOMATIC ANSWER** applies only when the agent position is not engaged in any other call. If the agent position is engaged in a call when the ACD call arrives (for example, if the agent is talking on the LINE key), then the ACD call will terminate as though Manual Answer was set.
7. The answer mode change can be operated at any time a position is occupied. A split parameter determines the default setting for this feature for a particular position each time an agent or supervisor logs in.
8. Agents can be restricted from changing their answer mode by not assigning an **AUTO/MAN** key to the agent position. In that case, the split default will remain in effect.

AUTO WORK MODE FOR PBX CALLS

General Description

Agent positions can automatically be placed in Work mode and Ready mode based on calling activity on their associated PBX line. There are 6 split-based features which control the setting of Work or Ready mode and the optional timeout associated with the Work mode. Since the 6 features can all be set independently of one another there are 2^6 combinations or 64 different ways for these features to interact.

Rather than attempt to describe 64 combinations of features, this document will explain how each of the 6 features work and describe a few of the interactions. It is anticipated that the other interactions can be inferred from these examples or from common sense. Should both of those avenues fail, then an actual trial of the specified combination should be conducted using a live system to see what the outcome will be.

For the purposes of these explanations it is assumed that Work mode is not restricted by split programming.

6 Auto Work Features:

- Auto Work Mode with Incoming Ringing PBX call
- Auto Work Mode with Answer of Incoming PBX call
- Auto Work Mode with Start of Outgoing PBX call
- Auto Ready Mode with Release of Any PBX call (incoming or outgoing)
- After ACD Call Work Mode Timeout
- After PBX Call Work Mode Timeout

Auto Work Mode with Incoming Ringing PBX Call

When this feature is enabled, an agent position in the Ready mode will be automatically placed in the Work mode when a call commences ringing on the associated PBX line.

Auto Work Mode with Answer of Incoming PBX Call

When this feature is enabled, an agent position in the Ready mode will be automatically placed in the Work mode when a call on the associated PBX line is answered.

Auto Work Mode with Start of Outgoing PBX Call

When this feature is enabled, an agent position in the Ready mode will be automatically placed in the Work mode upon going off hook on the associated PBX line and getting dial tone.

AUTO WORK MODE FOR PBX CALLS

Auto Ready Mode with Release of Any PBX Call

Auto Ready Mode with Release of Any PBX Call

If any of the Auto Work Mode features forced an agent position into the Work Mode as a result of activity on the associated PBX line then this feature will force the position back to the Ready Mode at the conclusion of the call.

PBX Call Work Mode Timeout

If an Automatic Work Mode was asserted as part of an interaction with an incoming or outgoing PBX call then it, too, may be either timed or permanent. If it is a timed Work mode the timer will begin at the moment the Automatic Work Mode was enforced. Subsequently, many different outcomes are possible.

- The timer expires while the PBX call is still in progress.
At that moment the ACD status will be set to Ready and an incoming ACD call is now possible even though the PBX call is still in progress.
- The timer expires after the PBX call is complete, Auto Ready Mode is *not* being used.
An ACD call will not connect until the expiration of the timer. A new PBX call placed or received during this interval will reset the timer to its full value.
- The timer expires after the PBX call is complete, Auto Ready Mode *is* being used.
The Auto Ready Mode will take precedence here and mark the ACD status as Ready for a new incoming ACD call. The timed Work mode is aborted.

If the Work Key is pressed at any time during the timed work modes described in this section it will operate as shown in the diagram above.

Operating Procedure

1. The 6 features are implemented using the ACDSPL MAT command. The command data is on a split-wide basis.

AVAILABILITY - ACD POSITION

General Description

After-Call Availability allows a split to be assigned to either Automatic-Available mode or Automatic-Work mode. This is referred to as the after-call work mode.

In Automatic-Available mode, a position becomes available to receive new ACD calls immediately upon disconnecting from the previous call. In Automatic-Work mode, a position is unavailable to receive ACD calls after disconnecting from the previous call. Automatic-Work mode allows the agent time to perform miscellaneous activities that may be associated with the ACD call.

After-call work mode may have a time limit which will automatically force the position to Available mode upon expiration. If the After-call work mode is timed then the Work LED will flash continuously until the timeout expires.

The after-call mode and optional Work Timeout are set on a per-split basis through the ACD MAT or a MIS terminal. Agents may change their after-call mode during an ACD call.

Operating Procedure

Automatic-Available Mode set for split:

1. An agent is engaged in an ACD call. The **WORK** lamp is not lit and the lamp associated with the ACD CALL key is lit.
2. If the ACD call is disconnected, the lamp associated with the ACD CALL key is turned off, the position becomes available, and **READY** is displayed.
3. If the agent presses the **WORK** key before the ACD call is disconnected, the **WORK** lamp is lit, **WORK PENDING** is displayed, and the Automatic-Work mode is selected for this call only.

Automatic-Work Mode set for split:

1. An agent is engaged in an ACD call. The **WORK** lamp is lit and the lamp associated with the ACD CALL key is lit.

AVAILABILITY - ACD POSITION

Service Conditions

2. If the ACD call is disconnected, the lamp associated with the ACD CALL key is extinguished, the position becomes unavailable, and **WORK MODE** is displayed for a short time.
3. If the agent presses the **WORK** key before the ACD call is disconnected, the **WORK** lamp is extinguished and the Automatic-Available mode is selected for this call only.
4. After releasing the call and entering the Automatic-Work mode, the agent must press the **WORK** key to leave the Automatic-Work mode and become available to receive new ACD calls.

Service Conditions

1. The after-call mode can be operated whenever a position is occupied.
2. A position is forced into the Automatic-Work mode immediately after an agent or supervisor logs on. The **WORK** key must be pressed to begin receiving ACD calls. When the first and all subsequent ACD calls are received, a split parameter will automatically set the appropriate after-call mode for the position.
3. The conditions for Automatic-Available / Automatic-Work mode can be set on a per-split basis. The operating mode can be changed either from the ACD MAT or from a MIS terminal.
4. During after-call Automatic-Work mode, no ACD incoming calls are allowed to terminate to the ACD position. However, non-ACD incoming calls can be terminated or originated from the ACD position's PBX line.

BREAK MODE

General Description

This feature allows an agent to take their position out of the queue without logging off or entering Automatic-Work mode. This feature is useful if the agent will be away from the position for a short time, such as for lunch, a coffee break, etc. Since the agent does not log off when using BREAK MODE, no other agent may log onto this position.

The user can select, for each split, a single break type or nine break types. If nine break types are selected for a split, then whenever an agent in the split requests a break, the agent is prompted for the break type. The CallCenterWorX Management Information System (MIS) allows each break type to be defined with a name, such as “coffee” or “lunch”. This string will be used for MIS reporting purposes.

Operating Procedure

To activate BREAK MODE (single break type):

1. The agent presses the **BREAK** key and the associated lamp is lit.
2. If the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display changes to **ON BREAK**.
3. Once on break, the agent may remove the headset jack; no displays or lamps will change.

To activate BREAK MODE (nine break types):

1. The agent presses the **BREAK** key and the associated lamp is lit.
2. The display shows **BREAK TYPE?**.
3. The agent enters a digit from “1” to “9”, to indicate the break type, and then enters “#” to complete the input.
4. The display shows **BREAK TYPE = N**, where N is the number the agent entered in the previous step. This display will be shown for four seconds. Following this display, if the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display will change to **ON BREAK**.
5. If the agent does not indicate a break type (“1” to “9”), within thirty seconds of pressing the **BREAK** key, the system will default to break type 1, and **BREAK TYPE = 1** will be displayed for four seconds. Following this display, if the agent is not on a call, the display will show **ON BREAK**. If the agent is on a call, the display will show **BREAK PENDING**. At the end of the call, the display will change to **ON BREAK**.
6. Once on break, the agent may remove the headset jack; no displays or lamps

BREAK MODE

Service Conditions

will change.

To cancel BREAK MODE (single break type or nine break types):

1. The agent presses the **BREAK** key.
2. The display shows the time spent on break in minutes and seconds. For example, **BREAK OVER 35:20**.
3. The **BREAK** lamp is extinguished.
4. The **WORK** lamp indicates whether the agent will be placed in the Work Mode or Ready Mode when the Break Mode is concluded. By operating the **WORK** key prior to exiting Break Mode the agent may specify what their next mode will be.

Service Conditions

1. Logging off is permitted while in Break Mode, by pressing the **LOGON** key. The after-call mode may be toggled while on break and set to either Automatic-Work or Automatic-Available.
2. When Break Mode is set at a position, incoming ACD calls are not allowed to terminate to the position.
3. Non-ACD calls can be originated from or terminated to a position, while the position is in Break Mode.
4. Every agent position and supervisor position may have a **BREAK** key.

CALL CONTROL VECTOR

General Description

A Call Control Vector (CCV) is a series of steps that describe how an incoming ACD call is to be handled. A CCV can consist of a maximum of twenty steps. Each step of a CCV is an instruction for handling the call at a specific time. The steps may be programmed in any sequence (see Service Condition # 1) and will be processed in order until an agent answers the call.

When an incoming call is presented to the ACD system, it is processed according to the CCV specified for the dialed pilot number (refer to [“PILOT NUMBERS” on page 87](#)). Thus, specifying different CCVs for different pilot numbers can produce a variety of call handling patterns. Countless combinations of CCV steps are possible and have been put together in very creative ways to solve complex call handling requirements.

A CCV is a timed sequence of events which control incoming ACD calls prior to their connection to an agent. It is important to understand the timing of CCV instructions in order to construct CCVs which process calls at the proper tempo. The following table shows how much time is used for each CCV instruction. Only after that amount of time has passed will a caller proceed to the next step in the CCV.

Table 3: Call Control Vector Timing

CCV Step Action	Takes This Much Time
Announcement	Wait until beginning of announcement or 30 seconds whichever comes first, then proceed to next instruction
Blank	0 seconds, next instruction processed immediately
Conditional Queue to Split	0 seconds, next instruction processed immediately
Dequeue from Split	0 seconds, next instruction processed immediately
Goto CCV X:Y	Wait 2 seconds, then proceed with CCV #X step #Y.
Hang Up	0 seconds, next instruction processed immediately
If Estimated Time To Answer (Split and Calling Party ETAs)	0 seconds, process first or second instruction immediately based on testing ETA
If Not Queued then Busy	0 seconds, call disconnected immediately
If Not Queued then Goto X:Y	Wait 2 seconds, then proceed with CCV #X step #Y.
IVR Announcement	Wait until call disconnects from the IVR

CALL CONTROL VECTOR
CCV Instructions

Table 3: Call Control Vector Timing

CCV Step Action	Takes This Much Time
IVR DN	0 seconds, next instruction processed immediately
New Priority	0 seconds, next instruction processed immediately
Pause X	Wait X seconds (1 to 999) then proceed with next instruction
Queue to Split	0 seconds, next instruction processed immediately
Ring Delay	0 seconds, next instruction processed immediately
Skip Percent	0 seconds, first or second instruction processed immediately based on percentage
Tally (Long and Short)*	0 seconds, next instruction processed immediately
Transfer To	If transfer succeeds, CCV processing is complete; otherwise, wait 2 seconds and process next instruction.
Up Priority	0 seconds, next instruction processed immediately

* Not supported by CallCenterWorX ACD 1.0

CCV Instructions

The following is a list of available CCV instructions and their associated variables.

1. Announcement #n

This instruction connects the caller to the beginning of the specified announcement. These announcements are typically implemented as broadcast announcements which enables several callers to connect and listen to a single play of the announcement together. As part of this broadcast feature, all callers arriving within the first 6 seconds of the announcement will be connected at that time. A caller arriving in the 7th second or later will have to wait for the announcement to finish before being connected to the next play.

As a result of this 6-second connect window, it is recommended that the announcement not contain any critical information in the first 6 seconds of the recording since callers are not guaranteed to be connected during that window. It is customary to have a bit of music or non-critical information during the initial 6-second window.

Multiple announcement channels may be implemented to lessen the amount of time a caller may have to wait before being connected. In fact, if sufficient channels are implemented the announcement is considered to be non-blocking, that is, there will always be one channel available to play to a newly arriving caller at all times.

Incoming callers with held parties cannot be connected to an announcement, although this will not affect their CCV processing.

An announcement may be used in any CCV and announcements can be shared among splits. Announcements can be used in any order and can be repeated as often as desired, although announcement #1 is not available. Also, each announcement should be followed by a pause which is at least as long as the announcement.

2. *Blank*

This instruction does not invoke any call processing action. The call will immediately process the next step with no delay.

The Blank instruction is used to simplify future modifications to a CCV. If a CCV is constructed without Blank instructions, and new instructions are added to the CCV at a later time, then the changes could force a major restructuring of the CCV. If a CCV is constructed with Blank instructions, and new instructions are added to the CCV at a later time, then the new instructions can take the place of Blank instructions.

3. *Conditional Queue To Split #n*

This instruction directs a call to the specified split. The split will not accept the call unless a predefined condition (to be explained) is satisfied. If the condition is satisfied, the calling party will be connected to an agent within the split, if an agent is available. If an agent is not available to accept the call, the call will be placed in a queue of calls waiting to be serviced by an agent. If the condition is not satisfied, the call will be handled by the next step in the CCV. The next step could provide alternate routing (refer to item # 4).

The condition serves to control the traffic that the split will accept. The condition is a property of the split, and is defined in the ACD database. There are three options for imposing a condition. The conditions are mutually exclusive; therefore, only one of the following three conditions can be selected.

- **Agents Available [minimum]**
The ACD system will ascertain the number of available agents in the split at the time the call is presented. If the number of available agents is greater than or equal to the minimum specified, the call is accepted and connected to the longest-waiting available agent. For example, if the minimum agent threshold is set at “3”, then calls are connected if there are three or more available agents. If there are two or fewer available agents, the call will be handled by the next step in the CCV.
- **Calls in Queue [maximum]**
The ACD system will ascertain the number of calls in the split's queue at the time the call is presented. If the queue depth is less than the maximum specified, the call may be queued, or connected if agents are available. For example, if the maximum queue depth is set at “3”, and there are fewer than

CALL CONTROL VECTOR

CCV Instructions

three calls in queue, calls will be queued, or connected to an available agent. If there are three or more calls in queue, the call will be handled by the next step in the CCV.

- **No Calls Accepted**
The split will not accept any call that is directed to the split by a Conditional Queue to Split instruction. The split will only accept calls that are presented through a Queue to Split instruction.

A call can only be queued to four splits, simultaneously. If a call encounters a Conditional Queue to Split instruction and the call is already successfully queued to four splits, the call will be connected to an agent in the target split, if an agent is available. If an agent is not available, the call will not be placed in the queue for that split. The call will be handled by the next step in the CCV.

When a Conditional Queue to Split instruction points to a split that is either in Night Mode or forwarded, the call will be handled by the next step in the CCV.

4. *Dequeue #n*

This instruction removes a call from a specified queue or from all the queues in which the call currently resides.

5. *End*

This instruction terminates the processing of the CCV. The call remains in any queue or queues in which it currently resides, and the caller will be connected to an agent when one is available.

The call processing in a CCV will terminate, without an End instruction, when the entire twenty steps of the CCV have been executed. If the CCV has fewer than twenty instructions, the steps without instructions are treated as Blank instructions.

6. *ETA > (Greater Than) / ETA < (Less Than)*

This instruction checks all queues a caller is waiting in and determines the best estimated time to answer (ETA). Using this ETA in a comparison with the parameter to the ETA > or ETA < instruction determines whether the next CCV instruction should be skipped.

If result of ETA comparison is TRUE, next instruction is PROCESSED.

If result of ETA comparison is FALSE, next instruction is SKIPPED.

Imagine this small CCV example:

3. Queue to1. this is the regular split queue
4. ETA Greater120
5. Goto CCV step8.
6. Queue to3. this could be the standard overflow split
7. ===End===
8. Queue to4. this could be the message center split
9. ===End===

If a caller is queued to split 1 and finds that his ETA for that split is greater than 120 seconds (2 minutes) then the call will go to step 8 and will queue to split 4, the message center. If the current ETA is less than or equal to 120 seconds (ETA tests FALSE) then step 5 will be skipped and the call will continue with step 6 and queue to the standard overflow split.

ETA steps should be used with some care since they can only be approximations of an estimated time to answer. Many events could occur to cause the ETA estimate to be incorrect by a considerable amount of time.

7. *Goto CCV #x Step # Y*

This instruction invokes a pause of two seconds before the processing of the CCV continues at the specified step, in the specified CCV. The specified CCV can be the CCV that is currently handling the call, or it can be a different CCV in the same tenant.

8. *Hang Up*

This instruction disconnects the call by breaking the station or trunk connection. CCV processing is terminated after this instruction. The Hang Up step is designed to provide positive forward disconnect on a supervised trunk circuit particularly after having heard an announcement. Station users who encounter a Hang Up step while calling into an ACD pilot number may receive mixed results based on their exact call scenario at the time as well as the PBX software level in use. The possible results include busy tone, reorder tone, or the inadvertent completion of a transfer. Because of these variations for station users the feature is best described as “unpredictable” for stations and should be avoided if possible.

9. *If Not Queued Goto CCV #x Step #y Or Busy*

This instruction provides an alternate routing option if a call cannot be queued for one of the following reasons.

- The target split of a Queue to Split instruction has a full queue.
- The target split of a Conditional Queue to Split instruction does not satisfy the preimposed condition.
- The call is already successfully queued to four splits.
- The target split of a Queue to Split instruction is in Night Mode or forwarded, and the call is already queued to other split(s).
- The target split of a Conditional Queue to Split instruction is in Night Mode or forwarded.

If none of the above reasons exists, then alternate routing is not implemented and the call will be handled by the next step in the CCV.

If one of the above reasons exists, then alternate routing is implemented in one of the following manners.

CALL CONTROL VECTOR

CCV Instructions

- If a CCV number and a step number are included in the If not Queued instruction, then processing will continue at the specified CCV number and step number.
- If a CCV number and a step number are not included in the If not Queued instruction, and the call is not queued to other split(s), then busy tone will be returned to the calling party. The CCV processing will be halted, and the calling party must hang up.
- If a CCV number and a step number are not included in the If not Queued instruction, and the call is queued to other split(s), then the call will be handled by the next step in the CCV.

The If not Queued, Goto or Busy instruction will be performed only if it follows a Queue to Split or a Conditional Queue to Split instruction. If it does not follow one of the queuing instructions, the If not Queued, Goto or Busy instruction will be ignored and the call will be handled by the next step in the CCV.

On occasion a brief burst of ringback tone may be heard by the caller before the busy tone is connected as a result of this CCV step.

10. IVR Announcement #n

This instruction will connect a caller to an IVR port for the purpose of playing a customized announcement. The IVR equipment will be notified via an Infolink message which announcement has been requested (1 to 99) and which port was used for connection. It will be up to the IVR to speak the desired announcement and inform the ACD when the announcement is complete.

Incoming callers with held parties cannot be connected to an announcement, although this will not affect their CCV processing.

11. IVR DN #n

When calls are connected using this IVR step, the ACD uses the number assigned in the ACDTN command as the IVR pilot number. The IVR DN allows users to specify an alternative UCD pilot number to use instead of the number programmed in the ACDTN. Any subsequent IVR announcements will also use the alternative UCD pilot number.

12. New Priority #n

This instruction is used to change the current priority associated with a call to a different priority in all the splits to which the call is currently queued. The priority that is specified in the instruction can be either higher or lower than the present priority.

The variable associated with the instruction is a priority. If a call with a priority of "8" encounters the instruction "New Priority 15", the call's priority will change to "15" in all splits it is currently queued to.

13. Pause #n

This instruction delays the processing of the CCV for the specified period of time. During that period of time, the call will remain in the same state it was in when the Pause step was encountered. After the specified period of time has elapsed, the processing of the CCV will resume at the step which follows the Pause step.

14. Queue to Split #n

This instruction directs a call to the specified split. The calling party will be connected to an agent within the split, if an agent is available. If an agent is not available to accept the call, the call will be placed in a queue of calls waiting to be serviced by an agent at a priority level determined by the Pilot Number dialed.

If the target split's queue is full, the call will be handled by the next step in the CCV. The next step could provide alternate routing (refer to item # 4).

A call can only be queued to four splits, simultaneously. If a call encounters a Queue to Split instruction and the call is already successfully queued to four splits, the call will be connected to an agent in the target split, if an agent is available. If an agent is not available, the call will not be placed in the queue for that split. The call will proceed to the next step in the CCV.

When a Queue to Split instruction points to a split that is in Night Mode or is forwarded, the call will follow the target split's night routing or forward routing only if the call is not already in a queue. If the call is already in a queue (or queues), the Queue to Split instruction will be ignored. The call will proceed to the next step in the CCV.

15. Ring Delay #n

This instruction must appear prior to any Queue to Split steps in the CCV in order for it to have the desired effect. The Ring Delay feature is intended to slow down the connection of incoming calls to agents and give a window of opportunity for a host computer to paint an appropriate screen of information for the agent which may aid in proper answering of the call.

Ring Delay specifies a number of seconds to wait after selecting which agent should receive the next call in queue. The actual ringing of the agent's phone will be intentionally delayed by 'n' seconds.

An Infolink application can send a command to the ACD to terminate the artificial delay before time expires if it has determined that it is OK to ring the agent's phone.

16. Skip %

This instruction causes the next CCV step to be bypassed by a percentage of the calls that reach this step. The indicated percentage of calls will skip the next step and continue immediately with the CCV step that is two steps after the SKIP

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instruction. The remaining calls will not honor the SKIP instruction and will process the next CCV step. Thus, the SKIP instruction acts as a filter to distribute calls, on a percentage basis, between two consecutive CCV steps.

17. Split ETA > (Greater Than) / Split ETA < (Less Than)

This instruction allows CCV processing to be decided based on the Estimated Time to Answer (ETA) for a specified split, as opposed to being based on the ETA of a call in queue. It then compares that calculated Split ETA with a specified number of seconds. If the greater than (>) or less than (<) comparison is met, the next CCV step is processed. The next step is skipped if the comparisons are not met. This allows the CCV to determine the ETA of a split before queuing a call to the split, thus allowing the decision of whether or not to queue a call, for example, to be determined by the current split traffic level.

18. Tally (Long and Short)*

Allows a Tally Code to be sent to the MIS system without the agent having to manually press a “tally key”. To log Tally Codes from 1 to 4 digits in length use the 1 “Tally Short” command from the choice list (F2). Longer Tally Codes, up to 8 digits, may be also be registered. These require two adjacent steps in the CCV and use the 2 “Tally Long” commands from the choice list. Tally Codes registered directly from a CCV will be counted by the MIS system against the CCV Tally DN programmed in the ACDSYS MAT command. This can be an actual ACD position actively being used for calls or it can be an ACD position simply set aside for the purpose of collecting these Tally Codes. In any event, the position DN programmed for Tally Code registration must also be programmed into ACDPSN for proper operation.

*** Not supported by CallCenterWorX ACD 1.0**

19. Transfer to PBX #n

This instruction transfers the call to the specified Transfer Index Number (1-9). A Transfer Index Number is associated with a telephone number; the telephone number can have a maximum of twenty-two digits. The telephone number can be associated with an internal extension, an operator, a UCD group, voice mail, an outside number via Least Cost Routing (LCR), or a system speed dial code. This instruction removes the call from every queue in which it currently resides.

With the exception of transfers across CCIS, if the specified telephone number is not busy, this instruction will complete the CCV call processing. If the specified telephone number is busy, CCV processing will resume at the next step following a two-second delay. If the transfer is across CCIS, this instruction will complete the CCV processing whether the specified telephone number is busy or not.

If the transfer is to a local UCD group with all members busy UCD queueing will not take place even if the feature is enabled. The call will continue processing the CCV in the case of an all-busy UCD group.

20. Up Priority #n

This instruction is used to change the current priority associated with a call to a higher priority in all the splits where the call is currently queued.

The variable associated with the instruction is the amount by which to increment the priority. If a call with a priority of “14” encounters the instruction “Up Priority 4”, the call's priority will change to “10”. A priority of “10” is four levels higher than a priority of “14”.

Operating Procedure

The desired Call Control Vectors are created through ACD MAT assignments.

Service Conditions

1. The programming of CCVs is not examined by the ACD system. It is the responsibility of the user to provide a logical sequence of instructions, which produce the desired call handling, in every CCV.
2. An announcement is not guaranteed to be available from its beginning, when an Announcement instruction is encountered. An additional Pause instruction may need to be programmed in order to provide proper sequencing through the CCV. Refer to “[ANNOUNCEMENTS](#)” on page 12 for additional information.
3. The If not Queued Goto or Busy instruction is applicable to DID & Tie type trunks. In the case of ringdown trunks, ringback tone is controlled by the C.O.; therefore, busy tone cannot be given to the caller.
4. A “Transfer To” step in the CCV may send a caller off to any number within the number plan established for the PBX system. It is not feasible to describe the exact operation of such a transfer to all possible numbers under all possible conditions. Many of the cases are described below.

When the target is a UCD pilot number in the PBX:

- If a member of the UCD is available the call will be transferred.
- If there are no members available in the UCD the call remains in the ACD side and continues the CCV with the step following the “Transfer To.”
- The call *will not queue* to the UCD group even if queuing in the UCD is enabled.

If the overflow destination is an ordinary station:

- If the station at the overflow destination is a member station of a station hunting group.:
- If transfer service is set for the station at the overflow destination.:
- When the station at the target is busy, the Transfer-To instruction may be retried with a Goto instruction.
- When the station at the target is in make-busy state or lockout state, no transfer takes place.

CALL CONTROL VECTOR

Service Conditions

If the overflow destination is an attendant console:

- Transfer is executed only when the attendant console group is in Day mode, or when a night attendant console is provided and is in service during Night mode.
- No transfer will take place when the attendant console group is in Night mode and no night attendant console is provided.

If the transfer target is an external line:

- To designate the external line number for the overflow destination, an abbreviated code for SPEED CALLING - SYSTEM is used.
- A maximum of 1000 abbreviated codes can be assigned for the ACD.
- For selecting external routes, LCR, LCRS, etc. can be used.
- When an overflow has encountered all external trunks busy, it may be retried with a Goto instruction.
- When an overflow has encountered all senders busy, it may be retried with a Goto instruction.
- Once an ACD call has been connected to an external trunk, it may not be distributed to agent positions at the overflow origination side even if the destination distant office happens to be busy.
- Tandem connections which release on both the incoming route and the outgoing route cannot be supervised and should be restricted by means of System Data programming.

A Transfer To step will not be executed if it is programmed directly after an announcement step. A Pause step, or the length of the previous announcement step, must be programmed after the Announcement.

A Transfer To step will not be executed if the PBX destination station is programmed as Timing Start in Command 20 (CM20).

CALL DISTRIBUTION TO AGENTS

General Description

ACD calls are automatically distributed among the agents in a split such that when an agent becomes available, the longest waiting call with the highest priority in the queue is assigned to that agent. Refer to [“PRIORITY QUEUING” on pag e88](#) and [“QUEUING - ACD” on page89](#) for additional information.

During periods when more than one agent is available and there are no calls in the queue, the first incoming ACD call is assigned, based on a two-level algorithm, to an agent.

Agent preferences

The first level of the algorithm seeks the agent who has the highest preference level specified for the split. An agent who is servicing a single split is considered to have the highest possible preference level (“1”) specified for the split. An agent who is servicing multiple splits can have a preference level ranging from “1” (highest) to “4” (lowest) specified for the split. The preference levels for an agent who is servicing multiple splits are set in the ACD database. Refer to the description of the [“MULTI-SPLIT AGENT” on page72](#) for more details.

Longest available agent

The second level of the algorithm seeks the agent who has been waiting to service an incoming ACD call (in Ready mode) for the longest period of time.

The following example illustrates the operation of the two-level algorithm.

Table 4: Agent Preference Example

Agent Name	Preference Level	Waiting Time
Allan	3	55 seconds
Barbara	1	30 seconds
Charles	1	25 seconds
Denise	2	40 seconds

The first incoming ACD call will be sent to Barbara. The first level of the algorithm removes Allan and Denise from consideration since their respective preference levels are lower than the preference level that Barbara and Charles have in common. The second level of the algorithm removes Charles from consideration since Charles has been waiting to service an incoming ACD call (in Ready mode) for a shorter period of time than Barbara.

CALL DISTRIBUTION TO AGENTS

Operating Procedure

Only incoming ACD calls directed to pilot numbers or personal pilot numbers, and other calls generated within the ACD processor (such as Assist and Emergency calls) may be connected to agents' ACD lines. For proper operation of the ACD, direct calls to an agent's ACD line from stations, DIDs, Tie trunks, CCIS trunks, attendants or any other method (such as call forwarding to agents' ACD lines) are not permitted and must be restricted by the proper programming of the PBX database.

Operating Procedure

No agents available:

1. An incoming ACD call is queued.
2. An agent becomes available.
3. The longest waiting ACD call in the queue with the highest priority is assigned to that agent.

Agents available:

1. There are no incoming ACD calls.
2. Agents are queued as they become available.
3. An incoming ACD call arrives.
4. The ACD call is assigned to the agent who has the highest preference level, and who, among those agents with the same preference level, has been waiting to service an incoming ACD call (in Ready mode) for the longest period of time.

Service Conditions

1. When calls are waiting in queue, all calls of a higher priority will be answered (in their order of arrival) before calls of a lower priority, regardless of how long a lower-priority call has been waiting.
2. Upon receiving a call, an agent may transfer the call to any destination allowed under normal transfer conditions. When transferring to a CALL PARK location, the agent will hear only a short burst of Service Set Tone.
3. Do Not Disturb (DND) Key
The DND Key may have undesirable side effects if utilized at an agent's ACD position. For example: an agent position left in Ready mode but with the DND feature set for the position's PBX line (myline) will still receive an ACD call (as a result of the Ready mode) but the position will not ring (as a result of the DND feature being set). It is up to the ACD user to understand and accept all potential side effects of using the DND key at an ACD position.

CALL FORWARDING - SPLIT

General Description

This feature provides alternate routing for calls destined for a particular split. When split call forwarding is in effect and a call attempts to queue for that split, the call is routed to a pilot number instead of being queued. At this point, the call is handled by the Call Control Vector (CCV) associated with the new pilot number.

Operating Procedures

To forward a call:

1. The agent or supervisor presses the **NIGHT** key while logged onto the ACD.
ENTER NIGHT / FWD? is displayed.
2. Enter the digit **0**, a pilot number, and **#**.

The split goes into call forwarding, incoming calls are routed to the call forwarding number entered, and the **NIGHT** lamp flashes at all the positions in the split.

To cancel a Call Forwarding:

1. Press the **NIGHT** key again.
EXIT FWD? is displayed at the position
2. The agent or supervisor enters **1#** to confirm.

The split exits split call forwarding and the **NIGHT** lamp is extinguished at all the positions in the split.

Service Conditions

1. Only pilot numbers may be used as the split call forwarding destination.
2. The pilot number used for split call forwarding may not contain a “*” or a “#”.
3. The pilot number for split call forwarding may invoke either a Week Schedule or a CCV.
4. The MIS is not informed when split call forwarding is activated.
5. When a split enters Night mode automatically using the MIS, split call forwarding is canceled.
6. When a call attempts to queue to a split using a Queue to Split instruction in a CCV and the split has call forwarding activated, the new pilot number routing for the split is only followed if the split is the primary split for the call. If the split is a secondary split, the Queue to Split instruction is ignored. A primary split is the split specified in the first queuing instruction in a CCV. Splits specified in subsequent queuing instructions in the CCV are referred to as secondary splits.

CALL FORWARDING - SPLIT

Service Conditions

7. When a call attempts to queue to a split using the Conditional Queue to Split instruction in a CCV and the split has call forwarding activated, the Conditional Queue to Split instruction is ignored.
8. When alternate routing is required by a split, night service may be used to provide a more strategic choice of pilot numbers used for the new routing (see [“NIGHT SERVICE - ACD” on page 81](#) for additional information).

CALL RECOVER

General Description

The call recover feature allows an ACD call to ring at an ACD position for a programmed length of time and if unanswered the call will be directed to another available agent or replaced in all of the queues it was originally in at the highest possible priority. If the call is requeued it will be the highest possible priority and will be answered by the next available agent.

Operating Procedure

1. An incoming ACD call rings at an agent's position. The agent is either unavailable to answer the call or chooses to not answer the call.
2. When the "Call Recover" timer expires the call is removed from the agent's position. The agent's position is placed in a "Penalty Work" mode and the display will show **CALL RECOVERED** until a key is pressed.
3. The caller will be immediately directed to another available agent if one exists.
4. If there are no available agents the call will be replaced in all of the queues it was originally queued to at the highest possible priority. The call will also continue to process the CCV beginning with the step where it left off.
5. The call will be assigned to the next available agent.

Service Conditions

1. The time used for the Time In Queue display when the call is assigned for the second time will be the cumulative time starting when the call first arrived at the ACD.
2. If a recovered call had been directed via the agent's personal queue the call will be redirected according to the Forward / Full CCV programmed for the agent's logon ID.
3. When a call is recovered and placed back in queue the caller hears hold tone source as provided by the PBX as determined by Command.48 (CM48 Y=0).

CALL TRANSFER TO SPLIT QUEUE

General Description

CALL TRANSFER TO SPLIT QUEUE

General Description

This feature allows calls to be transferred by agents or supervisors, PBX station users, or attendants to splits in the ACD system. The transferred call will be connected to an available agent or the call will be queued, if agents are not available. The transferring party is allowed to remain on the line until the agent answers (screened transfer) or may complete the transfer while still in queue or while ringing the agent (blind transfer).

Operating Procedure

From a PBX station:

1. The PBX station user transfers the calling party to the ACD by dialing a pilot number.
2. A Call Control Vector (CCV) associated with the pilot number is processed and the transferred call may be queued to a split.
3. The PBX transferring station processes the CCV until an agent answers, the PBX station finishes the transfer, or the party being transferred disconnects. All announcement connections indicated in the CCV are skipped over in the case of a transferred call. The PBX transferring party hears only ringback, while transferring, until an agent answers.
4. The transferring station user may either disconnect, completing the transfer, or may press the **TRANSFER** key again, aborting the transfer. Attempts to conference at this point will be ignored.
5. If the transferring station disconnects and completes the transfer, the calling party will then begin processing the remainder of the CCV, including announcements.

From an ACD agent's or supervisor's position:

1. The agent or supervisor presses their **TRANSFER** key while on an ACD call or a PBX call and transfers to the ACD by dialing a pilot number.
2. A CCV associated with the pilot number is processed and the transferred call may be queued to a split.
3. The agent processes the CCV until another agent answers, the agent finishes the transfer, or the transferred party disconnects. All announcement connection instructions in the CCV are skipped over. Ringback Tone (RBT) is provided to the transferring agent until another agent answers.
4. The transferring agent may either disconnect (completing the transfer), or may press the **TRANSFER** key again, aborting the transfer. Attempts to conference at this point will be ignored.

5. If the transferring agent disconnects and completes the transfer, the calling party will begin processing the remainder of the CCV, including announcements.

From an attendant console:

1. The attendant transfers the calling party to the ACD by dialing a pilot number.
2. Busy Tone is provided to the attendant. At this point the attendant may either complete or cancel the transfer. If the attendant completes the transfer, the transferred party will begin processing the CCV, including all announcements. Note that except for transfers across CCIS, no CCV processing is done while the attendant listens to Busy Tone. The attendant must complete the transfer before CCV processing takes effect. For attendant transfers across CCIS, CCV processing will begin when the attendant first receives Busy Tone.

Service Conditions

1. Any calling party, except attendants, may be transferred into a split queue.
2. For attendant transfers to a split queue across CCIS, CCV processing will begin when the attendant first receives RBT. However, for non-CCIS attendant transfers to a split queue, CCV processing will begin only after the attendant completes the transfer.
3. Except for calls across CCIS, attendants are only allowed to transfer calls to pilot numbers. They may not call pilot numbers directly. If an attendant dials a pilot number directly, the call is ignored and the attendant will hear RBT indefinitely.
4. If an attendant dials a pilot number directly across CCIS, the call will be treated as a normal trunk call.
5. If an agent or PBX station user transfers a call to a split queue and hangs up before the agent at the destination answers, recall does not occur when the don't answer timer expires.
6. In a call transfer to a split queue, overflow service is provided to calls placed in queue.
7. When transferring a call to an ACD pilot number that terminates to an ACD split, if there is no pause step programmed before the primary Queue to step, the transferred party will not hear any announcements in the CCV index. However, if there is a pause step previous to the Queue to step, the transferring party must release the caller before the pause timer expires to enable the transferred party to hear the announcements. If the pause timer expires during a transfer, the transferred party will not hear the announcements.

CALL WAITING INDICATION

General Description

CALL WAITING INDICATION

General Description

This feature provides visual indication of a split's current queue depth by the use of the **CW** lamp (Call Waiting) and the position's display. The **CW** lamp is always operative but only provides an approximate indication of the queue depth. The position's display can show the current queue depth precisely but the display is provided periodically as the agent processes calls. An optional Call Waiting Key may be programmed to generate a display of the current queue depth.

Operating Procedure

1. When the number of ACD calls in a split's queue is greater than or equal to the call-waiting-on threshold, the **CW** lamp is turned on.
2. When the number of ACD calls in the split's queue is greater than or equal to the call-waiting-flash threshold, the **CW** lamp flashes. A database setting can enable a chime to sound at positions in the WORK mode when the lamp comes on or begins flashing.
3. When an ACD agent or supervisor is assigned a new call or goes into Work mode, the number of calls waiting in the split's queue displays on their position. For example, **QUEUE DEPTH: 5** will be displayed if five calls are in the queue.
4. When an agent or supervisor presses the **LOGON** key while engaged in a call, the calling party identification of the original incoming ACD call (trunk calls only) is displayed followed by the number of calls waiting in the split queue. For example, **NATIONAL 17** followed by **QUEUE DEPTH: 5**.
5. For an on-demand display of the current queue depth and longest waiting caller the agent may press the Call Waiting Key while in any mode.

Service Conditions

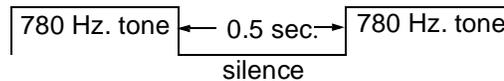
1. The **CW** lamp may be somewhat delayed and is not intended to depict instantaneous queue status.
2. Queue depth is only displayed on an agent's position when there are calls waiting in the split queue.
3. Split data must be set for the desired threshold of calls in queue required to make the **CW** lamp illuminate or flash to indicate call thresholds have been exceeded.
4. You must have the proper versions of the DLC line card to receive a "call waiting indication."
5. Agents and supervisor positions in the "Vacant" mode will only have call waiting indication if they are programmed in ACDPSN as split specific.

CALL WAITING LAMP WITH CHIME

General Description

An optional chime is available, on a split-wide basis, as a companion audio signal to the visual signals offered by the **CW** lamp (Call Waiting). The **CW** lamp can be programmed to light or flash when a given quantity of calls reside in a split queue. There are separate thresholds for lighting the lamp and for flashing the lamp. Refer to [“CALL WAITING INDICATION” on page40](#) for related information. If the chime is selected, the chime will sound at each agent position which is in the Work mode at the time the **CW** lamp is lit, and at the time the **CW** lamp begins to flash.

The chime is composed of two half-second beeps, which are separated by a half-second of silence.



Operating Procedure

The use of the chime is indicated through an ACD MAT command. The command data is on a split-wide basis.

Service Conditions

1. The chime will sound only at a position where the agent is in Work mode.
2. The volume of the chime is controlled by the ringer volume switch on the Dterm instrument.

CALLING PARTY IDENTIFICATION

General Description

CALLING PARTY IDENTIFICATION

General Description

This feature allows calling party information to be displayed on the LCD of the Dterm, when an incoming call is assigned to an ACD agent. The format of the calling party information follows:

1. Incoming Trunk and Circuit Information:

A unique eight-character name for an incoming trunk group along with the trunk circuit number within the group can be displayed. This name is programmed using the ACDTG ACD MAT command. This display is commonly used for ringdown trunks. For example, **NATIONAL 7**.

2. Called Number Identification: DNIS

When an incoming trunk calls a particular pilot number, a name associated with the pilot number can be displayed instead of the eight-character name of the incoming trunk group and the trunk circuit number. The displayed name is programmed in the **Name** field of the ACDPLT ACD MAT command. This display is commonly used for DID trunks. For example, **SALES DEPT**.

3. Internal Directory Number:

The internal directory number (up to five digits) assigned to the circuit can be displayed. This display is used for PBX stations calling into the ACD. For example, 70626.

4. Overflow Connections:

When a non-transferred call is assigned to an agent in a secondary split, an overflow message is displayed before the calling party identification indicating that this call is not being assigned to an agent in the split for which it was first queued. For example, **OVF SHIPPING**.

If the call has overflowed from an agent's personal queue, the display will identify the call as such and will show the name of the called agent; for example, **PRS OVF FRED**. Refer to [“AGENT PERSONAL QUEUE” on page 7](#) for related information.

5. Transfer Connections:

When a call being transferred by one agent is answered by another agent, an indication of who is transferring the call is displayed. For example, **XFR JONATHAN**.

6. Talking notification:

While an agent is engaged in a call, the Calling Party Identification of the original incoming ACD call, along with the number of calls waiting in the split

queue, can be displayed by pressing the **LOGON** key. For example, **NATIONAL 17** is displayed prior to **SHIPPING: 5**.

A display showing the amount of time in queue is provided to the agent position when a call is assigned (ringing) and again when the call is answered. For example, **TIME IN Q: 9:17**. The time shown is computed as the elapsed time since the caller entered the ACD system and when it is answered (or started ringing).

7. If an incoming ACD call enters the system through a pilot number and the receiving agent uses a pilot number to transfer the call to an agent in another split, the transferred call will be identified by the ID associated with the latter pilot number. If an ID is not associated with the latter pilot number, the call will be identified by the ID associated with the original pilot number. For example, an agent in Split A receives a call via a pilot number with an associated ID of “SERVICE”, resulting in **SERVICE** being displayed at the agent's position. The agent uses a pilot number to transfer the call to Split B. Split B has an associated ID of “PARTS”. The agent who receives the transferred call in Split B will have **PARTS** displayed at their position. If an ID was not associated with the pilot number applied in the transfer, the agent in Split B will have **SERVICE** displayed at their position. Refer to [“PILOT NUMBERS” on page 87](#) for related information.

Operating Procedure

1. This feature is assigned through ACDPLT MAT command.

Service Conditions

1. Called number ID (DNIS) display takes precedence over Incoming Trunk and Circuit Information when both are programmed.
2. If no special Calling Party Identification is chosen for a particular trunk, the PBX default is displayed.
3. Names displayed may be limited to seven alphanumeric characters to support certain display formats.
4. The character display data for C.O. Line / Tie Line calls can be assigned on the basis of each trunk route.
5. The character display data for this service is assigned from the ACD MAT.
6. The Calling Party Identification is displayed, by default, for only four seconds; then, the default PBX display is shown. The default settings can be modified using the “connection display” feature.

CONNECTION DISPLAYS

General Description

CONNECTION DISPLAYS

General Description

This feature allows each agent to specify the exact sequence of displays to be delivered to the LCD display at the time of an incoming ACD call connection. There are several displays available providing a variety of information pertaining to the call being connected. Different styles of operation give rise to different needs regarding what information is presented first. Now each agent can specify how much information they want and in what order.

The setup for the custom connection displays is controlled by each agent through the entry of a special Tally-Oh code designed for this purpose. By entering the proper codes and durations the agent can customize the sequence and timing of the displays they will receive when an incoming ACD call commences ringing at the agent position and when the agent answers the call. Only one sequence is specified and the same set of displays will be generated at time of ringing and answer.

The following table indicates which displays can be selected and the Display ID Code for each:

Table 5: Connection Display Codes

Display ID Code	Display Description
3	Time in queue (merged display)
4	Time in queue (stand-alone display)
5	Pilot number text (gate ID)
6	ANI digits received
7	Customer entered digits (via IVR)
8	Answering split name
9	Current queue depth and longest call time
10	unused
11	No displays sent during call connection
12 - 29	reserved

A maximum of 5 displays may be selected. A duration from 3 to 9 seconds is assigned to each display and is specified using the setup Tally-Oh code. As an option, the final display can be set to display for the remainder of the ACD call by entering a time of 0 seconds. A Tally-Oh code exists which can reset the permanent display and allow the standard conversation timer to display.

Three Tally-Oh codes have been added to support the Connection Displays feature. These codes are available to all ACD agent positions and cannot be restricted. The Connection Display sequence and timing is stored on a per-agent-logon ID basis and will be retained from one logon session to the next as long as a Personal

Emergency Supervisor has not been specified for this agent. Those agents with an assigned Personal Emergency Supervisor will need to setup their Connection Displays each time upon logging onto the system.

Table 6: Connection Display Tally-Oh Codes

Code	Format	Description
021	021DS# -or- 021DDS#	Setup the display sequence and timing for the current agent. D = single-digit display code (3 - 9) DD = double-digit display code (10 - 29) S = number of seconds to display (3 - 9 seconds, or 0 for permanent display) The DS or DDS pairs may be repeated up to 5 times, the '#' digit must follow the final entry. A very long entry might look like: Tally+021-44-54-64-74-84# (pluses and minuses are not actually entered, they are shown here for visual separation only). Tally+021-110# will disable displays entirely. This code should not be mixed with any other display codes since its intention is to completely disable the connection displays feature.
022	022#	On-line help to show a series of 4-second displays describing the available displays codes.
023	023D# -or- 023DS# -or- 023DDS#	Demand display of the specified code. D = single-digit display code (3 - 9) DD = double-digit display code (10 - 29) S = optional number of seconds to display (3 - 9 seconds, or 0 for permanent display. Default = 4)

When using display code 3, time in queue merged display, the actual time in queue will be merged with the previous display if possible. The previous display must be 11 characters or shorter for the merge to be allowed (10 or shorter if the time in queue was over 10 minutes). For example, if the agent entered Tally "021-58-38#" the request is to display the Pilot number text for 8 seconds and merge the time in queue on the end of the display. If the Pilot number text was "SALES" then the display would show "**SALES 0:48**" for 8 seconds. On the other hand, if the Pilot number text was "APPLICATIONS" (12 characters) then the first display would be "**APPLICATIONS**" for 8 seconds followed by "**TIME IN Q 0:48**" for 8 seconds.

Use display code 4 to force the time in queue display to always be displayed alone, that is, not merged with the previous display even when space permits.

Use a time code of 0 seconds to indicate that the final display should remain on the display for the duration of the ACD call. Tally-Oh code 009# can be entered at any time to reset the display to the default information. For example, if the agent entered Tally "021-42-60#" the time in queue will be displayed (alone) for 2 seconds (code 42) followed by the ANI digits being displayed for the remainder of the ACD call (code 60). All digits beyond the permanent display will be ignored.

CONNECTION DISPLAYS

Service Conditions

Service Conditions

1. A maximum of 5 displays may be setup with each display being from 3 to 9 seconds.
2. A permanent display (time code of 0 seconds) must be the last display in the setup string. Any subsequent codes entered will be ignored.
3. When more than 5 displays are coded only the first 5 will be displayed, the remaining entries will be ignored.
4. The same display sequence and display timing is provided both when the agent position begins ringing with an incoming ACD call as well as when the agent answers the incoming ACD call. The permanent display is only supported after the agent answers the phone and will be provided as a 9-second display when displayed during the ringing phase. This is a security feature so that potentially private numbers are not left on display at an unoccupied position.
5. Even a permanent display will be automatically reset at the conclusion of the ACD call.
6. This feature is available to all agents via Tally-Oh codes. The feature itself cannot be restricted.
7. Display timing accuracy is limited to +/- 2 seconds from the time indicated for each display.

DO NOT DISTURB - SPLIT

General Description

The Do Not Disturb feature disables queuing when there are no agents logged onto the split. When the last agent logs off the split will be automatically placed in the Do Not Disturb mode. Although similar to Night Mode in some respects this feature does not activate the **NIGHT** lamp. Incoming calls cannot queue to this split as long as it is in the Do Not Disturb mode. As soon as an agent logs in the Do Not Disturb mode is cancelled and queuing is enabled. See also [“STRANDED CALL ROUTING” on page101](#) for how to process calls which were left behind in queue when the last agent logs off.

If the Do Not Disturb mode is active, any Call Control Vector (CCV) step that would cause a call to be queued to the split is ignored. The CCV processing will continue until a queuing or transfer step is reached. Any Pause and Announcement steps that are encountered, between the ignored queuing step and the subsequent queuing / transfer step, are also ignored.

After the call is queued to another split or transferred to a PBX number, the CCV processing will continue in a normal fashion, with every Pause and Announcement step processed normally.

Operating Procedure

The DO NOT DISTURB option is implemented through the Split Data MAT command. The command data is on a split-wide basis.

The following example illustrates how the feature functions.

Table 7: Do Not Disturb CCV Example

Step	CCV INSTRUCTION	PARAMETER
1	QUEUE TO SPLIT	5
2	PAUSE	15
3	ANNOUNCEMENT	3
4	PAUSE	22
5	CONDITIONAL QUEUE TO SPLIT	12
6	ANNOUNCEMENT	4

1. Split #5 has been programmed to be placed in DO NOT DISTURB mode when agents are not logged onto the split. There are no agents logged onto Split #5.
2. A call to an ACD pilot number processes the CCV shown above.
3. The Queue to Split #5 in step #1 is ignored, because Split #5 is in DO NOT DISTURB mode.
4. The Pause in step #2 is ignored because the call was not queued during step #1.

DO NOT DISTURB - SPLIT

Service Conditions

5. The Announcement in step #3 and the Pause in Step #4 will also be ignored since the call was not queued.
6. The Conditional Queue to Split # 12 is processed. The conditions for queuing are satisfied, and the call is queued to Split # 12.
7. The processing of this CCV will continue from step #6 in a normal fashion, with all Pause and Announcement steps processed.
8. The first agent logs onto Split #5 and is in Work mode. A call to an ACD pilot number now enters the same CCV. The call will queue to split 5 even though the agent is not yet available. The caller will also perform the pause from step #2 and hear announcement #3 assuming the agent is not available.

Service Conditions

1. Both a Queue to Split and a Conditional Queue to Split instruction will be ignored if the target split is in DO NOT DISTURB mode.

EMERGENCY MONITORING

General Description

In an emergency, this feature allows a conversation between an agent and an incoming ACD caller to be monitored using a monitor connection between the ACD call and a supervisor. Activation of this feature, while on an ACD call, automatically places a call to a pre-programmed number. This number can be any station in the PBX, an individual supervisor, or a pilot number for a split of supervisors. If the target extension of the emergency request has display capabilities, then display information will accompany the call, identifying it as an emergency call.

Emergency Request Procedures:

Note: The following procedures assume that an emergency request is sent to the pilot number of a split of supervisors.

To place an emergency request:

1. Simply press the **EMERGENCY** key while engaged in an ACD call.

The agent's display shows **EMR SUPV A** and the **EMERGENCY** lamp is lit. "SUPV A" is the name associated with the split of supervisors.

Related Emergency Request Conditions:

- If no supervisor is available to take the call, a call waiting indication is provided to each supervisor position. The first supervisor to respond will silently monitor the agent and the calling party.
- When the call is assigned, the supervisor's display shows **EMR #### CCSA ##**.
"####" represents the agent position's extension and "CCSA ##" represents the trunk type and trunk circuit number to which the agent is connected.
- When a supervisor answers, the agent's display will show **EMERG ANSWERED** and the **EMERGENCY** lamp will blink. When the agent releases from the call, or the supervisor releases from the monitor, the agent's lamp will be extinguished.
- The agent and the calling party are never disconnected while the supervisor's position is ringing.

To cancel an emergency request:

1. If the request is routed to an individual supervisor's ACD or PBX line, simply press the **EMERGENCY** key again.

EMERGENCY MONITORING

Service Conditions

Queuing of emergency requests:

- Emergency requests may be routed to a split of supervisors or an individual supervisor. In the case of a split of supervisors, multiple emergency requests can be queued.
- For emergency split queuing, to ensure the fastest processing, the only CCV steps that will be executed are Queue to Split, Conditional Queue to Split, and Goto, and the request will be queued at the highest priority. All other CCV steps will be ignored.

Service Conditions

1. During an emergency, either the agent or the supervisor can display the identification of the original ACD call and the queue depth by pressing the **LOGON** key. Refer to [“CALLING PARTY IDENTIFICATION” on page 42](#) for additional information.
2. The directory number used for emergency requests may not contain a “*” or a “#” and must be a Dterm station on the same switch as the ACD agent. Therefore it is not possible to route emergency requests out of the local PBX system such as to a CCIS destination phone.
3. Any call forwarding which may be programmed at the target station receiving the emergency call will be ignored
4. Supervisor positions are always rung in Manual Answer for the EMERGENCY feature, regardless of their answer mode. This is to guard against unattended supervisor positions being left in Ready mode.
5. Supervisors may be members of a split when it is necessary for them to handle regular split calls. In this case, emergency requests should be routed to a split of supervisors, and the supervisor should work in multi-split mode taking calls from both splits. The supervisor’s logon ID should specify a higher priority for the emergency split.
6. Emergency requests are only allowed while talking on an ACD line. Requests while on a non-ACD line will be ignored.
7. Emergency requests are not allowed during an assist call.
8. If the emergency request is sent to an individual line and that line is busy, the agent's display will show **EMERG BUSY** and the **EMERGENCY** lamp will be turned off. The agent may try to send the emergency request as many times as necessary during the call.

Even though the call could not be connected because of the busy condition, a display with chime is sent to the target supervisor position to indicate that an emergency request was made but could not be connected.
9. The supervisor's monitor will not be updated for transfers or subsequent calls as in the [MONITORING - ACD SUPERVISOR](#) feature. At the completion of the emergency call, the supervisor will be released.

10. If an agent presses the **EMERGENCY** key while already being monitored by a supervisor for a non-emergency situation, the supervisor will be released from the monitor and the emergency will continue as usual. Emergency requests are not allowed during a supervisor's three-way barge or any other three-way connection in progress at the agent's position.
11. Emergency requests cannot be routed to operators, pilot numbers for group hunts, or destinations over CCIS.
12. When the emergency destination is forwarded All, Busy, or Don't Answer, the emergency call will not be forwarded.
13. The display will read **MON XXXX** at the supervisor position during the emergency call.
14. Emergency calls to personal pilot numbers:
 - a. Do not follow the Forward / Full CCV, and **Emerg Busy** is displayed.
 - b. Do not overflow once they are queued to a personal pilot number.

FLEXIBLE ID CODES

General Description

FLEXIBLE ID CODES

General Description

ID codes are used by agents and supervisors to access the ACD system. A considerable amount of information is programmed for each agent's ID code and this information is used by the ACD system to determine which calls the agent will be handling after logging in and which features the agent will have access to.

Some of the logon ID parameters are described in the table below.

Table 8: Logon ID Characteristics

Logon Entity	Logon ID Characteristic
The Logon ID	From 1 digit to 9 digits
Default Language	English / Japanese / Spanish / Italian / French / German
Agent Name	Specify a name for use in displays
Split or Splits	Specify from 1 to 16 splits
Multi-split Allowed	Allow or Restrict multiple simultaneous splits
Personal Pilot Number	Specify a directory number for Personal Queue
Personal Queue Depth	From 0 to 300 calls may be in queue
Personal Queue Forward CCV	Specify a CCV for alternate handling
Personal Queue Timeout	From 1 to infinity seconds
Personal Queue Timeout CCV	Specify a CCV for alternate handling
Personal Queue Chime	Call Waiting in queue chime On or Off
Personal Assist	Specify destination for Assist
Personal Emergency	Specify destination for Emergency

Refer to [“MULTI-SPLIT AGENT” on page 72](#) and [“SPLIT SELECTION” on page 100](#) for information on how an ID code determines the split.

Operating Procedure

1. ID codes are created with ACD MAT assignments.

Service Conditions

1. The maximum ID Code length is nine digits. The digits “0” through “9” are allowed (so long as the number does not begin with a “0”).
2. Leading zeros are not permitted in logon ID codes.
3. Each split determines whether ID codes are required for access to the ACD

system.

4. An ID code can only be assigned once in the ACD system regardless of which tenant the ID code is used for.
5. An ID code can only be used in the tenant in which it is assigned.
6. An ID code can only be used at one position at any given time. Multiple logons with the same ID code are not permitted.

HOLIDAYS SCHEDULING

General Description

HOLIDAYS SCHEDULING

General Description

Holidays may be programmed up to 365 days in advance. On a holiday, special call routing is in effect for up to eight time-of-day changes. Thirty different holiday schedules, one of which is used on any particular holiday, may be programmed for each tenant.

Operating Procedure

1. See [“TIME OF DAY/WEEK ROUTING”](#) on page 112 .

Service Conditions

1. Holiday schedule routing takes place only for those pilot numbers which route to week routing. If a pilot number routes directly to a Call Control Vector (CCV), its routing is not affected on a holiday even if holiday routing has been programmed.
2. All incoming ACD traffic must follow the same routing (CCV handling) on a holiday.

HOT SPLIT

General Description

This feature was designed to accommodate “automatic” agents or “hot” agents. That is to say, agents who never log on, never log off, and never take breaks. As soon as the ACD is online these “agents” are automatically logged on to the ACD and placed in the Ready Mode to take incoming calls. These “agents” are more accurately described as “machines” because the feature was intended for use with answering machines, dictation machines, voice mail machines, etc.

The feature is named “Hot Split” because all members of the split must be automatic agents. There cannot be a mixture of standard agent positions and hot agent positions in the same split.

Due to the nature of the equipment expected to be used for this feature, it was designed to accommodate only analog station equipment. D^{term} stations in particular cannot be used for members of a Hot Split. A member of a Hot Split is called a Hot Position.

Operating Procedure

1. A Hot Position is idle and, therefore, in the Ready Mode. This station is the only assigned member of a particular Hot Split. Let’s say it is an answering machine.
2. A call arrives to the Pilot Number for this Hot Split and immediately rings the Ready “agent”.
3. The “agent” (answering machine) automatically answers. Meanwhile, another call arrives for the Hot Split and is placed in queue.
4. The Hot Split is programmed for 15 seconds of After Call Work Mode Timeout. This allows the answering machine sufficient time to rewind or reset before the next call rings through.
5. The first caller hangs up. The “agent” enters After Call Work Mode for 15 seconds.
6. After 15 seconds the Hot Position is automatically placed in the Ready Mode and since a caller is waiting in queue, it immediately rings the position.
7. The Hot Position (answering machine) answers the next call.

HOT SPLIT

Service Conditions

Service Conditions

1. A Hot Position is allowed to go off-hook and originate outgoing calls. It will be placed in an Unavailable Mode for incoming ACD calls until it goes on hook.
2. Hot Positions are assumed to be in the Ready Mode upon ACD start-up. If the position is off hook and busy, the ACD will make only one attempt to connect a call. Then, upon noticing the busy status, will correctly mark the position as Unavailable and wait for an “on hook”.
3. Hot Split positions are not placed in the “Penalty Work” mode as a result of the call recover feature.

INFOLINK DATA MESSAGES

GENERAL DESCRIPTION

Infolink Data Messages provides a two-way communications link between the ACD and external computer equipment. Typical examples of external computer equipment includes but is not limited to:

- Mini and Mainframe Host Computers
- Desktop Workstations
- Personal Computers
- Interactive Voice Response

The first three categories are obvious examples of computer equipment but what about the fourth? The Infolink message set was specifically designed to support features which are best performed by IVR equipment in addition to several obvious applications which can be done from a host computer. IVRs can provide customized announcements, collect digits (account numbers, billing reference codes, etc.) from customers, and provide voice menuing (“Press ‘1’ for Sales, ‘2’ for Service or ‘3’ for Billing Inquiry”).

Three message sets have been designed for Infolink. External computers may use as little or as much of the data from any of the three sets as needed in order to implement their application. Unnecessary messages may be turned off to reduce transmission bandwidth. Just as there are many words which can be derived using the 26 letters of the alphabet there are also many applications which can be invented using the messages available in the Infolink message sets. We can guess what some of the obvious applications might be but there is no way to predict how far developers can go given the information available from Infolink.

Some of the possible applications which Infolink clients could perform include:

- Agent Screen Pop-Up
- Agent Screen Correlation and Screen Transfer
- Outbound Calling Campaigns
- Electronic Call Transfer
- Customized Announcements
- Host Directed Routing - Host Directed Priority Changes
- Customer Callback
- Predictive Dialing Enhancements
- Phone-In-A-Drawer / Soft phone
- Position In Queue Announcements
- Estimated Time To Answer Announcements

INFOLINK DATA MESSAGES
GENERAL DESCRIPTION

- Leave A Message vs. Stay In Queue Options

The following tables lay out the names of the messages currently available:

Table 9: Inbound Messages from Infolink Client to ACD

Tag	Message Description
IA	Dialed Digits
IB	Manage Call
IC	Split Status / Caller Status Request
Ic	Agent / Call Status
ID	Announcement Request
IE	Outbound Call Request
Ie	Outbound Call Dequeue Request
IF	Route Call Request
IG	Call Manipulation Request
IH	State Change Request
IL	Message Subscription
II	Message Subscription with Acknowledgement

Table 10: Outbound Messages from ACD to Infolink Client

Tag	Message Description
IM	ANI / DNIS Information
IN	Port Release
IO	Play Announcement
IP	Split Status Notification
Ip	Agent / Caller Status Notification
IQ	Incoming Call Notification
Iq	Incoming Call Notification with Splits
IR	Report IVR Dialed Digits
IS	Agent Ringing
IT	Agent Answer
IU	Call Disconnect
IV	Call Transfer
IW	Agent State Change
IX	Party Acknowledgment
IY	Sequence Acknowledgment
IZ	Outbound Call Disposition

Table 11: Inbound Database Change Commands from Infolink Client to ACD

Tag	Message Description
JT	Tenant Data (ACDTN)
JS	Split Data (ACDSPL)
JD	Position Data (ACDPSN)
JL	Agent Logon Data (ACDLOG)
JV	Call Control Vectors (ACDCCV)
JP	Pilot Number Data (ACDPLT)
JG	Trunk Group Data (ACDTG)
JW	Week Schedule Data (ACDWS)
JH	Holiday Schedule Data (ACDHS)
JC	Holiday Calendar Data (ACDHC)

SERVICE CONDITIONS

1. Communications between the ACD and Infolink client is performed using TCP/IP connection.

LANGUAGE DEFAULT

General Description

LANGUAGE DEFAULT

General Description

This feature allows the selection of a language, applicable to an entire tenant, for use in messages displayed at positions where an agent is not logged onto the ACD system. The following are examples of messages that will appear in the selected language:

1. The **VACANT** message, displayed when an agent is not logged on at the position;
2. The messages used during the logon procedure, such as **LOGON ID?**, (if logon ID codes are used);
3. The messages giving split information (name, queue depth, time of longest waiting call) that are displayed at a vacant position when the agent presses the **AUTO/MAN** key.

This feature offers a choice of six languages:

- English
- French
- German
- Italian
- Japanese
- Spanish

The language used for displays at a position where an agent is logged onto the ACD system is programmable for each logon ID code.

Operating Procedure

This feature is implemented through an ACD MAT command. The command data is on a tenant-wide basis.

LOGON / LOGOFF

General Description

Access to the ACD system is controlled either with or without logon ID codes. A logon ID code is used to identify individual agents or supervisors, to the ACD, for statistics gathering purposes. An agent is only permitted to be logged onto the system at one position at a time. Flexible ID Codes can be employed to log onto the ACD system. Refer to [“FLEXIBLE ID CODES” on page52](#) for related information.

Operating Procedures

Logon Procedure:

This procedure varies depending on whether or not logon ID codes are used. The cases are described separately.

When logon ID codes are used:

1. The display shows **VACANT**.
2. The agent presses the **LOGON** key. The display shows **LOGON ID?**.
3. The agent enters a logon ID code, using the DTMF keypad, and presses the “#” key after the logon ID code is entered.
4. If an invalid logon ID code is entered, the display returns to **LOGON ID?** and the agent must enter a correct logon ID.
5. If the entered logon ID code is currently in use, the display briefly shows **ID IN USE** and then returns to **LOGON ID?**.
6. If a valid logon ID code is entered, the **LOGON** lamp is lit, a greeting is provided, and the split the user logged onto is displayed.
7. The console is placed in the Work mode with the Manual / Auto answer mode set to the split's default.
8. The **WORK** key must be pressed before the agent can begin taking calls.

When logon ID codes are not used:

1. The display shows **VACANT**.
2. The agent presses the **LOGON** key; the **LOGON** lamp is turned on, a greeting is provided, and the split the user logged onto is displayed.
3. The console is placed in the Work mode with the Manual / Auto answer mode set to the split's default.
4. The **WORK** key must be pressed before the agent can begin taking calls.

LOGON / LOGOFF

Service Conditions

Logoff Procedure (with or without ID codes):

1. The agent or supervisor may log off the system while in Break mode, Work mode, or while ready to take calls.
2. The agent presses the **LOGON** key at this time. Several displays will cycle on the display for four seconds each:
 - a. A farewell greeting; for example, **GOODBYE RENEE**.
 - b. The time since logon in hours, minutes, and seconds; for example, **SHIFT 6:38:08**.
 - c. The number of incoming calls handled; for example, **ACD CALLS 138**.
 - d. If any calls were handled, the average time spent with each call in minutes and seconds; for example, **AVG TALK 1:30**.
 - e. The cumulative amount of time spent in Work mode during the shift in hours, minutes, and seconds; for example, **WORK 2:07:25**.
 - f. The cumulative amount of time spent in Break mode during the shift in hours, minutes, and seconds; for example, **BREAK 1:02:41**.
 - g. Finally, the display shows **VACANT**.

Service Conditions

1. When a vacant position displays **R.I.P.** (Reset In Progress), it indicates that the system is unable to communicate with the telephone instrument. If the **LOGON** key is pressed and the connection is established, the display will show **VACANT** within five seconds. If the connection cannot be established, **R.I.P.** will continue to be displayed.
2. An agent cannot logoff while on an ACD call. But, if agents do press the logon key during a call, the connection displays associated with the call are displayed again.
3. Split programming can be used to prevent agents from logging off based on the number of calls currently queued to that split. Refer to [“LOGOFF WARNING” on page 63](#) for more details on that feature.

LOGOFF WARNING

General Description

This feature is programmed on a per-split basis via the ACDSPL MAT command. When a split is marked for Logoff Warning agents will receive the display “Logoff Warning” for a few seconds if they try to logoff while there are still calls in queue. In order to actually logoff the agent must press the Logoff Key a second time after having received the warning message. In other words, the warning message is intended to encourage the agent to continue taking phone calls and, in fact, the agent remains logged on if the key is pressed only one time.

A value is set for the Logoff Warning feature from 1 to 9. The value describes the maximum number of agents still logged onto the split when the warning is given. If the setting is at 5 then only the last 5 agents to logoff from the split will be given the warning message.

The “Logoff Warning” display is shown only when the number of callers waiting in queue for the agent’s split is greater than or equal to the number of agents still logged on. That is, if the setting is at 5 and there are 5 agents logged on but only 3 calls are in queue then an agent will be allowed to logoff and will not receive the warning message. In fact, 2 agents may logoff and neither will receive the message. However, when there are only 3 agents remaining and 3 calls in queue, if one of those agents attempts to logoff the warning will be provided.

Service Conditions

1. For multi-split agents the logoff warning is calculated for each split that the agent is a member of. If any split falls into the logoff with warning threshold then the warning will be provided and the agent’s logoff will be restricted. No indication is given as to which split or splits has remaining calls to be answered.
2. When an agent wishes to logoff when Logoff Warning is enabled it will be required that the agent press the LOGON / LOGOFF KEY two times in succession and that there must be at least a 2 second pause between the two key presses. This should ensure that the agent was given an opportunity to see the “Logoff Warning” display and has a chosen to ignore it and logoff anyway.

MONITORING - ACD SUPERVISOR

General Description

MONITORING - ACD SUPERVISOR

General Description

This feature allows the supervisor to select an agent position and to monitor the calls on both the ACD line and the non-ACD line at that position. The agent and calling party are not aware that their call is being monitored. As the agent concludes one call and begins another, switches from one line to another, or transfers, the supervisor's monitor is applied to the current call. If both lines are idle when the monitoring is established, the supervisor will hear quiet tone until the agent either answers a call on one of the lines or places a call from the non-ACD line. At that time, the supervisor will be able to hear both parties.

Operating Procedure

Monitoring an agent's position:

1. While in Work mode, Break mode, or Ready mode (Note), the supervisor presses the **MON/BARGE** key and the display shows **MONITOR NUMBER?**.
2. The supervisor enters either the ID code of the agent or a "0" followed by the extension number of the position the supervisor wishes to monitor. For example, to monitor the agent whose ID code is "101" and who is at extension "4301", the supervisor presses either 101# or 04301#. Either a PBX or ACD extension can be used.
3. If the ID code or extension number is valid and the agent has a call in progress on either line, the **MON/BARGE** lamp will flash and the supervisor will hear a Zip Tone before silently listening in on the agent's call.
4. If no ACD call is in progress, the **MON/BARGE** lamp will be steadily lit and the supervisor will hear nothing.
5. As calls are handled by the agent, the supervisor will alternate between the two states described previously.
6. If the agent transfers to a third party, the supervisor will hear the conversation between the agent and the third party. When the agent returns to the original caller, the supervisor will again hear the agent and the original caller.
7. While monitoring a conversation, the monitor function is terminated either by releasing or by pressing the **MON/BARGE** key. The ACD system will respond by displaying the prompt **BARGE?**. To barge, the supervisor enters 1#. To exit from the monitor mode and return to the previous mode, the supervisor enters # or presses the **MON/BARGE** key again.
8. While listening to quiet tone, the monitor function is terminated by pressing the **MON/BARGE** key once.

*Note: To use this feature, the supervisor must be off-hook and must not use the **SPEAKER** key of a D^{term} to monitor an agent. If the **SPEAKER** key is used the **SPEAKER** lamp on the supervisor's D^{term} is extinguished when the call*

*is released by either the agent or the ACD calling party. If the supervisor presses the **SPEAKER** key before another call is routed to that agent, monitoring will continue. If the agent receives another call before the supervisor's **SPEAKER** key is pressed, the monitor function is terminated.*

Barging in on the monitored call:

1. Set up the monitor function as described in the preceding section.
2. While the agent is engaged in a conversation on the ACD line and the supervisor is monitoring, the supervisor may press the **MON/BARGE** key. The ACD system will respond by displaying the prompt **BARGE?**. To barge, the supervisor enters 1#. A three-way conference connection is now established.
3. Intrusion tones are provided to both the agent and the calling party prior to the conference connection, and the supervisor's **MON/BARGE** lamp will wink.
4. At this time one of two things is likely to happen:
 - a. The supervisor may press the **RELEASE** key or the **MON/BARGE** key to terminate the conference connection (barge) and return to the monitor connection.
 - b. The agent may press the **RELEASE** key and relinquish control of the call to the supervisor. In this case, the supervisor will continue to talk to the incoming caller until the call is completed, either by the supervisor pressing the **RELEASE** key or the **MON/BARGE** key, or by the caller releasing first. The supervisor will then return to a monitor connection, either listening to the agent on a new call, or quiet tone if there is no call.

Service Conditions

1. While monitoring or barging, the supervisor can display the identification of the original ACD call and the queue depth by pressing the **LOGON** key. Please see [“CALLING PARTY IDENTIFICATION” on page42](#) for additional information.
2. During three-party calls such as transfers and conferences, the supervisor will not be able to barge in, but will continue monitoring the agent and one of the other two parties. The monitoring will be updated to follow assist calls.
3. A supervisor can only monitor agents that are currently logged onto the ACD system. If a supervisor barges into a monitored call, and the agent releases and logs off, the supervisor will return to the previous mode at the completion of the call.
4. While monitoring an agent's PBX (non-ACD) line, the supervisor cannot barge into the conversation. Barges can only be done while monitoring ACD lines.
5. While the supervisor is monitoring, if the agent being monitored begins an emergency request, the supervisor will be released. This allows the supervisor to answer the emergency if necessary.
6. When requesting an agent to monitor, if the agent is not logged on, is on an emergency call, or is being monitored by another supervisor, the supervisor will be prompted again.

MONITORING - ACD SUPERVISOR

Service Conditions

7. This feature is restricted to ACD positions. There is no capability to monitor voice connections, conducted by non-ACD users, among the remaining (non-ACD) station equipment connected to the switch. The intent of this feature is to provide a secure, ACD-only, performance appraisal function.

CAUTION: The use of a monitoring device to eavesdrop may be illegal under certain circumstances and laws. Legal advice should be sought before implementing any practice that monitors a telephone conversation. Some federal and state laws require the monitoring party to use beep tones, to notify all parties to the telephone conversation, or to obtain the consent of all parties to the telephone conversation. Some of these laws incorporate strict penalties.

MONITOR ME

General Description

An agent, during an ACD call, can request to be monitored by a specific supervisor. When the agent presses the **ASSIST** key or presses the **TALLY** key and dials 006#, a monitor request is sent to the designated supervisor. Upon answering, the supervisor is in a silent monitor connection listening to the agent and the calling party.

The number (personal assist request number) associated with the supervisor is programmable for each agent.

The **ASSIST** key and the personal assist request number can be used for either the MONITOR ME feature or the ASSISTANCE - ACD AGENT feature. The choice is made for each split. Regardless of which feature the key and number are dedicated to, if an agent personal assist number and a split assist request number are both defined, the personal assist request number will always be used. If an agent is in multi-split mode and a personal assist request number is defined, the quantity of splits which have an assist request number defined is meaningless; the personal assist request number will be applied. Please refer to [“MULTI-SPLIT AGENT” on page 72](#) for more information.

An agent can also use a Agent Tally-Oh Code to send a monitor request to a supervisor. This is accomplished by pressing the **TALLY** key and entering 006#. As before, if a personal assist request number has been specified for the agent, that number will take precedence over any split assist request numbers that have been specified. Please refer to [“TALLY-OH CODES” on page 103](#) for more information.

The MONITOR ME feature works the same way with both PBX business station lines and PBX lines to supervisors. The monitor lamp is not lit nor can the Supervisor barge into the call. However, the supervisor can use his monitor key to set up the monitoring of another agent while still monitoring the PBX line. When the to-be-monitored agent receives the next call, the ACD phone will ring, telling the supervisor that the agent is receiving a call. The PBX monitor will be disconnected when the supervisor answers the ACD line to monitor the agent he set PBX line.

MONITOR ME

Operating Procedure

Operating Procedure

The following example illustrates how the feature functions.

1. An agent is logged onto a position; the extension is 4281.
2. The agent requests to be monitored either by pressing the **ASSIST** key, if this function has been programmed via the ACD MAT, or by pressing the **TALLY** key and entering 006#. The latter method is always available.
3. While the supervisor's position is being rung, the agent and the calling party remain connected and can continue to converse.
4. The **ASSIST** lamp at the agent's position is lit, and the display shows the individual supervisor's name or the name of the split of supervisors, if a pilot number is used. Examples of the two displays are, respectively, **MONITOR JAMES** or **MONITOR SUPV. A**.
5. The **MON/BARGE** lamp at the destination supervisor's position is lit and the display provides the extension of the agent who is requesting the monitor activity and the trunk type and number to which the agent is connected; for example, **MON 4281 CCSA 12**. The display appears when the monitor request is ringing and when it is answered.
6. The supervisor answers the request and begins monitoring the agent and the calling party.
7. The **ASSIST** lamp at the agent's position starts to flash and the display changes to **MONITOR ANSWERED**.
8. At this point, the supervisor is able to release the call or to barge. The latter option results in a three-way call involving the supervisor, the agent, and the calling party. To initiate the barge, the supervisor presses the **MON/BARGE** key; the ACD system responds with a **BARGE?** prompt. The supervisor can enter 1# to affirm the barge, at which point the agent and calling party are sent an intrusion tone. The supervisor can cancel the monitor activity by either pressing the **MON/BARGE** key or by entering #.

Service Conditions

1. During the barge (three-way conversation), any of the three parties may release themselves from the call; the other two parties remain connected.
2. The monitor activity, which is silent, is automatically canceled if the agent transfers to another party.
3. If the connection between the calling party and the agent is terminated prior to the supervisor's response to the monitor request, the request is automatically canceled.
4. An agent can cancel the monitor request by pressing the **ASSIST** key, if and only if the call was routed to a specific agent's or supervisor's ACD or PBX line. If a pilot number, personal pilot number, or a party that is not an agent is the target of the monitor request, the request cannot be canceled. Please refer to [“AGENT PERSONAL QUEUE” on page 7](#) for related information.

5. When a monitor me is attempted to the busy my line of a digital phone, the digital phone chimes and the LCD displays a name if the logon id has a name assigned in the ACDLOG command, for example - **Mon Henry**. If a name is not programmed the display indicates the line number of the ACD position, for example - **Mon 3000**.

CAUTION: The use of a monitoring device to eavesdrop may be illegal under certain circumstances and laws. Legal advice should be sought before implementing any practice that monitors a telephone conversation. Some federal and state laws require the monitoring party to use beep tones, to notify all parties to the telephone conversation, or to obtain the consent of all parties to the telephone conversation. Some of these laws incorporate strict penalties.

MULTIPLE CUSTOMER GROUPS

General Description

MULTIPLE CUSTOMER GROUPS

General Description

The system can be arranged to independently service more than one ACD customer (tenant). Ideally all components of the ACD system should be duplicated for each tenant but in reality some components can be shared.

Utilizing multiple tenants in an attempt to circumvent limitations imposed at a per tenant level does not work, since too many components end up being shared. Tenant limitations exist for a reason often related to software design considerations.

Assigning a second tenant to take advantage of a tenant parameter may appear to work at first, but blending all the other components of a multi-tenant ACD can present several difficulties.

Operating Procedure

No manual operation is required.

Service Conditions

1. CallCenterWorX ACD 1.0 does not support multiple tenants.
2. CallCenterWorX ACD 2.0 supports tenants 1-9.
3. Both MY line and ACD have to be in the same tenant.
4. If the logon ID is set for multi splits, the splits have to be in the same tenant.
5. If multi “queue to” steps are used in a CCV, the splits have to be in the same tenant.
6. Each tenant must have its own MIS.
7. Any alternate night CCVs must be in the same tenant as the pilot that they are assigned to.

MULTIPLE SUPERVISORS

General Description

Multiple supervisors can be grouped together to form a split when it is necessary for more than one supervisor to serve a split of agents. Assistance and emergency requests can be routed to a split of supervisors, but a split of supervisors does not normally receive incoming call traffic unless it has been programmed as a secondary split to be queued to in a Call Control Vector (CCV). Refer to [“CALL CONTROL VECTOR” on page 23](#) for more detailed information. All aspects of an agent split, such as call waiting indication and queuing, also apply to a split of supervisors.

Operating Procedure

For additional reading please see the note for [“The Supervisor Concept” on page 98](#).

MULTI-SPLIT AGENT

General Description

MULTI-SPLIT AGENT

General Description

This feature allows an individual agent to handle calls from a maximum of 16 splits. The agent's logon ID is programmed to specify whether the agent is permitted to handle calls from a single split (single-split mode) or from multiple splits (multi-split mode).

The agent's logon ID is programmed to specify which splits the agent can service. The logon ID permits 1 to 16 specific splits to be listed, or access to any split to be indicated. If specific splits are listed, then a priority (or preference level) is assigned to each split. There are four priority levels; splits can be assigned the same level.

An agent who is servicing multiple splits will have calls assigned based on a two-level algorithm. The first level of assignment is based on the priorities of the splits. Calls from the split with the highest priority will always be connected before calls from splits with lower priorities. The second level of assignment is the amount of time that the longest waiting call has been in queue. This level is only used if two or more splits have the same priority. If splits have the same priority, then the call with the longest time in queue will always be connected before calls that have spent less time in queue. The following examples, where an agent is servicing four queues, illustrate the two-level algorithm.

Table 12: Call Distribution Algorithm 1

SPLIT NUMBER	PRIORITY LEVEL	CALLS IN QUEUE	LONGEST WAITING CALL
1	1	1	15 seconds
2	2	4	45 seconds
3	2	7	20 seconds
4	3	3	50 seconds

In this case, the call in Split #1 will be connected to the agent. Split #1 has the highest priority of the splits that the agent is serving. Thus, the fact that Split #1 has the fewest calls and the call with the shortest time in queue is not a consideration.

Table 13: Call Distribution Algorithm 2

SPLIT NUMBER	PRIORITY LEVEL	CALLS IN QUEUE	LONGEST WAITING CALL
1	1	0	
2	2	4	60 seconds
3	2	7	35 seconds
4	3	3	65 seconds

In this example, the next call that is connected to the agent will be the longest waiting call from Split #2. The split with the highest priority, Split #1, does not have any calls in queue. Split #2 and Split #3 have the same (and next highest) priority. Thus, the longest waiting call will be selected, and that call resides in Split #2 (60 seconds as opposed to 35 seconds).

The splits that an agent can handle are not based solely on the agent's logon ID. A combination of three factors determines which splits a specific agent, at a specific position, can handle. The three factors and their associated variables follow.

1. The splits allowed by the agent's logon ID, which can be a list of 1 to 16 specific splits, or any split.
2. The splits allowed by the position, which can be 1 specific split or any split.
3. The split mode allowed by the agent's logon ID, which can be single-split or multi-split.

The following paragraphs describe the scenarios associated with each possible combination of the three factors. While examining these scenarios, it would be beneficial to reference [Table 14, "Valid Logon ID / Position Combinations," on page 75](#). The table's horizontal axis describes the agent's logon ID (split mode and allowed splits) and the vertical axis describes the position's allowed splits. The intersection presents the split mode in which the agent will operate and the split or splits the agent will service (indicated with lower-case letters in parentheses).

The single-split mode scenarios:

An agent, in single-split mode, whose logon ID lists 1 to 16 allowable splits can log on to a position with a single specified split (which matches one of the agent's logon ID splits) or a position with any split allowed. As an example, an agent's logon ID specifies the splits 2, 5, 8 and 12. The agent can log on at a position that specifies one of those splits (2, 5, 8 or 12). Alternatively, the agent can log on to a position that allows any split. During the logon procedure, the splits in the logon ID list are displayed sequentially. The agent indicates the single split of choice by entering 1#; entering # indicates that this is not the split of choice. The agent's split defaults, such as the after-call mode and the answer mode, will be the defaults associated with the single split that is chosen.

An agent, in single-split mode, whose logon ID permits any split can only logon at a position that permits a single specified split. The agent will take calls from the single split and the agent's split defaults will be the defaults associated with that split.

An agent, in single-split mode, whose logon ID allows any split is not permitted to log on at a position that allows any split. This combination would force the ACD system to begin to sequentially prompt the agent with the name of every split in the system, until the agent selected the single split in which they wish to work. This is not an effective use of agents' time.

MULTI-SPLIT AGENT

General Description

The multi-split mode scenarios:

An agent, in multi-split mode, is not permitted to have a logon ID which allows any split. This combination would force the ACD system to begin to sequentially prompt the agent with the name of every split in the system, until the agent selected the splits in which they wish to work. As in the previous case, this is not an effective use of agents' time.

If taken together, the last scenario of the single-split mode (an agent's logon ID allows any split, the agent is not permitted to log on at a position which allows any split), and the first scenario of the multi-split mode (an agent's logon ID which allows any split is not permitted), the following ACD condition is the result. If an agent's logon ID allows any split, then the agent will automatically be put into single-split mode and will not be allowed to log on at a position which allows any split.

An agent, in multi-split mode, whose logon ID allows a list of specific splits can log on at a position that allows a single specified split (where the split matches one of the allowed splits in the agent's logon ID list) or at a position that allows any split. In both cases, the agent will automatically be allowed to handle calls from every split in the agent's logon ID list. As an example, the agent's logon ID list allows splits 2, 5 and 8. The agent logs on at a position that allows Split #5. The agent will be allowed to handle calls from splits 2, 5 and 8. The same agent logs on at a position that allows any split. The agent will be allowed to handle calls from splits 2, 5 and 8. The agent's split defaults, such as the after-call mode and the answer mode, will be the defaults associated with the agent's logon ID attribute split. The attribute split is the first split in the list of allowable splits.

The **CW** lamp (Call Waiting), for an agent in multi-split mode, reflects the status of every split that the agent is servicing. The **CW** lamp serves as a visual indication for changes in the depth of each split queue. Thresholds for each split queue, based on the quantity of calls in the split queue, are programmed to force the CW lamp to light or flash. There are two separate thresholds. Please refer to [“CALL WAITING INDICATION” on page 40](#) for related information. Since the **CW** lamp is related to multiple splits, the lamp is used to indicate the most “severe” case at any given time. For example, the **CW** lamp reflects the status of the first split that has either reached a threshold, the first to reach a higher threshold (flashing), or the status of the split which has exceeded a threshold by the greatest amount of calls.

The **NIGHT** lamp, for an agent in multi-split mode, reflects the night mode of the attribute split. The agent is allowed to put the attribute split into Night mode, or remove the attribute split from Night mode. If one of the secondary splits is to be put into or removed from Night mode, then an agent, who is classified as a supervisor, can use a Supervisor Tally-Oh Code. The supervisor presses the **TALLY** key and enters 040# to initiate the process. Please refer to [“TALLY-OH CODES” on page 103](#) for more information.

Table 14 summarizes the valid combinations of an agent's split mode, the splits allowed to the agent, and the splits allowed to the position. Recall that a logon ID which allows the agent to operate in multi-split mode and service any split is not permitted. The intersection of the rows and columns presents the split mode in which the agent will operate and the split or splits the agent will service (indicated with lower-case letters in parentheses).

Table 14: Valid Logon ID / Position Combinations

Position's Allowed Splits	Agent's Logon ID Split Mode (single split vs. multi split) Allowed Splits - List (a, b, c, d) - Any Split		
	Single-Split List (a, b, c, d)	Single-Split Any Split	Multi Split List (a, b, c, d)
Single (a)	Single (a)	Single (a)	Multi (a, b, c, d)
Any	Single (a, b, c, d)	Not Allowed	Multi (a, b, c, d)

The splits allowed to a position or an agent can be changed by using the ACD MAT, the MIS, or a Supervisor Tally-Oh Code. These changes can be implemented while agents are logged on at positions. The impact on the agent's call handling and the agent's ability to log on at the same position in the future are described by the two general statements which follow.

1. If the changes to the splits allowed the position and/or the splits allowed the agent produce a situation which is not a valid combination, the agent will be allowed to continue handling calls as before, until the agent logs off.
2. If the changes to the splits allowed the position and/or the splits allowed the agent produce a situation which is not a valid combination, the agent will not be allowed to log on at the same position, after the agent logs off.

The following paragraphs describe the scenarios associated with changing the splits allowed to a position, the agent's split mode and the splits allowed to an agent.

Examples of changes, to the splits which are allowed to a position, follow. While examining these cases, it would be beneficial to reference Table 15, "Change Position's Allowed Splits," on page 77. The table's horizontal axis describes the agent's logon ID (split mode and allowed splits) and the vertical axis describes the change to the position's allowed splits. The table assumes that prior to the change the agent in single-split mode is servicing Split "a" and the agent in multi-split mode is servicing Splits "a", "b", "c" and "d". The intersection of the rows and columns presents the split or splits the agent will service, after the change, and the agent's ability to log on at the same position in the future. As an example, "a / NO" would indicate that the agent will serve Split "a", and will not be allowed to log on at the position in the future.

A position that allows a single specific split is changed to a position that allows a different single specific split. If an agent working in single-split mode is logged on at the position and the new split is in the agent's logon ID list of splits or the agent's logon ID allows any split, the agent will immediately begin receiving calls from the

MULTI-SPLIT AGENT

General Description

new split and the agent will be able to logon at the position after the current session. If the new split does not fall within the agent's logon ID list of splits, the agent will continue to handle calls from the original split, but will not be allowed to log on at the position following the termination of the current session. The agent whose logon ID allows any split will handle calls from the new split and will be allowed to log on at the position following the termination of the current session.

A position that allows a single specific split is changed to a position that allows a different single specific split. If an agent working in multi-split mode is logged on at the position and the new split is in the agent's logon ID list of splits, the agent will continue to receive calls from every split they were receiving calls from prior to the change and the agent will be able to logon at the position after the current session. If the new split does not fall within the agent's logon ID list of splits, the agent will continue to handle calls from the original splits, but will not be allowed to log on at the position following the termination of the current session.

A position that allows a single specific split is changed to a position that allows any split. If an agent working in single-split mode is logged on at the position, the agent will continue to receive calls from the same split. The agent with a logon ID which allows a specific split or specific splits will be able to log on at the position, after the current session is terminated. The agent with a logon ID which allows any split will not be able to log on at the position, following the termination of the current session.

A position that allows a single specific split is changed to a position that allows any split. If an agent working in multi-split mode is logged on at the position, the agent will continue to receive calls from every split they were receiving calls from prior to the change and will be able to logon at the position after the current session.

A position that allows any split is changed to a position that allows a single specific split. If an agent working in single-split mode is logged on at the position, the agent will continue to receive calls from the original split. If the new split is in the agent's logon ID list of splits, the agent will be allowed to log on at the position, after the current session is terminated. If the new split does not fall within the agent's logon ID list of splits, the agent will not be able to log on at the position, following the termination of the current session. An agent who operates in single-split mode and whose logon ID allows any split would not have been permitted to log onto a position that allows any split.

A position that allows any split is changed to a position that allows a single specific split. If an agent working in multi-split mode is logged on at the position, the agent will continue to receive calls from every split they were receiving calls from prior to the change. If the new split is in the agent's logon ID list of splits, the agent will be allowed to log on at the position, after the current session is terminated. If the new split does not fall within the agent's logon ID list of splits, the agent will not be able to log on at the position following the termination of the current session.

Table 15, “Change Position’s Allowed Splits,” on page 77 summarizes the changes to a position’s allowed splits. The table’s horizontal axis describes the agent’s logon ID (split mode and allowed splits) and the vertical axis describes the change to the position’s allowed splits. The table assumes that prior to the change the agent in single-split mode is servicing Split “a” and the agent in multi-split mode is servicing Splits “a”, “b”, “c” and “d”. The intersection of the rows and columns presents the split or splits the agent will service, and the agent’s ability to log on at the same position in the future. As an example, “a / NO” would indicate that the agent will serve Split “a”, and will not be allowed to log on at the position in the future.

Table 15: Change Position’s Allowed Splits

Change in the Position’s allowed splits	Agent’s Logon ID Split Mode (single-split vs. multi-split) Allowed Splits - List (a, b, c, d) - Any Split		
	Single-split List (a, b, c, d)	Single-split Any Split	Multi-split List (a, b, c, d)
Single (a) --> Single (b)	b / Yes	b / Yes	a, b, c, d / Yes
Single (a) --> Single (e)	a / No	e / Yes	a, b, c, d / No
Single (a) --> Any	a / Yes	a / No	a, b, c, d / Yes
Any --> Single (b)	a / Yes	Not Allowed	a, b, c, d / Yes
Any --> Single (e)	a / No	Not Allowed	a, b, c, d / No

Examples of changes to the agent's split mode:

The table's horizontal axis describes the agent's logon ID (split mode and allowed splits) and the vertical axis describes the change to the agent's split mode. The table assumes that prior to the change the agent in single-split mode is servicing Split “a” and the agent in multi-split mode is servicing Splits “a”, “b”, “c” and “d”. The intersection of the rows and columns presents the split or splits the agent will service after the change, and the agent's ability to log on at the same position in the future. As an example, “a / YES” would indicate that the agent will serve Split “a”, and will be allowed to log on at the position in the future.

An agent working in single-split mode can only be changed to multi-split mode if the allowed splits are a list, as opposed to any split. An attempt to change an agent's logon ID from single-split mode, allowed any split, to multi-split mode, allowed any split, will be denied. The resultant logon ID (multi-split, any split) is not permitted. An agent in single-split mode, allowed a list of splits, can change to multi-split mode. The agent will immediately be receiving calls from every split in the agent's logon ID list of splits. The split defaults will come from the agent's attribute split. After the current session is terminated, the agent will be able to log on at the position.

An agent working in multi-split mode is changed to single-split mode. The agent will immediately begin taking calls from their attribute split only. The agent will be able to log on at the position, after the current session is terminated.

MULTI-SPLIT AGENT

General Description

Examples of changes to the agent's logon ID allowed splits:

The table's horizontal axis describes the agent's logon ID (split mode and allowed splits) and the vertical axis describes the change to the agent's allowed splits. The table assumes that prior to the change the agent in single-split mode is servicing Split “a” and the agent in multi-split mode is servicing Splits “a”, “b”, “c” and “d”. The intersection of the rows and columns presents the split or splits the agent will service after the change, and the agent's ability to log on at the same position in the future. As an example, “a / YES” would indicate that the agent will serve Split “a” and will be allowed to log on at the position in the future.

If an agent is in single-split mode and the logon ID list of splits is changed to a different list of splits, the agent will receive calls from the attribute split in the new list of splits. The agent will be able to log on at the position, after the current session is terminated, only if the position allows one of the splits in the new list or allows any split.

If an agent is in single-split mode and the logon ID list of splits is changed to allow any split, the agent will receive calls from the same split as prior to the change. The agent will be able to log on at the position, after the current session is terminated, only if the position allows a single split.

If an agent is in single-split mode with a logon ID that allows any split and the agent's logon ID is changed to allow a list of splits, the agent will receive calls from the attribute split in the new list of splits. The agent will be able to log on at the position, after the current session is terminated, only if the position allows one of the splits in the new list.

If an agent is in multi-split mode and the logon ID list of splits is changed to a different list of splits, the agent will receive calls from every split in the new list of splits. The agent will be able to log on at the position, after the current session is terminated, only if the position allows one of the splits in the new list or allows any split.

If an agent is in multi-split mode with a logon ID that allows a list of splits and an attempt is made to change the allowable splits to “any split,” the attempt will be blocked. An agent is not permitted to have a logon ID that indicates multi-split mode and allows “any split.”

Table 16: Changes to an Agent’s Allowed Splits

Change in the Agent’s allowed splits	Agent’s Logon ID Split Mode (single-split vs. multi-split) Allowed Splits - List (a, b, c, d) - Any Split		
	Single-split List (a, b, c, d)	Single-split Any Split	Multi-split List (a, b, c, d)
(a, b, c, d) --> (c, d, e, f)	c / Yes	----	c, d, e, f ¹
(a, b, c, d) --> (e, f, g, h)	e ²	----	e, f, g, h ¹
(a, b, c, d) --> Any	a ³	----	Not Allowed
Any --> (a, b, c, d)	----	a / Yes ⁴	----
Any --> (e, f, g, h)	----	e / No ⁴	----

1. The agent will be allowed to log onto the position only if the position allowed a single specific split that is in the agent’s new list of split, or the position allowed any split.
2. The agent will be allowed to log onto the position only if the position allowed any split. If the position allowed a single specific split, it was Split “a”, since the agent was serving Split “a”. This agent can no longer log onto a position that allows Split “a”.
3. The agent will be allowed to log onto the position only if the position allowed a single specific split. An agent who is allowed any split (as this agent is now) is not permitted to log onto a position that allows any split.
4. The agent will be allowed to log onto the position only if the position allowed a single specific split which is in the agent’s new list of splits. An agent who was allowed any split (as this agent was) would not have been permitted to log onto a position that allows any split.

A supervisor may invoke a Supervisor Tally-Oh Code to change an agent's split mode (single-split/multi-split) and/or allowed splits (list/any). Changes that are instituted in this manner are only effective for the duration of the session; when the agent logs off the ACD system, the changes are ignored. Please refer to [“TALLY-OH CODES” on page103](#) for related information.

In order to change the agent's split mode and/or allowed splits, the supervisor presses the **TALLY** key and enters 035aaaaa#, where aaaaa is the ACD or PBX extension of the agent. If the agent's allowed splits is not set to any split, meaning the agent has a list of splits and is in either single-split or multi-split mode, the prompt **MULTI-SPLIT?** is displayed at the supervisor's position. The supervisor enters #1 to approve, and the agent immediately begins receiving calls from every split in the agent's list of allowable splits. Additionally, the agent's list of splits will be displayed at the supervisor's position.

If the supervisor wants the agent to work in single-split mode, the supervisor enters “#”, in response to the **MULTI-SPLIT?** prompt. The agent's list of splits will be displayed sequentially at the supervisor's position. The supervisor enters 1# to

MULTI-SPLIT AGENT

Operating Procedure

indicate the split the agent will handle. Entering # displays the next split in the agent's list. The agent will immediately begin receiving calls from the single split indicated, and the supervisor's display will show **CHANGE DONE**.

If the agent's allowable splits is set to any split, meaning the agent must be in single-split mode, then the supervisor is prompted to enter a split number, after invoking the Tally-Oh Code. The supervisor enters the split number and is prompted with the split name, for approval. After the supervisor's approval, the agent immediately begins taking calls from the new split.

Operating Procedure

This feature is implemented through ACD MAT assignments. The three critical areas which underpin the feature are:

1. The split mode of the agent, which is part of the agent logon ID, programmed on an agent basis;
2. The splits that an agent can service, which is part of the agent logon ID, programmed on an agent basis;
3. The splits allowed at a position, which are programmed on a position basis.

NIGHT SERVICE - ACD

General Description

This feature provides alternate routing for calls destined for a particular split. When Night mode is in effect for a split and a call attempts to queue to that split, the call is routed to a programmed pilot number (night pilot number), used by the split, instead of being queued. At this point, the call is handled by the Call Control Vector (CCV) of the new pilot number. Refer to [“CALL CONTROL VECTOR” on page 23](#) for related information. Night mode is invoked manually by pressing the **NIGHT** key, or automatically by the MIS.

Operating Procedure

Manual Change-over:

Night Mode Engage:

1. The agent or supervisor presses the **NIGHT** key while logged onto the ACD system.
2. **ENTER NIGHT / FWD?** is shown on the display and the agent presses 1# to confirm entering Night mode.
3. At this point, the split goes into Night mode, the **NIGHT** lamp is lit at all the positions in the split, and incoming calls are routed to the night pilot number programmed from the ACD MAT.

Night Mode Cancel:

1. Night mode may be canceled by pressing the **NIGHT** key again. **EXIT NIGHT?** is shown on the display and the agent presses 1# to confirm entering Day mode.
2. At this point, the split exits night service and the **NIGHT** lamp is extinguished at all the positions in the split.

Automatic Change-over:

1. Automatic change-over from Day mode to Night mode and vice versa is accomplished from the MIS system.

Service Conditions

1. The pilot number used for Night mode cannot contain a “*” or a “#”.
2. The pilot number for Night mode may invoke either a Week Schedule or a CCV.
3. The **NIGHT** lamp shows the current night status regardless of whether the night status was changed automatically or manually.
4. When a call attempts to queue to a split using a Queue to Split instruction in a CCV and the split is in Night mode, the Night mode routing for the split is only followed if the split is the primary split for the call. If the split is a secondary

NIGHT SERVICE - ACD

Service Conditions

split, the Queue to Split instruction is skipped. A primary split is the split specified in the first queuing instruction in a CCV. Splits specified in subsequent queuing instructions in the CCV are referred to as secondary splits.

5. When a call attempts to queue to a split using the Conditional Queue to Split instruction in a CCV and the split is in Night mode, the Conditional Queue to Split instruction is skipped.
6. When alternate routing is required by a split, **“CALL FORWARDING - SPLIT”** on page 35 may be used to provide a more dynamic choice of the pilot number used for the new routing.
7. When a split enters Night mode automatically, using the MIS, CALL FORWARDING - SPLIT is canceled.
8. For multi-split positions the **NIGHT** key activates night mode for the agent’s attribute split only. The attribute split is the first split assigned for the agent’s logon ID. Refer to **“MULTI-SPLIT AGENT”** on page 72 for related information.

NON-ACD CALL

General Description

This feature allows agents and supervisors to receive calls from and place calls to other ports in the system (e.g., PBX stations, attendants, trunks). When an agent or supervisor position is called using their PBX directory number, the call appears on the PBX line provided for that purpose. The same PBX line also permits agents and supervisors to place outgoing calls.

If an agent who is logged onto the ACD system uses his PBX line to call a pilot number, or personal pilot number, the agent's name will be displayed at the receiving agent's position. Please refer to the sections [“PILOT NUMBERS” on page 87](#) and [“AGENT PERSONAL QUEUE” on page 7](#) for related information.

Operating Procedure

1. The operation to place and receive calls on the PBX line is like any other PBX line with all the associated privileges and restrictions.

Service Conditions

1. The PBX line is not essential to ACD operation. Both agents and supervisors can operate without a PBX line. Agents and supervisors would only lose the ability to place non-ACD calls.
2. Direct incoming calls to PBX lines are permitted. When a call is received, or placed, on a PBX line, it is tagged as a non-ACD call by the MIS.

OPERATOR SELECTION

General Description

OPERATOR SELECTION

General Description

This feature permits the selection of an access code for an operator, for an entire tenant.

In the extreme case where the ACD traffic has exhausted all available call records (too many simultaneous ACD calls either connected or in queue) all new incoming ACD traffic will be diverted to the code specified. Once diverted the caller should be encouraged to call back at a later time when the ACD system is not so congested.

Operating Procedure

This feature is implemented through an ACD MAT command. The command data is on a tenant-wide basis.

PERSONAL EMERGENCY AND ASSIST

General Description

This feature allows an agent to have a designated individual supervisor's number as the destination for an assist request (personal assist request number) and a designated individual supervisor's number as the destination for an emergency request (personal emergency request number). If these personal numbers are defined for an agent, then these numbers will be used instead of the emergency and assist numbers that are defined for a split. If these personal numbers are not defined, then the request (emergency / assist) will be directed to the supervisor who was designated for the split. In the latter case, the split is the split in which the agent received the call. This is true for an agent working in single-split or multi-split mode. Please refer to [“MULTI-SPLIT AGENT” on page 72](#) for related information.

Operating Procedure

For these examples, the agent's name will be Molly and the supervisor's name will be Kathy.

To place a personal assistance request:

1. While on an ACD call, Molly at extension is 4302 presses the **ASSIST** key. The **ASSIST** lamp turns on and **ASSIST KATHY** is displayed on the agent's position indicating whose supervisor position is receiving the call.
2. The ACD call is placed on hold and an automatic transfer to the designated supervisor is initiated.
3. The agent hears ringback tone and the supervisor's position is rung.
4. The assistance call will connect on the supervisor's ACD line and the supervisor's position will display either **ASSIST MOLLY** or **ASSIST 4302**, depending on whether the agent's name is programmed with his or her logon ID. Please refer to [“FLEXIBLE ID CODES” on page 52](#) for more information.
5. After consulting with the supervisor, one of three things may happen:
 - a. The agent may release from the call thereby completing the transfer of the ACD call to the supervisor.
 - b. The supervisor may release from the call. This will reconnect the agent and the ACD call.
 - c. The agent may press the **CONF** key and invoke a three-way conference between the supervisor, the agent and the ACD calling party.
6. When either the agent or the supervisor disconnects from the assistance call, the **ASSIST** lamps are extinguished and the displays return to their original status.

To cancel a personal assistance request:

1. After initiating an assistance request and before being answered by the supervisor, the agent may cancel the request by pressing the **TRANSFER** key.

PERSONAL EMERGENCY AND ASSIST

Service Conditions

2. The **ASSIST** lamp will be extinguished, the agent will be reconnected with the ACD call, and the display will return to its original status.

To place a personal emergency request:

1. While engaged in an ACD call, the agent presses the **EMERGENCY** key, the agent's display shows **EMR KATHY**, and the associated lamp is lit.
2. The supervisor's phone rings with the emergency displays shown below.
3. The supervisor will silently monitor the agent and the calling party.
4. The supervisor's display shows **EMR 4302 CCSA 28**, where 4302 is the agent position's extension and CCSA 28 is the trunk type and trunk circuit number to which the agent is connected.
5. When the supervisor answers, the agent's display will show **EMERG ANSWERED** and the **EMERGENCY** lamp will wink. When the agent releases from the call, or the supervisor releases from the monitor, the agent's lamp will be extinguished.
6. The agent and the calling party are never disconnected while the supervisor's position is ringing.

To cancel a personal emergency request:

1. If the request is routed to an individual supervisor's ACD or PBX line, the request can be canceled by pressing the **EMERGENCY** key.

Service Conditions

1. The **ASSIST** key and the personal assist request number are dedicated to one of two features; either the key and the number are used for the **ASSIST** feature or they are used for the **MONITOR ME** feature. The choice is indicated through an ACD MAT command on a split-wide basis.
2. When a Personal Emergency or Personal Assist call destination is a station which has Call Forward All, Busy or Don't Answer set the call will not be forwarded.
3. ICS limitation shows **MON XXXX** for Personal Emergency calls.

PILOT NUMBERS

General Description

Pilot numbers are the access codes to ACD functions. They are programmed into the PBX-side database according to the numbering plan in effect for the system. Pilot numbers do not correspond to any line appearances, either physical or virtual, in the system. No physical equipment is required to assign a pilot number.

Although pilot numbers are often thought of as ringing into a particular split, pilot numbers are associated with a Call Control Vector (refer to [“CALL CONTROL VECTOR” on page23](#)) which in turn controls the handling of the ACD call. Since most Call Control Vectors will present a call to a split as one of their first functions, the pilot numbers appear as if they are connecting the ACD call to a split.

An ID can be associated with a pilot number. This ID will be displayed at an agent's position when the agent accepts a call that entered the system via that pilot number. An example of this display is **TECH SUPPORT**. Refer to [“CALLING PARTY IDENTIFICATION” on page42](#) for related information.

If an incoming ACD call enters the system through a pilot number and the receiving agent uses a pilot number to transfer the call to an agent in another split, the transferred call will be identified by the ID associated with the latter pilot number. If an ID is not associated with the latter pilot number, the call will be identified by the ID associated with the former pilot number. For example, an agent in Split A receives a call via a pilot number with an associated ID of “SERVICE”, resulting in **SERVICE** being displayed at the agent's position. The agent uses a pilot number to transfer the call to Split B. Split B has an associated ID of “PARTS”. The agent who receives the transferred call in Split B will have **PARTS** displayed at his position. If an ID was not associated with the original pilot number, the agent in Split B will have **PARTS** displayed at his position.

Service Conditions

1. Only the digits “0” to “9” may be used (“*” and “#” are not allowed) with a minimum of 2 digits and a maximum of 5 digits in each Pilot Number.
2. The *leading* digit of the Pilot Number cannot be “0”.

PRIORITY QUEUING

General Description

PRIORITY QUEUING

General Description

The ACD system supports 250 different queue priorities for every split. Priorities in a split queue are assigned such that priority “1” calls have the highest priority and priority “250” calls have the lowest priority. Calls with a higher priority will be serviced, in the order in which they were queued, before calls with a lower priority, regardless of the waiting time of the calls with a lower priority.

A particular call's priority is determined by the following factors:

1. Call origination (incoming trunk or internal station).
2. Call transfer (by attendant or station).
3. Pilot number dialed.
4. CCV priority change steps.

Operating Procedure

When implementing a system which will use multiple priorities for incoming callers there are several important concepts to keep in mind:

Highest Priority Callers Always Go First

Callers with a higher priority are always serviced before those with lower priorities. As a result of this a low priority call could remain in queue forever or at least as long as higher priority calls continue to arrive. This situation can be rectified by proper CCV programming. After a low priority call has been in queue for some amount of time a “New Priority” step in the CCV can change a call’s priority. It should be changed to something at least as high as, if not higher than, the highest priority in use for other calls.

In this way a low priority caller is only penalized (kept at a low priority) for a certain amount of time after which it will be treated similarly to the higher priority calls coming in.

Determining Trunk Caller Priority

The priority of an incoming trunk call is determined by checking two places.

- A priority assigned to the trunk group (route)
- A priority assigned to the pilot number dialed

The higher of these two priorities will be used for the call.

Service Conditions

1. Calls transferred into the ACD by PBX stations and calls transferred by attendants have the same priority.

QUEUING - ACD

General Description

There are two queues for every split. One queue contains a prioritized list of callers waiting to be connected to agents and the other queue contains a list of agents waiting to be connected to callers starting with the agent who has been ready the longest. A queue will be empty when there are no waiting callers or no waiting agents.

If agents are available to handle a call, the agent queue contains a list of the agents, starting with the highest priority (preference level) agent who has been waiting the longest period of time for a call, and ending with the lowest priority agent who has been waiting the shortest period of time for a call. Refer to [“CALL DISTRIBUTION TO AGENTS” on page 33](#) and [“MULTI-SPLIT AGENT” on page 72](#) for related information.

If callers are waiting to be connected to agents, the call queue contains a list of the calls, starting with the highest priority calls which have been waiting the longest period of time to be connected to an agent, and ending with the lowest priority calls which have been waiting the shortest period of time to be connected to an agent.

Callers may be suspended in queue while conducting certain voice transactions with IVR equipment. At this time it is possible to have a (suspended) caller in the call queue while at the same time have available agents in the agent queue.

There are two distinct ways to present a call to a split. Each way provides a different algorithm for connecting the call to an agent or placing the call in queue.

Standard queuing:

Standard queuing always connects a call with an available agent or queues the call when an agent is not available. Calls are queued according to their priority. The only limit to standard queuing is the split's maximum depth. Upon finding the queue full, alternate routing may be invoked, if alternate routing has been programmed. Please refer to the If not Queued, Goto or Busy instruction, under [“CALL CONTROL VECTOR” on page 23](#), for additional information.

A split's maximum queue depth may be specified in one of two ways:

- As an absolute number. This count defines the maximum number of callers who may wait in queue for the split.
- As a percentage of the number of working agents. This percentage is specified in 5% increments from 5% to 1000%. Working agents are those agents in the Work Mode or on an ACD call. When the queue depth is specified as a percentage of working agents the depth will change up and down as agents logon, take breaks and logoff. There may be occasions when

QUEUING - ACD

General Description

there are more calls in queue than the queue depth than normally permits. Once the queue depth reaches the maximum queue depth, no new calls will be allowed to queue until the queue depth is reduced to below the maximum queue allowance.

If the percentage is set to 150% and there are 18 agents working then the queue depth for that moment will be set at 27. No matter what the queue depth percentage is set at, a minimum of 1 call will always be queued.

Conditional queuing:

One of the two following conditions (programmed on a split-wide basis) will be checked before a call is either connected to an agent or queued.

- Minimum Agent Availability

The system will check for a minimum number of available agents before connecting the call. If the number of available agents is greater than or equal to the minimum specified, the call is accepted and connected to the longest-waiting available agent. For example, if the minimum agent threshold is set at “3”, then calls are connected if there are three or more available agents. If there are two or fewer available agents the call will be processed by the next step in the Call Control Vector (refer to [“CALL CONTROL VECTOR” on page23](#)).

- Maximum Queue Depth

The system will check for a maximum number of calls in the split's queue, at the time the call is presented. If the queue depth is less than the maximum specified, the call may be queued or connected if agents are available. For example, if the maximum queue depth is set at “3”, then calls are connected if there are fewer than three calls in queue. If there are three or more calls in queue the call will be processed by the next step in the Call Control Vector (refer to [“CALL CONTROL VECTOR” on page23](#)).

A Call Control Vector (CCV), which is assigned to a Pilot Number, allows certain calls to queue to a split, and specifies standard or conditional queuing. When conditional queuing is used, the type (condition) and threshold must be selected for the split. A split may receive standard queuing calls from one CCV while receiving conditional queuing calls from another CCV. Refer to [“CALL CONTROL VECTOR” on page23](#) for related information.

The following types of calls are permitted to queue to an ACD split when agents in the split are not available to handle calls:

- Calls to C.O., FX, or WATS trunks assigned to the ACD split.
- A DID or Tie trunk call that dialed the Pilot Number associated with the split.
- Automatic Ringdown Tie trunk terminations.
- Calls transferred by the attendant.
- Calls overflowed from other splits.

- Calls forwarded by the split supervisor of another split.
- Calls transferred by PBX stations or ACD agents.
- Calls transferred by Night mode.
- Direct station calls.

Operating Procedure

1. This feature is implemented through the programming of CCVs.

Service Conditions

1. Queuing Limitations:
 - a. An incoming ACD call can follow a set of instructions in the CCV, associated with the pilot number, and encounter many different splits. If all the splits are busy, the call is allowed to queue to the first four splits it encounters. Additional splits may be programmed in the CCV, but no queuing is permitted if the splits are busy. A Dequeue instruction removes the call from one or all of the queues it currently occupies. After dequeuing, additional splits may be programmed and queuing will take place.
 - b. There are a limited number of queue spots available in the ACD system. If a call is queued to four different splits, it has absorbed four queue spots. In the unlikely event that all the queue spots in the ACD system are in use, the split queue will not accept additional calls even though its queue depth limit has not been reached.
2. Queue Size Restrictions:
 - a. Queues are basically unlimited in size; however, a maximum queue depth may be specified when designing the database. For example, a small split having only six agents should not allow 220 queued calls. This would result in numerous abandoned calls. A maximum queue size of 15 would be more appropriate for this particular split. Once full, additional calls would get busy tone or endless ringing, depending on CCV programming. Each split's queue is programmed with a maximum size which may be an absolute number (1 to 700) or may be stated as a percentage of logged on agents (5% to 1000%).
 - b. The total number of all calls waiting in all queues combined with the total number of all calls currently connected to agents is limited to the maximum number of Call Records. Refer to the ACD Job Specification for the quantity of Call Records allocated for each ACD system. When the supply of Call Records is exhausted each new incoming call will be connected to the operator access code specified in ACDTN (Tenant Data MAT command). See [“OPERATOR SELECTION” on page84](#) for information pertaining to the specification of the operator access code.

QUEUING - ACD
Service Conditions

3. Queue Timing Restrictions:

- a. There is no limit on how long a call may remain in queue. There are ways of removing calls from queues including the caller disconnecting, a successful transfer to a PBX number, a Dequeue instruction in the CCV, or the call being answered by an agent from another queue. Encountering an END instruction in a CCV does not remove the call from the queue.

RELEASE - ACD POSITION

General Description

This feature allows an agent who is using a headset to release from a call by pressing the **RELEASE** key, rather than waiting for the other party to disconnect.

Operating Procedure

1. While engaged in a call, the agent or supervisor presses the **RELEASE** key.
2. The calling party is immediately disconnected and the agent or supervisor becomes idle with after-call availability set accordingly. Refer to [“AVAILABILITY - ACD POSITION”](#) on page 19 for related information.

RING DELAY

General Description

RING DELAY

General Description

This feature is programmed in a Call Control Vector (ACD CCV) using the Ring Delay step followed by a parameter from 1 to 15 seconds. Once a call has traversed a Ring Delay step then the ring delay feature will be applied to that call when it ultimately connects to an agent!

The effect of the Ring Delay feature on a call is that once an agent has been selected to receive this call there will be a delay in connection of up to 15 seconds. This delay is intentionally inserted to provide a window during which a host computer could paint information on the agent's screen which is pertinent to the call. The Host Computer is allowed to shorten the Ring Delay cycle by sending an appropriate Infolink command to the ACD. This message (IHx) will cause the call to immediately ring through to the agent's position.

Service Conditions

1. The accuracy of the timing in the Ring Delay feature is +/- 2 seconds.
2. For a Ring Delay step in a CCV to be effective it must appear before the Queue To step, otherwise the Ring Delay step may not be reached if calls ring in and go directly to a waiting agent.

SPLITS

General Description

A Split is a basic building block of a call center and is generally thought to consist of a group of agents performing a similar task, a prioritized queue for incoming callers and possibly a supervisor position to oversee the caller and agent activity within the split. The supervisor may have a sophisticated statistics program available to monitor the caller and agent activity which will provide both realtime as well as historical information.

Many features are provided on a per-split basis and applied equally to all agents in the split or all callers in the split's queue. Here is a brief summary of the features available for a split. Most of these are discussed in detail on their respective pages and are included here for summary information only.

After ACD Call Mode

At the conclusion of each call an agent can be automatically either available or in wrap up mode depending on this setting. Straightforward key presses at the agent instrument allows individual agents to override this feature on a call-by-call basis.

Agent Queuing Options

An option exists where the agent's preference levels can be checked in order to decide which agent should receive the next incoming call. When preference levels are not being checked then the call will go to the longest waiting agent. If preference levels are being checked then the agent with the highest preference level is located and if there are more than one with the same preference level then the longest waiting one will be assigned the call.

Answer Mode

By default, agent phones may be setup for auto answer which provides zip tone and an automatic connection or manual answer in which case the agent's position will ring and the incoming call should be answered in the normal fashion. Straightforward key presses at the agent instrument allows individual agents to override this feature on a call-by-call basis.

Assist Destination

A destination to receive calls when an agent presses the Assist Key can be specified for each split.

Auto Ready after PBX Call

A feature may be setup such that an agent's position will be automatically replaced in the Ready Mode at the conclusion of a call on their PBX line.

SPLITS

General Description

Auto Work with PBX Answer

ACD positions may be automatically placed in the Work Mode when an agent answers an incoming call on their PBX line.

Auto Work with PBX Ringing

ACD positions may be automatically placed in the Work Mode when an incoming call begins to ring on their PBX line.

Auto Work with PBX Dialing

ACD positions may be automatically placed in the Work Mode when an agent receives dial tone in order to place an outgoing call on their PBX line.

Break Types

By simply pressing a digit '1' through '9' when entering the Break Mode the MIS systems can track more closely how an agent's time is being spent.

Call Recover Timer

After a call has been assigned to an agent's position it is expected to be answered within a certain short period of time. If the call is not answered it can be programmed to be recovered and placed back in queue. At this time it will be connected immediately to another agent if one is available or will wait as the highest priority call to be connected as soon as one is available.

Call Waiting Chime On

The Call Waiting feature includes an optional chime which sounds only at ACD positions which are in the Work Mode at the moment the CW light turns on or begins flashing.

Call Waiting Threshold

The Call Waiting LED can be programmed to light when 'X' calls are in queue and begin flashing when there are 'Y' calls in queue. The thresholds are programmed independently for each split.

Conditional Threshold

Certain splits may be programmed to only accept overflow calls from other splits only if certain thresholds have not been exceeded. Either too many calls in queue or not enough available agents can prevent conditionally queued incoming calls from reaching this split.

Do Not Disturb Mode

When a split is unstaffed it operates in a Do Not Disturb Mode. Calls may be either allowed or restricted from queueing during this mode.

Emergency Destination

A destination to receive calls when an agent presses the Emergency Key can be specified for each split.

Hot Split

When a split is specified as a Hot Split then all ACD positions which are programmed for that split are automatically logged on when the ACD is initialized. This is most useful for ports which are typically staffed with machines like dictation equipment, answering machines, voice mail, etc.

Logon ID

Agents are expected to use a logon ID to gain access to an ACD position. It is via this ID that the ACD becomes aware of what kind of calls should be assigned to this position.

Queue depth

The number of calls waiting to be answered in a split's queue can be limited as an absolute value or as a percentage based on the number of agents logged in and working. Of course the limits can be set to such a level as to be virtually unlimited.

Monitor Me Destination

A destination to receive calls when an agent dials the Monitor Me code can be specified for each split. A supervisor is alerted to the agent's request for monitoring and should commence a silent monitor to that station.

Night Destination

A destination pilot number can be specified to receive incoming ACD calls when a split goes to Night Mode.

Stranded Calls CCV

If there are calls remaining in queue even after the last agent has logged off they will be forwarded automatically to the Stranded Calls CCV if one has been specified.

Work Mode Restriction

The ability for agents to selectively enter the work mode can be restricted. In such an environment agents will normally be forced to take one incoming call after another or enter the break mode.

Work Mode Timeout

The amount of time allocated for after call work mode wrap up can be set for each split. At the conclusion of that time period the agent will be automatically placed in the ready mode in order to receive a new incoming ACD call.

SPLITS

Service Conditions

By properly assigning these features each split can customize the method of operation to suit the needs of the agents and clients. Additionally, it may be advantageous for an agent to be a member of multiple splits at one time. Please refer to “[MULTI-SPLIT AGENT](#)” on [page72](#) for additional information.

The Supervisor Concept

The concept of a supervisor or a supervisor position has no formal definition within this ACD. Some of the traditional ideas of a supervisor are described below and in all cases these features or attributes may be applied to any agent or agent position.

Controls Day / Night Mode

Traditionally the supervisor would be responsible for placing the split in the day mode and night mode. This operation is performed via the **NIGHT** key which was typically only present on the supervisor’s phone. Now, any agent telephone may be programmed with a **NIGHT** key, indeed, the supervisor phone is just another agent phone, and may place the split into the day or night modes. Each phone in the split equipped with a **NIGHT** key will get an appropriate **NIGHT** lamp indication whenever anyone in the split changes the day / night mode.

Can utilize the Performance Appraisal / Silent Monitor feature.

This feature is activated through the use of the **MON/BARGE** key and is available to any agent position equipped with such a key. It is not hard to imagine an environment where a senior agent may be responsible for doing some of the performance appraisals but not be considered the “Supervisor”. Every position may be equipped with a **MON/BARGE** key.

Has access to the Realtime and Historical Report MIS Information.

This capability is provided by external computer (PC) equipment. It is a management decision that determines who will be provided with such computer equipment. We would expect most “Supervisors” to have access but certainly other individuals may have a need for such information as well.

Service Conditions

1. Every position in the ACD may be a member of the same split.

SPLIT DISPLAY - ACD POSITION

General Description

The name of the split that a position belongs to can be displayed while the position is in Vacant mode. This maintenance feature helps the user determine which positions belong to which splits.

Operating Procedure

1. While the position is Vacant, press the **AUTO/MAN** key or the **WORK** key.
2. Two four-second displays will follow each other providing some brief statistics pertaining to the split this position belongs to.
 - the current queue depth and wait time of the longest caller is displayed first:
Q = 1 WAIT = 4:38
 - the name of the split and an estimated time to answer (ETA) for a call just arriving is shown second: **SALES: 5:45**
3. The display returns to **VACANT**.

Service Conditions

1. This feature is only available when the position is unoccupied.
2. Positions which are programmed to allow any split cannot use this feature but Tally-Oh codes have been provided which can display the same information if the position has proper permission settings to use these codes. See [“TALLY-OH CODES” on page 103](#) for specific information.
3. The agent’s display will show **SPLIT: ANY** if the position is programmed as an any split position and an attempt is made to use this feature.

SPLIT SELECTION

General Description

SPLIT SELECTION

General Description

Split selection is determined by the position in use and the logon ID in use. A logon ID indicates whether the agent can service a single split (single-split mode) or a maximum of four splits concurrently (multi-split mode). A logon ID can access a maximum of four specified splits or any split. A position can access a single specified split or any split.

When an agent logs on, a validation procedure compares the split assignment of the position with the split assignment and the split mode of the logon ID. The three factors (position split assignment, logon ID split assignment, logon ID split mode) determine the split(s) that the agent works in and that are displayed during the logon process. Please refer to [“MULTI-SPLIT AGENT” on page 72](#) for additional information.

Operating Procedure

1. Split assignments for positions and logon IDs are accomplished through ACD MAT assignments.
2. Split selections are performed automatically by the ACD system when an agent logs on.

Service Conditions

1. One combination of a position's split assignment and a logon ID is not allowed. One combination of a split mode and a split assignment, within the same logon ID, is not allowed. Both combinations are denied because the determination of the appropriate split(s) would be an ineffective use of ACD system resources and agents' time. The two combinations which are not permitted are:
 - a. A logon ID which allows any split, in combination with a position which allows any split;
 - b. A logon ID which indicates multi-split mode and allows any split.
2. Changes to the position's split assignment and/or the logon ID, entered at the ACD MAT or the ACD MIS terminal, will take effect immediately when the agent logs on. If these changes are invoked when the agent is already logged on at a position, then several scenarios unfold. Refer to [“MULTI-SPLIT AGENT” on page 72](#) for an explanation of these scenarios.
3. A supervisor can invoke a Supervisor Tally-Oh Code (refer to [“TALLY-OH CODES” on page 103](#)) to change the logon ID attributes, while an agent is logged on at a position. These changes are only effective for the duration of the current session; when the agent logs off, the changes are ignored. The effect of these changes, during the current session, are explained in [“MULTI-SPLIT AGENT” on page 72](#).

STRANDED CALL ROUTING

General Description

A stranded call is defined as a call left unanswered in queue at the time when the last agent in the split logs off the ACD system. If this call is not queued to any other split which still has agents logged on then it becomes “stranded” at the moment the last agent logs off and is a candidate for Stranded Call Routing.

Some call centers operate by placing a split into Night Mode some number of minutes prior to their actual closing time or more precisely prior to the time when the last agent will log off. This will stop new incoming calls from being queued while the remaining agents handle the calls which are still in queue. The Stranded Call Routing feature is not affected by Night Mode and will still be invoked to reroute any calls remaining in queue when the last agent logs off.

When Stranded Call Routing is invoked each caller remaining in queue will be directed to a new Call Control Vector and step and continue their ACD processing from that new point. Any CCV sequence may be specified at this time.

Operating Procedure

1. A caller remains in queue for the Customer Service split.
2. One agent is still working, handling another call and all other agents have logged off and gone home.
3. The last agent finishes the call and enters After Call Work Mode.
4. After some time, and without answering the last call in queue, this agent logs off the system.
5. Since the caller in queue is only in the Customer Service queue and there are no agents remaining in this split the caller will be immediately rerouted to the Stranded Call CCV destination specified for this split.

Service Conditions

1. Assist and Emergency calls will be rerouted by the Stranded Call Routing feature.

TALLY COUNT

General Description

TALLY COUNT

General Description

This feature allows agents to register the occurrences of several specific events using the dial keypad, such as responses to various advertising methods, sales campaigns, or calls from particular locations.

The MIS system is responsible for keeping a record of each event and may keep additional statistics for the various Tally Count events such as call duration. If a particular Tally Count pertains to a specific phone conversation that Tally Count will need to be entered either during the phone call itself or during the After Call Work time following that call and definitely prior to the beginning of the next ACD call. Once the next call has begun a Tally Count entry at that time would be associated with the new call. There is no way to associate a Tally Count with a previous call once a subsequent call has begun.

Multiple Tally Counts may be entered for a single phone call.

This feature is activated by the operation of the **TALLY** key on the agent position.

Operating Procedure

1. The agent presses the **TALLY** key at any time. The display shows **TALLY NUMBER?**.
2. The agent enters up to 22 digits from the telephone keypad and presses # when finished.
3. The display shows **TALLY ENTERED**, for a short time, and then reverts to the previous display.
4. Pressing the **TALLY** key a second time before pressing the “#” key cancels the Tally Count feature.
5. All digits must be entered within a 30-second period or the Tally Count feature will timeout. After timeout, the feature is reset and all digits will have to be reentered.

Service Conditions

1. Tally Count items are entered by pressing one of the dial keypad digits, “0” through “9” (however, leading digit “0” is not allowed).
2. The length of tally numbers is variable, to a maximum of 22 digits.
3. The “*” key and the “#” key cannot be used as tally numbers since they are used to erase and enter input.
4. The keypad number “0” cannot be used as the leading digit of a Tally Count code since this number is reserved as the leading digit for Tally-Oh Codes. Refer to [“TALLY-OH CODES” on page 103](#) for related information.

TALLY-OH CODES

General Description

Tally-Oh Codes are reserved for special use by agents or supervisors in the ACD system and are not reported to the MIS. These codes invoke various actions, such as statistical displays and mode changes. Tally-Oh Codes always begin with the digit zero, “0”. This trait of always using a leading digit of “0” differentiates the Tally-Oh Codes from the Tally Codes which are reported to the MIS system for statistical analysis.

The Tally-Oh Codes are divided into three categories which are suggestive of the types of users who are most likely to need those codes. Only the Supervisor Codes can be restricted on a per-position basis. All other codes may be used at any ACD position.

The following three tables illustrate the purpose and usage of the Tally-Oh Codes for Agents, Supervisors, and Technicians.

Operating Procedure

1. The agent/supervisor presses the **TALLY** key at any time. The displays shows **TALLY NUMBER?**.
2. The agent/supervisor enters the Tally-Oh Code from the telephone keypad and presses “#” when finished.
3. Pressing the **TALLY** key a second time before pressing the “#” key cancels the Tally-Oh Code entry.
4. The Supervisor Tally-Oh Codes must be explicitly enabled on a per-position basis as specified in the ACD MAT Position Data command.

Agent Examples:

1. Press **TALLY** key.
2. For Tally-Oh Code 024 dial 024XXX# (XXX = split number).
3. For Tally-Oh Code 025 use 025XXX# (XXX = split number).
4. For Tally-Oh Code 026 use 026#.
5. For Tally-Oh Code 027 use 027#.

Supervisor Examples:

1. Press **TALLY** key.
2. For Tally-Oh Code 050 dial 050XXXBBZZZ.
XXX= the “from” split;
BB = the number of calls to be redirected (a maximum of 10 calls);
ZZZ = the “to” split.

TALLY-OH CODES

Service Conditions

3. For Tally-Oh Code 054 dial 054XXXX# (XXXX = position number).
 - a. Display reads Split number: Dial YYY# (YYY = split number)
 - b. Display reads Priority: Dial AA# (AA = priority 01-99)
4. For Tally-Oh Code 055 dial 055XXXX# (XXXX = position number)
 - a. Display reads Split number: Dial YYY# (YYY = split number)
5. For Tally-Oh Code 056 dial 056XXXX# (XXXX = position number).
6. For Tally-Oh Code 057 dial 057XXXX# (XXXX = position number).

Service Conditions

1. Tally-Oh Codes are entered by pressing one of the dial keypad digits, “0” through “9”.
2. The “*” key and the “#” key cannot be used as Tally-Oh Code numbers since they are used to erase and enter input.

Table 17: Agent Tally-Oh Codes

Code	Description
000#	<p>Replay agent’s statistics: shift time, number of ACD calls answered, average talk time, total time in work mode since logging on, and total time in break mode since logging on). Can be used from any mode. After logging off, statistics can be replayed as many times as necessary until an agent logs onto the position. All statistics are reset upon logon.</p> <p>Sample Displays:</p> <p>SHIFT 3:12:48 (hours, minutes, seconds) ACD CALLS 22 (one to three digits) AVG TALK 3:11 (minutes and seconds) T-WORK 0:55:19 (hours, minutes and seconds) T-BREAK 1:04:31 (hours, minutes and seconds)</p>
001#	<p>Display queue depth for current split. If used from a vacant position, the position’s split is used. If used while logged on, the agent’s split is used. For agents working in multi-split mode, the queue depths of all of the agent’s splits are displayed, one at a time.</p> <p>Sample Displays:</p> <p>ORDERS 10</p>
002#	<p>Display time of longest waiting caller for current split. If used from a vacant position, the position’s split is used. If used while logged on, the agent’s split is used. For agents working in multi-split mode, the longest waiting callers of all of the agent’s splits are displayed, one at a time.</p> <p>Sample Displays:</p> <p>SERVICE 1:50 (minutes and seconds)</p>

Table 17: Agent Tally-Oh Codes

Code	Description
003#	<p>Display number of working agents in split. A working agent is one that is logged on, and not in break mode. (Either on an ACD call, in work mode, or ready mode) If used from a vacant position, the position's split is used. If used while logged on, the agent's split is used. For agents working in multi-split mode, the number of working agents for all of the agent's splits are displayed, one at a time.</p> <p>Sample Displays: DOMESTIC 151 (1 to 3 digits)</p>
004#	<p>Display number of agents on break in split. If used from a vacant position, the position's split is used. If used while logged on, the agent's split is used. For agents working in multi-split mode, the number of agents on break for all of the agent's splits are displayed, one at a time.</p> <p>Sample Displays: INTERNAT'L 8 (1 to 3 digits)</p>
005#	<p>Display time passed since entering current mode. Valid for all modes: vacant, work, break, ready, or on an ACD call.</p> <p>Sample Displays: BREAK 0:41:06 (hours, minutes and seconds)</p>
006#	<p>Monitor me request. An agent asks a supervisor to monitor the conversation. Only valid while on an ACD call.</p> <p>Sample Displays: MONITOR JAMES</p>
007#	<p>Temporarily disable work mode time limit. Valid only from work mode, and disabled only until agent exits work mode.</p> <p>Sample Displays: TIMEOUT DISABLED</p>
008#	<p>Display time and date for four seconds. Can be used from any mode, including modes such as ready and break where the display normally shows a constant display.</p> <p>Sample Displays: 4:58 PM MON 28</p>
009#	Clear permanent display such as "READY", "ON BREAK", or "VACANT".
021#	Setup Connection Displays, see "CONNECTION DISPLAYS" on page44
022#	Online Help, see "CONNECTION DISPLAYS" on page44
023#	Show Connection Displays, see "CONNECTION DISPLAYS" on page44
024#	Agent uses to add himself or herself into another split (for CallCenterWorX ACD version 2.0 only). See Note below.
025#	Agent uses to remove himself or herself from a split (for CallCenterWorX ACD version 2.0 only). See Note below.

TALLY-OH CODES
Service Conditions

Table 17: Agent Tally-Oh Codes

Code	Description
026#	Displays the current splits that the agent is in (for CallCenterWorX ACD version 2.0 only). See Note below.
027#	Makes permanent the changes made by Tally-Oh Code 024 or 025 (for CallCenterWorX ACD version 2.0 only). See Note below.
028#	Unlock an agent's own position (Emergency use only).
029#	Force an agent's own position to logoff (Emergency use only).
Note	If Tally-Oh Code 027 is not used, the changes made by Code 024 and 025 will return to the original setting when that agent logs off.

Table 18: Supervisor Tally-Oh Codes

Code	Description
030	<p>Display statistics for a given agent: shift time, number of ACD calls answered, average talk time, total time in work mode since logging on, and total time in break mode since logging on.</p> <p>Press: 030aaaaa# (aaaa = agent's ACD or PBX extension)</p> <p>Sample Displays:</p> <p>SHIFT 3:12:48 (hours, minutes, seconds) ACD CALLS 122 (one to three digits) AVG TALK 3:11 (minutes and seconds) T-WORK 0:55:19 (hours, minutes and seconds) T-BREAK 1:04:31 (hours, minutes and seconds)</p>
031	<p>Display a given agent's current mode and the time passed since entering that mode. Valid for all modes: vacant, work, break, ready, or on an ACD call.</p> <p>Press: 031aaaa# (aaaa = agent's ACD or PBX extension)</p> <p>Sample Displays:</p> <p>BREAK 0:41:06 (hours, minutes and seconds)</p>
032	<p>Force a given agent to break mode. (From work or ready modes)</p> <p>Press: 032aaaa#(aaaa = agent's ACD or PBX extension)</p>
033	<p>Force a given agent to ready mode. (From break or work modes)</p> <p>Press: 033aaaa#(aaaa = agent's ACD or PBX extension)</p>
034	<p>Force a given agent to work mode. (From break or ready modes)</p> <p>Press: 034aaaa#(aaaa = agent's ACD or PBX extension)</p>
035	<p>Change a given agent's split or multi-split mode. Prompts are displayed to prompt for split number and approval.</p> <p>Press: 035aaaa#(aaaa = agent's ACD or PBX extension)</p>

Table 18: Supervisor Tally-Oh Codes

Code	Description
036	<p>Display queue depth for a given split. Press: 036ss#(ss = one or two digit split number) Sample Displays: DOMESTIC 36</p>
037	<p>Display time of longest waiting caller for a given split. Press: 037sss#(sss = one or two or three digit split number) Sample Displays: INTERNAT'L 4:06 (minutes and seconds)</p>
038	<p>Display number of working agents (on an ACD call, in Work or Ready modes) for a given split. Press: 038ss#(ss = one or two digit split number) Sample Displays: CRUISES 9</p>
039	<p>Display number of agents on break for a given split. Press: 039ss#(ss = one or two digit split number) Sample Displays: SKY-DIVERS 2</p>
040	<p>Change night mode of a given split. Press: 040ss# (ss = one or two digit split number). The prompt NIGHT MODE? will be displayed to ask for approval to put the specified split into night mode. To approve, press “1#” and the display split name = NIGHT will be shown. To disapprove and put the split into day mode, press “#” and the display split name = DAY will be shown. Sample Displays: AWARDS = NIGHT AWARDS = DAY</p>
041	<p>Display Estimated Time to Answer (ETA) for a given split. Press: 041sss# (sss = one or two or three digit split number) Sample Displays: SALES: 11:43 (minutes and seconds)</p>
050	<p>Redirect calls in queue from one split to another split (for CallCenterWorX ACD version 2.0 only). See Note below.</p>
054	<p>Add an agent to another split (for CallCenterWorX ACD version 2.0 only). See Note below.</p>
055	<p>Remove an agent from a split (for CallCenterWorX ACD version 2.0 only). See Note below.</p>

TALLY-OH CODES
Service Conditions

Table 18: Supervisor Tally-Oh Codes

Code	Description
056	Display an agent's current splits (for CallCenterWorX ACD version 2.0 only). See Note below.
057	Make permanent the changes made by Tally-Oh Code 054 or 055 (for CallCenterWorX ACD version 2.0 only). See Note below.
068	Unlock a given agent's position. (Emergency use only) Press: 068aaaa#(aaaa = agent's ACD or PBX extension)
069	Force a given agent's position to logoff (Emergency use only). Press: 069aaaa#(aaaa = agent's ACD or PBX extension)
Note	If Tally-Oh Code 057 is not used, the changes made by Code 054 and 055 will return to the original setting when that agent logs off.

Table 19: Technician Tally-Oh Codes

Code	Description
071	Set I/O port speed (for MIS or trace). Press: 071pss#(p = I/O port number 1-6. ss = two-digit speed 04-64) Default speed is 24 for all ports. Can also be done by ACDCOMMAT command.
072	Turn call processing trace on or off. Output goes to the trace port setup by "070" above, or to a buffer in ACD memory if a trace port is not active. Press: 072s#(s = state: 0 (off) or 1 (on)) Can also be done by ACDCOMMAT command.
073	Turn X409 trace on or off (hex messages between ACD and PBX). This trace outputs very large amounts of data, and cannot be enabled while a trace port is active unless a Tally-Oh Super User code is used. Output will go to a buffer in ACD memory if a trace port is not active. Press: 073s# (s = state: 0 (off) or 1 (on)) Can also be done by ACDCOMMAT command. NOTE: Because of the large amount of trace data, this trace is usually used only by NEC engineers.
074	Turn MIS trace on or off (MIS related trace and error messages). Output goes to the trace port setup by "070" above, or to a buffer in ACD memory if a trace port is not active. Press: 074s#(s = state: 0 (off) or 1 (on)) Can also be done by ACDCOMMAT command.
076	Display error counts. Press: 076n#(n = error count number 0-99)

Table 19: Technician Tally-Oh Codes

Code	Description
077	Reset all error counts. Press: 0770#
078	Reset trace flag (memory save after some errors). Press: 0780#
079	Display time of last ACD initialization. Press: 079#
080	Display ACD version number and release date. Press: 080#
081	Unlock given logon id. Press: 081n#(n = logon id number)
082	Display current location of buffer trace pointer. Press 082#
083	Force MIS download on a given port. Press: 083p#(p = MIS port number 1-6)
084	Display (clear) debugging call counters. To display, press: 084# To clear counters, press: 0840#
085	Turn st_driver() debugging on or off. Usually used with call processing trace. Press: 085s#(s = state: on = 1, off = 0)

TALLY-OH CODES
Service Conditions

Table 19: Technician Tally-Oh Codes

Code	Description
087X	<p>X = 0 – 6 (for CallCenterWorX ACD version 2.0 only)</p> <p>0 = Clear (reset to 0) all 087 counters</p> <p>1 = SMFN 1 – ACD Call counter</p> <p>2 = SMFN 2 – ACD Answer counter</p> <p>3 = SMFN 3 – ACD Release counter</p> <p>4 = SMFN 4 – ACD Offhook counter</p> <p>5 = Events/hour – ACD Call Rate (number of ACD calls in an hour)</p> <p>6 = Events/hour – ACD Answer Rate (number of ACD calls answered in an hour)</p>
088X	<p>X = 0 – 6 (for CallCenterWorX ACD version 2.0 only)</p> <p>0 = Clear (reset to 0) all 088 counters</p> <p>1 = SCF 1 – Orig. Call counter</p> <p>2 = SCF 2 – Release Call counter</p> <p>3 = SCF 4 – Connect Call counter</p> <p>4 = SCF 5 – Announcement Call counter</p> <p>5 = SCF 6 – Non ACD Call counter</p> <p>6 = SCF 7 – Xfer Call counter</p>

TALLY REQUIRED

General Description

This feature is programmed on a per-split basis via the ACDSPL MAT command. When a split is marked for Tally Required an agent will not be able to answer a new incoming ACD call until a Tally entry has been made for the previous call. If an agent attempts to enter the Ready Mode to receive a new call but has not yet entered a Tally Code from the previous call a message will display “Tally Needed” for a few seconds.

The per-Call Tally field on the ACDSPL MAT command may be set independently for each split in the ACD. Even if an agent is using the multi-split agent feature will be checked as each call is assigned based on the split that call is coming from. The Tally Code may be entered while the call is in progress or during the after-call work mode. If the after-call work mode is timed and the timer expires before the Tally Code has been entered a Permanent Work Mode will result. Once in Permanent Work Mode an agent will be required to press the Work Key in order to receive the next incoming call and, of course, this will only be effective after the required Tally Code has been entered.

Service Conditions

1. Agents who are determined to get around the requirement of entering a Tally Code after each and every call may find that they are not even allowed to logoff the ACD system until they have entered a tally code for the most recently completed call. This is not a bug. The “Tally Needed” display will serve as a strong reminder to the agent that they have not yet completed the requirements for the previous call.
2. An agent is not permitted to go to Break Mode until a required Tally Code has been entered for the previous call. The usual display will remind the agent that the tally code is still needed.
3. Tally-Oh codes to Force Logoff a position will work even though a final Tally Code has not been entered.
4. Even though Tally Codes are required it is still possible for counts of Tally Codes and calls handled to differ. There are a few reasons for this, not the least of which is that multiple Tally Codes for a single call are always permitted.

TIME OF DAY/WEEK ROUTING

General Description

TIME OF DAY/WEEK ROUTING

General Description

The routing of incoming calls can be controlled by the time of week. A week can be divided into 50 time segments, with different call handling performed during each segment. Segments must begin and end on whole minutes; no fractional minutes are allowed. Each segment will specify a Call Control Vector (CCV) number and step number where call handling will commence (refer to [“CALL CONTROL VECTOR” on page23](#)). This routing specification is referred to as a Week Schedule.

Week routing can be interrupted during pre-programmed holidays, at which time a special 24-hour override table is available with up to eight time segments to provide routing on that day. The override table is referred to as a Holiday Schedule (refer to [“HOLIDAYS SCHEDULING” on page54](#)). Holidays may be programmed up to 365 days in advance.

Operating Procedure

Week Schedule routing is activated by programming a pilot number to invoke a Week Schedule instead of a CCV.

Service Conditions

1. This feature uses the PC system clock to determine the current time. It is the user's responsibility to ensure that the clock is accurately set in order for week routing to make accurate transitions from one time segment to another.
2. In processing the CCV for a particular time of the week, a Queue to Split instruction in the CCV may find a split in Night mode or in split call forwarding. In this case, the Night mode or split call forwarding will take over the routing of the incoming call. See [“NIGHT SERVICE - ACD” on page 81](#) and [“CALL FORWARDING - SPLIT” on page 35](#) for more information.

TRUNK TROUBLE REPORT - MIS

General Description

This feature allows an agent to indicate a trouble condition affecting a trunk (e.g., poor transmission) which is encountered during a call. The system will log the agent's position number and the number of the connected trunk. This information is printed out on the ACD MAT and provided to the MIS.

Although this feature is designed primarily to aid in the reporting of defective trunk circuits it does also report the connected party information even when the connected party is not a trunk such as in a station-to-station call.

Operating Procedure

1. The operations at the ACD agent position and the supervisory position are as follows:
 - a. The agent is engaged in an ACD call.
 - b. The **TRK TRBL** key is pressed on the ACD agent position.
 - c. **TROUBLE REPORTED** is displayed on the position for four seconds and the trouble is reported to both the ACD MAT and the MIS terminal.

Service Conditions

1. There is no LED indication when the **TRK TRBL** key is pressed.

VARIABLE QUEUEING

General Description

VARIABLE QUEUEING

General Description

This feature allows the ACD caller to be queued to a split, depending on the number of working agents at the time that the ACD call is presented to the split.

Operating Procedure

Variable queueing is programmed by splits in the ACDSPL command in ACDMAT.

Service Conditions

Variable queueing is activated by a percentage of working agents (a working agent is logged on and not in Break mode). This percentage is specified in increments of 5 percentage points up to 1000%. This percentage is programmed in ACDSPL at maximum queue depth.

Example:

Maximum Queue Depth = 150%

There are 4 working agents.

The number of calls that will be allowed to queue to the split = 6.

1.50 (or 150% max queue depth)

x 4 (working agents)

6 calls allowed to queue

VOLUME CONTROL (ACD HEADSET)

General Description

This feature allows the agent to control the receive volume level at the position, independently of the level of the incoming signals. This is a feature implemented exclusively by hardware with customer provided equipment.

WORK MODE

General Description

WORK MODE

General Description

This feature offers the choice of allowing the agents within a split to enter and exit Work Mode. Calls waiting in queue cannot be connected to agents in the Work Mode. Since the Work Mode inhibits agents from receiving calls it is sometimes beneficial to limit Work Mode use or restrict it altogether. Two features have been provided which limit the agent's ability to be in the Work Mode.

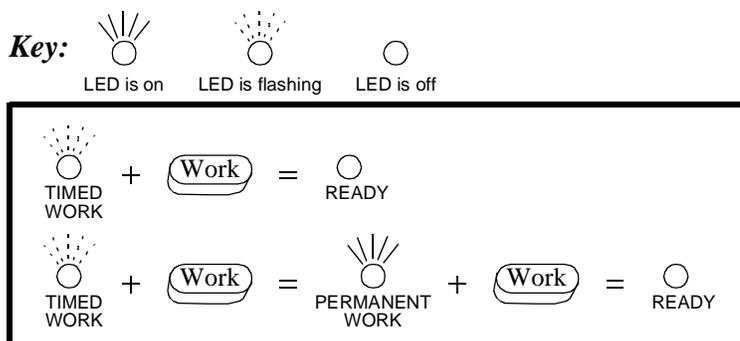
After Call Work Mode Timeout

This feature sets a timer which limits how much time an agent may remain in the Work Mode at the conclusion of each ACD call. This mode is sometimes called the Wrap-Up Mode as well. When the timer expires the agent is automatically placed in Ready Mode and a new ACD call will be connected immediately if there is one waiting in queue.

This timeout is programmed on a per-split basis. A Tally-Oh Code allows an agent to override this timeout but should be used judiciously. Once the timeout is overridden the agent can remain in Work Mode indefinitely.

Work mode, when begun at the conclusion of an incoming ACD call, can either be timed or permanent. When it is permanent the Work LED is lit solid red and the display briefly shows WORK MODE. To enter the Ready Mode and become available for another ACD call you have to press the Work Key. When Work mode is timed the Work LED will flash until the timeout expires and the position is automatically placed in the Ready mode. Once in the Ready mode the Work LED goes off and the agent is available for a new incoming ACD call.

There are two ways to terminate the timed Work mode before the expiration of the timer. Which method is in use is based on an ACD system-wide setting. The following graphic illustrates the way the LED works.



Work Mode Restriction

The Work Mode can be restricted altogether for a specified split. Any attempt to enter the Work Mode is overridden according to the following conditions:

- The agent presses the **WORK** key. The ACD system ignores the request.
- The agent logs on to the ACD system. The agent is automatically placed in Ready mode. and will receive calls immediately if calls are queued.
- The agent concludes an ACD call. The after call work mode of the split is ignored by the ACD system and the agent is automatically placed in Ready mode. If the agent requested to enter Break mode, while on the ACD call, the request will be honored and the agent will not be placed in Ready mode at the conclusion of the ACD call.
- The agent is placed in Work mode automatically if an assigned ringing ACD call has not been answered and the Recover Call feature has been activated and removed that call from the agent's position. The **WORK** lamp flashes to visually inform the agent of the forced entry into Work mode. This prevents the agent from receiving another ACD call.
- A supervisor, using a Supervisor Tally-Oh Code, attempts to force the agent into Work mode. The request is ignored by the ACD system.
- If the split is also setup for Automatic Work Mode with PBX Call and Work Mode Restriction is set then the position will be placed in the Break mode instead of the Work mode when PBX calls are assigned.

If the agents within a split are allowed to enter Work mode, the mode can be entered given the following conditions.

- The agent from the Ready Mode presses the **WORK** key.
- The agent is placed in Work mode automatically upon logon. This prevents a call from being connected before the agent is prepared to handle the call.
- The agent is placed in Work mode automatically at the conclusion of an ACD call, if the after call mode of the split is set to "Work".
- The agent is placed in Work mode automatically if an assigned ringing ACD call has not been answered and the Recover Call feature has been activated and removed that call from the agent's position. The **WORK** lamp flashes to visually inform the agent of the forced entry into Work mode. This prevents the agent from receiving another ACD call.
- The agent is forced into Work mode, from Ready mode or Break mode, by a supervisor using a Supervisor Tally-Oh Code. Please refer to "[TALLY-OH CODES](#)" on page103 for additional information.

WORK MODE

Operating Procedure

Operating Procedure

This feature is an inherent feature of the ACD programs. Agents use the **WORK** key on their ACD position to set the Work Mode appropriately. Work Mode restrictions and timeouts are programmed using the MAT command ACDSPL for each split.

WORK MODE TIME LIMIT

General Description

This feature allows the specification of a maximum time limit for an agent to be in Work mode at the conclusion of an ACD call before being automatically placed in Ready mode. Once in Ready mode, the agent will be connected to a call if calls are queued. The time limit applies to all the agents within a split.

An agent may apply an Agent Tally-Oh Code to disable the work mode time limit by pressing the **TALLY** key and entering 007#.

Operating Procedure

1. This feature is implemented through an ACD MAT command. The command data is on a split-wide basis.
2. The following example illustrates the operation of the feature.
 - a. The Work mode time limit is set at 45 seconds for Split A.
 - b. After-call Work mode is set for Split A.
 - c. An agent in Split A completes an ACD call, and is automatically placed in Work mode.
 - d. One of four different scenarios could follow:
 1. The agent does not press any keys in the next 45 seconds. The agent is automatically placed in Ready mode and is connected to a caller if there are calls in queue.
 2. The agent presses the **BREAK** key or **LOGON** key within the next 45 seconds. The agent is placed in the appropriate mode.
 3. The agent chooses to return to Ready mode in less than 45 seconds, and presses the **WORK** key. The agent is connected to a caller if there are calls in queue.
 4. The agent wishes to remain in Work mode for more than 45 seconds. The agent disables the timeout by pressing the **TALLY** key and entering 007#. The agent will remain in Work mode indefinitely.

Service Conditions

The Tally-Oh Code which is used to disable the Work mode time limit (007) is available to every agent and supervisor. This Tally-Oh Code cannot be disabled.

ZIP TONE

General Description

ZIP TONE

General Description

When an agent is operating in AUTOMATIC ANSWER mode, the system will provide an audible burst of tone to the agent's receive audio path before connecting an incoming ACD call.

Operating Procedure

The operation of this feature from the agent or supervisory position is as follows:

From Manual Answering status:

1. The **AUTO/MAN** key is pressed.
2. **AUTO ANSWER** is displayed.
3. The **AUTO/MAN** lamp lights steadily.
4. The agent hears Zip Tone when an ACD call is connected.

Service Conditions

1. Tones:
 - a. Normal ACD calls are introduced by a single burst of tone.
 - b. Calls which may require special handling, calls which have overflowed from another split, calls which were call forwarded from another split by that split's supervisor, and calls transferred by agents or other business stations are introduced by two bursts of tone.

APPENDIX A – Definitions

- **Announcement** A Call Control Vector instruction that causes an audio message (announcement) to be connected to the user.
- **Call** An incoming ACD call that is either connected to an agent, is in a split queue, or is in an agent personal queue. This includes calls originated from any type of circuit including trunk, CCIS trunk, business station or agent position.
- **Call Control Vector** When the ACD system receives a call to a pilot number, the processing of the call is controlled by a Call Control Vector (CCV) or a Week Schedule. A CCV is a sequence of instructions for handling an incoming call to the ACD system. The instructions can include: placing a call in the queue of a specific split; delivering an announcement to the calling party; pausing; placing the call under the control of another Call Control Vector; etc.
- **Holiday Schedule** A calendar date can be defined as a holiday. A Holiday Schedule, which pertains to all the splits in a tenant which uses a Week Schedule, permits special ACD call routing for the date defined as a holiday. The day can be divided into eight (8) time periods. A specific instruction (step number), within a specific Call Control Vector, is associated with each time period. The Call Control Vector will control the flow of any incoming ACD calls received during the time period.
- **Logon ID** An access code used by agents/supervisors to be granted permission to handle ACD calls at a position. The logon ID describes the environment (language, splits serviced, personal pilot number and attributes, emergency and assist request numbers) in which the agent/supervisor shall work.
- **Multi-splits per Agent** Each agent logon ID will allow an agent to work in as many as 16 multiple splits simultaneously.
- **Personal Pilot Number** A number called to reach a specific agent. If the ACD agent is available to service the call, the caller is connected. If the ACD agent is unavailable, the call is placed in a group of waiting calls (referred to as an agent personal queue). A call in an agent personal queue has precedence over any call in a split queue.

APPENDIX A – Definitions

- **Pilot Number** A pilot number is associated with a Call Control Vector or Week Schedule, which in turn attempts to route the call to a split. If an ACD agent, within the split, is available to service the call, the caller is connected. If ACD agents are unavailable, the call is assigned a priority level and placed in a group of waiting calls (referred to as a split queue).
- **Position** A specialized telephone instrument (D^{term}) used by agents/supervisors to handle ACD calls.
- **Priority Level** A numerical value, assigned to a call, that affords the call a rank among calls waiting to be serviced by an ACD agent. The higher the priority (rank), the more quickly the call will be serviced when an agent is available.
- **Split** An organization of users who handle ACD calls related to a specific area, such as Sales, Parts, Customer Service, etc.
- **Station Call** An incoming ACD call that is from a station, as opposed to being from a trunk. A call transferred from a station is considered a station call until the transferring station disconnects and completes the transfer. Of the total number of simultaneously active ACD calls only this limit may be station callers. All other callers must be originating from trunk circuits.
- **TCP/IP Clients** TCP/IP clients connect to the ACD software via Ethernet. Two applications are supported for TCP/IP clients:
 - Infolink messages
 - MIS data stream
 - CallCenterWorX ACD supports up to 8 simultaneous (MIS and Infolink) client connections.
- **Tenant** An organization of users who form a customer group. If the group is using ACD features, the group is comprised of several smaller organizations called splits.
- **Transfer-to-PBX Number** A Call Control Vector instruction that directs an incoming ACD call to a telephone number (with a maximum of twenty two digits).
- **Trunk Group** A collection of trunk circuits, with identical properties, that are routed to an ACD split. The activities of an ACD Trunk Group are reported to the MIS for statistical purposes.
- **Week Schedule** When the ACD system receives a call to a pilot number, the processing of the call is controlled by a Week Schedule or a Call Control Vector. A Week

Schedule, which pertains to every split in a tenant, routes calls based on the time of day and the day of the week. A specific day (Monday, Tuesday, etc.) can be divided into a maximum of fifty (50) time periods. A specific instruction (step number), within a specific Call Control Vector, is associated with each time period. The Call Control Vector will control the flow of any incoming ACD calls received during the time period.

This page is for your notes.

CallCenterWorX

ACD Features and Specifications

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