SATURN® EPABX

OC1E

DYAD™ DIGITAL TELEPHONE
(10-, 18- and 26-BUTTON)
USER INSTRUCTIONS

CONTENTS

LIST OF FIGURES

LIST OF TABLES

SECTION 1.00 INTRODUCTION

1.01 General. This document provides step-by-step instructions for accessing SATURN Electronic Private Automatic Branch Exchange (EPABX) features from the SATURN DYAD digital telephones. (Refer to Figure 1.00.)

1.02 Feature Access. The instructions provided in this document are for features that can be accessed by depressing a button and/or dialing an access code. If your DYAD does not have a button for a particular feature, you may be able to access the feature by dialing an access code, if allowed by Class-of-Service. Refer to Table 12.00, located in the back of this document, for a list of the feature access codes and associated button labels. Unless otherwise noted, the instructions provided in this document apply to the 10-, 18-, and 26-button DYADs.

For users who are familiar with accessing features from Single Line Telephone (SLTs); whenever hookswitch flashing is required, you must instead depress the XFER feature button on your DYAD. Depression of the hookswitch on a DYAD disconnects the call in progress.

1.03 To Place a Call. The following procedures may be used to place a call:

a. Normal Handset Operation. To place a call from your DYAD, select and depress an idle line pickup button, pick up the handset, listen for dial tone, and dial the desired destination number.

b. On-Hook Dialing. On-Hook Dialing allows you to place a call to another party without lifting the handset. Call progress tones such as dial tone, busy tone, ringback tone, etc., and the called party's voice are heard over the DYAD's loudspeaker.

To place a call, select and depress an idle pickup button, depress the On-Hook Dialing (ON-HK DIAL) feature button, listen for dial tone, and dial the desired destination number. If busy tone is heard, the call may be disconnected by again depressing the ON-HK DIAL feature button. If the called station is idle, ringback tone is heard. When the called party answers, the party's voice is heard over the loudspeaker. To talk to the party, you must convert to normal handset operation by picking up the handset.

Alternatively, if your DYAD is equipped with a TALK button, you may leave the handset on the hookswitch and talk to the other party by speaking into the DYAD's microphone. The TALK button must be depressed each time you speak toward the microphone and released to hear the called party's response over the speaker.

You may convert from On-Hook Dialing to normal handset operation, any time during the call, simply by picking up the handset. Additionally, you may convert from normal handset operation to On-Hook Dialing, any time during a call, by depressing the ON-HK DIAL feature button and hanging up.

c. Hands-Free Operation. Hands-Free Operation allows you to place a call to another party and talk to the party without lifting the DYAD's handset. Lifting the hand-

set or operation of a Push-To-Talk (TALK) feature button is not required. Call progress tones such as dial tone, busy tone, ringback tone, etc., and the voice of the called party are heard over the DYAD's loudspeaker. Your voice is transmitted via the DYAD's microphone.

To place a hands-free call, select and depress an idle pickup button, depress the HANDS FREE feature button, listen for dial tone, and dial the desired destination number. When the called party answers, talk toward the DYAD's microphone. The party can be heard over the DYAD's loudspeaker.

You may convert from Hands-Free Operation to normal handset operation, anytime during the call, simply by picking up the handset. Additionally, you may convert from normal handset operation to Hands-Free Operation, any time during a call, by depressing the HANDS FREE feature button and hanging up.

1.04 To Answer a Call. The following procedures may be used to answer a call.

a. Normal Handset Operation. To answer an incoming call at your DYAD, simply depress the "flashing" pickup button (if required), pick up the handset, and talk to the calling party. Immediately after depressing the "flashing" pickup button the calling party's extension number or trunk identity is displayed on the alphanumeric display (18- and 26-button DYADs only).

b. On-Hook Dialing. To answer a call without lifting the handset, depress the "flashing" pickup button (if required), depress the On-Hook Dialing (ON-HK DIAL) feature button and talk to the calling party via the DYAD's microphone and speaker. You must depress the TALK button each time you speak toward the DYAD's microphone. To hear the response, you must release the TALK button.

You may convert from On-Hook Dialing to normal handset operation, anytime during the call, by picking up the handset. Additionally, you may convert from normal handset operation to On-Hook Dialing, anytime during a call, by depressing the ON-HK DIAL feature button and hanging up.

c. Hands-Free Operation. To answer a call and talk to the calling party without lifting the handset, depress the "flashing" pickup button (if required), depress the HANDS FREE feature button and talk to the calling party via the DYAD's microphone and speaker. The Push-to-Talk (TALK) feature button is not required for Hands-Free Operation.

You may convert from Hands-Free Operation to normal handset operation, anytime during the call, by picking up the handset. Additionally, you may convert from normal handset operation to Hands-Free Operation, any time during a call, by depressing the HANDS FREE feature button and hanging up.

1.05 Automatic Line Preferences. Connection to a given pickup line on your DYAD may be provided on an automatic

10-Button DYAD

18-Button DYAD

Speaker
Volume Control ————————▶
(side)

Speaker

Alphanumeric Display

Handset ————————▶

Pickup/Feature
Buttons

Keypad   26-Button DYAD

(bottom)   Audible Alert Tone
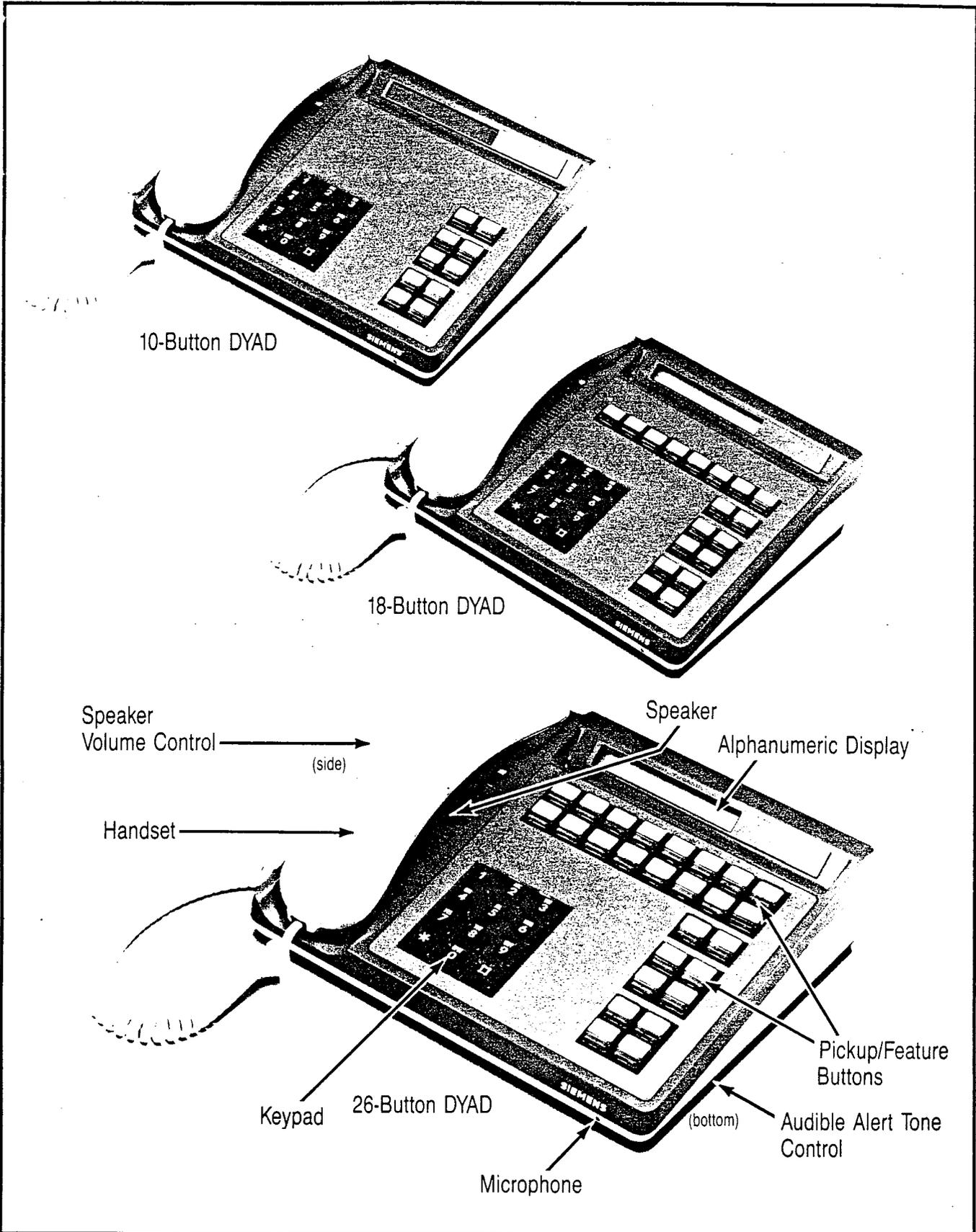Control

Microphone

Figure 1.00   DYAD Digital Telephones

basis. Each DYAD can be assigned one originating and one terminating preference. The originating preference options are: Prime Line Preference, Last Line Preference, and Idle Line Preference. The terminating preference options are: Ringing Line Preference and Incoming Line Preference. If an automatic line preference is not assigned to your DYAD, you must depress a pickup button each time you originate and answer a call.

   a. Originating Preferences:

      1. Prime Line Preference – Automatically selects the prime line pickup button when you pick up the handset to place a call.

      2. Last Line Preference – Automatically selects the same line pickup button to which you were connected on your last call when you pick up the handset to place a call.

      3. Idle Line Preference – Automatically selects an idle line pickup button when you pick up the handset to place a call.

   b. Terminating Preferences:

      1. Ringing Line Preference – Automatically selects a pickup button associated with a call that is ringing your DYAD. Pickup buttons associated with lines that are not assigned to ring at your DYAD are not selected.

      2. Incoming Line Preference – Automatically selects a pickup button associated with an incoming call. Automatic selection occurs regardless of whether the line is in the ringing or alerting only state.

A terminating line preference will take precedence over an originating line preference when an incoming call exists. You may override an automatic line preference by manually depressing another pickup button prior to picking up the handset.

1.06 Discriminating Ringing. Several types of distinctive ringing patterns are provided so that you can distinguish between the different types of incoming calls. The ringing patterns are:

   a. One-burst ringing (normal ringing) – Identifies an incoming call from another SATURN EPABX telephone.

   b. Two-burst ringing – Identifies an incoming "outside" call, including attendant extended calls.

   c. Three-burst ringing – Identifies calls initiated by the following:

      1. Call Hold automatic recall
      2. Call Transfer Security recall
      3. Executive Intercom calls
      4. Internal Call Queuing – Callback
      5. Outgoing Call Queuing – Callback
      6. Station Controlled Conference recall to conference master

1.07 Call Progress Tones. The following call progress tones are used to inform you of the status of a call:

   a. Busy Tone – Normal tone heard when a called party's telephone is busy.

   b. Busy Override Injection Tone – Single burst of tone heard repeatedly every 8 to 20 seconds apart AFTER an attendant or executive overrider has intruded on the call in progress. This tone continues for the entire time the attendant or executive overrider is present on your conversation.

   c. Busy Override Tone – Three short bursts of tone heard two seconds apart BEFORE an overriding attendant intrudes on a call in progress.

   d. Call Waiting Tone – One burst of tone heard when a SATURN EPABX telephone call is waiting to be answered or two bursts of tone heard when an outside trunk call is waiting to be answered at your DYAD. This tone is repeated after 10 seconds if the waiting party is still present.

   e. Conference Tone – One burst of tone heard when a called party is being added to a conference to which you are connected.

   f. Confirmation Tone – Three rapid bursts of tone indicating the action taken by you has been accepted (e.g., activation of a Call Forwarding feature).

   g. Dial tone – Normal tone heard indicating that dialing can begin.

   h. Executive Override Tone – One three-second burst of tone heard BEFORE an executive overrider intrudes on a call in progress.

   i. Expensive Facility Tone – One second burst of high pitch tone heard when the SATURN System selects a more expensive route for call routing via the Least Cost Routing (LCR) feature.

   j. Intercept Tone – A continuous alternating low and high pitch tone indicating an invalid or unauthorized feature code or extension number was dialed.

   k. Low Tone – Steady tone heard after receiving busy tone indicating successful activation of such features as Outgoing Call Queuing – Callback and Internal Call Queuing – Callback.

   l. Recall Dial Tone – Three rapid bursts of tone followed by dial tone indicating the action taken by you has been accepted and you can now dial additional digits (e.g., for transfering a call via the Call Transfer feature).

   m. Reorder Tone – Fast busy tone indicates a network blocking condition or the activation of a feature was not granted.

   n. Ringback Tone – Normal tone heard when a called party's telephone is ringing.

   o. Route Advance Tone – One short burst of tone heard each time the SATURN System searches for an idle route via the LCR feature.

   p. Special Ringback Tone – A tone that sounds similar to normal ringback tone except for the distinctive low signal at the end of each tone cycle. Special ringback tone indicates you are in a waiting state for a busy telephone and is heard during activation of the following features: Internal Call Queuing – Standby, Outgoing Call Queuing – Standby, and Executive Override – Automatic.

1.08 Speaker Volume Control. You may control the voice and call progress tones level and the audible alert tone level of the DYAD's speaker with the two controls on the DYAD. Use the thumbwheel control on the handset side to adjust voice and call progress tones level and the control on the underside of the DYAD to adjust the audible alert tone level.

NOTE: The voice level heard from your handset is not adjustable.

1.09 Pickup Button Indications. The DYAD can be provided with multiple line and/or trunk pickup buttons. The current status of a line/trunk is displayed via a corresponding lamp located within each pickup button. The bottom two DYAD buttons (5 and 10) do not have a lamp associated with them.

    a. Dark – Indicates that the line/trunk is idle.

    b. Lighted Steady – Indicates that the line/trunk is busy.

    c. Flash (lamp blinks 30 times per min.) – Indicates that the line/trunk has an incoming call.

    d. Wink (lamp blinks 60 times per min.) – Indicates that the line/trunk has been placed on Manual Hold.

    e. Flutter (lamp blinks 300 times per min.) – Indicates that the line/trunk has been placed on Exclusive Hold.

1.10 Feature Button Indications. Feature buttons are used to activate features at your DYAD. For some features, the button lamp indicates the active/inactive status of the feature. Generally when the feature is active the lamp is lighted, and when the feature is inactive the lamp is dark.

1.11 Alphanumeric Display. (18- and 26-button DYADs only). Additional information about a call or feature is shown on the alphanumeric display. The displays available on your DYAD are shown below. Examples of display types are as follows:

    a. Attendant Identification on Display

         | ATT   5000 |

    When you originate or receive an attendant call, the attendant's identification code (e.g., 5000) is displayed.

    b. Call Forwarding Destination Display

         | FWD   TO   1856 |

    Identifies the destination number (e.g., 1856) to which all your calls are forwarded.

    c. Call Forwarding Source Display

         | CF 2295   1784 |

    Identifies the extension number (e.g., 2295) from which a call is being forwarded and the extension number or trunk identity of the calling party (e.g., 1784).

    d. Call Park Location Number Display

         | PARK   570   4943 |

    Identifies the dialed parked code (e.g., 57) and location code (e.g., 0) which was selected by the SATURN System.

    e. Call Pickup Source and Destination

        Display | PU3939   3456 |

When you pick up a call the calling party's extension number or trunk identity (e.g., 3456 or LOCAL) and the extension number from which you are picking up the call (e.g., 3939) are displayed. Refer to the operating instructions for the features, "Call Pickup – Directed and Call Pickup – Group."

    f. Call Waiting Source Display

         | CW   2954   LOCAL |

    Identifies the extension number or trunk identity of a call waiting to be answered (e.g., 2954) and the extension number or trunk identity of the party to which you are currently talking (e.g., LOCAL).

    g. Callback Number Display

         | CALLBCK   1234 |

    Identifies that the call being received is for an automatic callback initiated earlier to another extension. Refer to the operating instructions for the feature, "Internal Call Queuing – Callback".

    h. Called Number Display

         | 2413 |

    Identifies the extension number of the called party.

    i. Calling Number Display

         | 4813 |

    Identifies the extension number of the calling party.

    j. Conference Mode Display

         | CONF |

    Indicates that a conference call has been established. Refer to the operating instructions for features, "Add-On Conference, Bridge Call and Meet-Me Conference".

    k. Dial Input Verification Display
    Identifies the keyed digits as you enter them from your keypad. The digits are scrolled from right to left as shown in the example displays to the right (e.g. extension 1219 is being dialed).

         | 1 |
         | 12 |
         | 121 |
         | 1219 |

    l. Do Not Disturb Display

         | DND   ALL |

    When you activate the Do Not Disturb feature, a Do Not Disturb indication is shown on your alphanumeric display. Refer to the operating instructions for the feature, "Do Not Disturb".

    m. Duration of Call Display

         | 3:35 |

    When you activate the Duration of Call Display feature, an indication of the total elapsed time of the call in progress is displayed. Refer to operating instructions for feature, "Duration of Call Display".

    n. Hold Display

         | ON HOLD |

    Identifies that another party has placed you on hold.

o. Incoming Call Display

| | 2411 |

When you receive an incoming call (line pickup lamp flashes), the extension number (e.g., 2411) or trunk identity (e.g., INWATS) of the calling party can be displayed prior to answering the call by depressing the "flashing" pickup button.

p. Message Waiting Destination Display

| CALL | 1419 |

When a party from another extension initiates message waiting toward your DYAD, the message "CALL" and the party's extension number are displayed. Refer to the operating instructions for the feature, "Message Waiting".

q. Recall Identification Display

| RECALL | 1234 |

Identifies that you are connected to a call that has been recalled to your DYAD. Refer to the operating instructions for the feature, "Call Hold and Call Hold – Flip-Flop (Broker)".

r. SMDR Account Code Display

| ACCT | 10810781417 |

Identifies the default account code associated with your DYAD. Refer to the operating instructions for the feature "SMDR Account Codes".

s. Speed Calling – Individual Display

| 3 | 13059948800 |

Identifies the destination number and associated speed call code programmed from your DYAD. Refer to the operating instructions for the feature, "Speed Calling – Individual".

t. Time of Day Display

| | 4:38 AM |

Indicates the time of day in reference to the SATURN System clock. Refer to the operating instructions for the feature, "Time of Day Display".

u. Last Number Redial

| | 99948800 |

Identifies the last number dialed from your DYAD. Refer to operating instructions for the feature "Last Number Redial".

v. Save Number Redial

| | 99948800 |

Identifies the number just dialed and saved in system memory for later dialing. Refer to operating instructions for the feature "Save Number Redial".

SECTION 2.00   HOLD FEATURES

2.01 Consultation Hold. This feature allows you to place a call (inside or outside) on hold and originate another call on the same extension line.

a. To place a party on hold and originate another call:

  1. First, ask the other party to wait.

  2. Depress the [XFER] button.

   • XFER lamp winks.
   • Recall dial tone is heard.
   • The party is placed on hold.

  3. Dial the number of the desired party.

   • Ringback tone is heard.

NOTE: If busy tone is heard or the called party does not answer, depress the XFER button to return to the held call.

  4. When the called party answers, you may begin to talk.

b. To return to the held party:

  1. Wait until the consulted party hangs up.

   • You are automatically reconnected to the previously held party.
   • XFER lamp extinguishes.

  2. Resume your conversation.

2.02 Call Hold. This feature allows you to place any call (inside or outside) on hold and hang up without losing the call. After holding the call, you may originate or receive other calls on the same extension line and return to the held call or alternate between the two calls (holding one call while speaking to other).

By using the Call Hold feature button (PARK PRIV).

a. To place a party on hold:

  1. First, ask the other party to wait.

  2. Depress the [PARK PRIV] feature button.

   • Confirmation tone is heard.
   • The party is placed on "call hold."
   • PARK PRIV lamp winks.

  3. Hang up.

NOTE: If the held party is from "outside" the SATURN EPABX, you must return to the held party within a preset period of time or the call is recalled to your DYAD (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

b. To return to a held call or alternate between two calls:

  1. Pick up the handset or depress "ONHKDIAL" or "HANDSFREE" then depress the [PARK PRIV] feature button (if connected to another call).

   • You are reconnected to the previously held party and the other party, if any, is placed on hold.

  2. Resume your conversation.

By using the Call Hold feature access code.

a. To place a party on hold:

  1. First, ask the other party to wait.

  2. Depress the [XFER] button.

   • XFER lamp winks.
   • Recall dial tone is heard.

  3. Dial the Call Hold feature access code.

   • Confirmation tone is heard.
   • The party is placed on "call hold."
   • XFER lamp extinguishes.

  4. Hang up.

NOTE: If the held party is from "outside" the SATURN EPABX, you must return to the held party within a preset period of time (five minutes, nominal) or the call is recalled to your DYAD (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

b. To return to a held call or alternate between two calls:

  1. Pick up the handset or depress the [XFER] button (if connected to another call).

   • Dial tone/recall dial tone is heard.

  2. Dial the Call Hold feature access code.

   • You are reconnected to the previously held party and the other party, if any, is placed on hold.

  3. Resume your conversation.

2.03 Call Hold – Flip-Flop (Broker). This feature allows you, upon hearing a call waiting tone and receiving a call waiting display, to place the call in progress (inside or outside call) on hold and establish a connection to the waiting call. When no call is waiting, this feature allows you to place a call in progress on hold and originate another call on the same extension line. In either case, you can return to the held call or alternate between the two calls (holding one call while speaking to the other).

By using the Call Hold – Flip-Flop feature button (SPLIT).

a. To place a party on hold and answer a waiting call:

  1. First, ask the other party to wait.

  2. Depress the [SPLIT] feature button.

   • SPLIT lamp winks.
   • You are connected to the waiting party and the other party is placed on hold.

  3. You may begin to talk.

b. To place a party on hold and originate another call:

  1. First, ask the other party to wait.

2. Depress the | SPLIT | feature button.

- SPLIT lamp winks.
- Dial tone is heard.
- The party is placed on hold.

3. Dial the phone number of the desired party.

- Ringback tone is heard.

NOTE: If the called party does not answer your call or the line is busy, depress the SPLIT button to return to the held party.

4. When the called party answers, you may begin to talk.

c. To return to a held party or alternate between two calls:

1. Depress the | SPLIT | feature button.

- You are reconnected to the previously held party and the other party, if any, is placed on hold.

NOTE: If you hang up while a call is on hold, the call is automatically recalled to your DYAD. To answer/return to the held call, pickup the handset.

2. Resume your conversation.

By using the Call Hold – Flip-Flop feature access code.

a. To place a party on hold and answer a waiting call:

1. First, ask the other party to wait.

2. Depress the | XFER | button.

- XFER lamp winks.
- Recall dial tone is heard.

3. Dial the Call Hold – Flip-Flop feature access code.

- You are connected to the waiting party and the other party is placed on hold.
- XFER lamp extinguishes.

4. You may begin to talk.

b. To place a party on hold and originate another call:

1. First, ask the other party to wait.

2. Depress the | XFER | button.

- XFER button winks.
- Recall dial tone is heard.

3. Dial the Call Hold – Flip-Flop feature access code.

- Dial tone is heard.
- The party is placed on hold.
- XFER lamp extinguishes.

4. Dial the phone number of the desired party.

- Ringback tone is heard.

NOTE: If the called party does not answer your call or the line is busy, depress the XFER button to return to the held party.

5. When the called party answers, you may begin to talk.

c. To return to a held party:

1. Wait until the other party hangs up.

- You are automatically connected to the previously held party

2. Resume your conversation.

d. To alternate between two calls:

1. Depress the | XFER | button.

- You are reconnected to the previously held party and the other party is placed on hold.

NOTE: If you hang up while a call is on hold, the call is automatically recalled to your DYAD. To answer/return to the held call, pickup the handset.

2. Resume your conversation.

2.04 Call Park. This feature allows you to place a call (inside or outside) on "system hold" (referred to as parked) and return to the parked party from the same or another SATURN EPABX telephone. The call is placed in one of ten selected park locations. A unique access code is assigned to each park location.

By using the Call Park feature button (PARK) (18- and 26-button DYADs only).

a. To park an established call:

.1. First, ask the other party to wait.

2. Depress the | PARK | feature button.

- Confirmation tone is heard.
- The call is placed in the first available park location and is shown in the alphanumeric display. e.g., | PARK   570   1219 |

NOTE: If all park locations are in use, the alphanumeric display shows PARK BUSY and you remain connected to your party.

3. Hang up. You are free to originate or receive other calls.

NOTE: If you park an outside call and you do not return to the party within a preset period of time, the call is automatically recalled to your DYAD, if idle, otherwise to the attendant.

b. To return to the parked call:

1. Pick up the handset at any non-restricted DYAD or telephone.

- Dial tone is heard.

2. Depress the | PARK | feature button on any DYAD and dial the park location code (e.g., 0) that was selected for you by the SATURN System, or if at another telephone, dial the Call Park and call location codes that were used to park the call.

- You are connected to the parked call.

NOTE: If reorder tone is heard, the held party has discon-
        nected. If intercept tone is heard, the telephone is
        restricted from Call Park access.

3. Resume your conversation.

By using the Call Park feature access code.

a. To park an established call:

    1. First, ask the other party to wait.

    2. Depress the | XFER | button.

        • XFER lamp winks.
        • Recall dial tone is heard.

    3. Dial the Call Park feature access code.

    4. Dial the Call Park location code (0 to 9).

        • Confirmation tone is heard.
        • The call is parked at the dialed location.
        • XFER lamp extinguishes.

NOTE: If the dialed Call Park location is not available, busy
        tone is heard. If this situation occurs, depress the
        XFER button to return to the held party and repeat
        the process using a different location code.

    5. Hang up. You are free to originate or receive other
        calls.

NOTE: If you park an outside call and you do not return to
        the party within a preset period of time, the call is
        automatically recalled to your DYAD, if idle, otherwise
        to the attendant.

b. To return to the parked call:

    1. Pick up the handset at any non-restricted DYAD or
        telephone.

        • Dial tone is heard.

    2. Dial the Call Park feature access code.

    3. Dial the Call park location code which was used to
        park the call.

        • You are connected to the parked call.

NOTE: If reorder tone is heard, the held party has discon-
        nected. If intercept tone is heard, the telephone is
        restricted from Call Park access.

    4. Resume your conversation.

2.05 Manual Hold. This feature allows you to place a line on
hold for the purpose of holding a call and originating or receiv-
ing another call on a second SATURN EPABX line. The held
call can be picked up at any DYAD with an appearance of the
held line.

a. To place a line on hold:

    1. First, ask the other party to wait.

    2. Depress the "red" | HOLD | feature button.

• Line pickup lamp winks at all appearances of
  the line.

3. You may hang up without losing the call, or originate
    or receive another call on a second EPABX line.

NOTES: Any DYAD with the same appearance of the held line
        may be used to pick up the held call.

        After depressing the HOLD button to hold a line the
        same button can be used to hold another line without
        losing the previous held call. As many calls can be
        held as there are lines on your DYAD.

        You are not allowed to hold an attendant. Addition-
        ally, if a party has bridged on a line, that line cannot
        be held.

b. To return to the held call:

    1. Pickup handset and depress the "winking" line pick-
        up button associated with the held call.

        • Line pickup lamp changes from winking to
          steadily lighted.

        • You are reconnected to the held call.

    2. Resume your conversation.

2.06 Exclusive Hold. This feature allows you to place a line
on hold for the purpose of holding a call and originating or
receiving another call on a second SATURN EPABX line. The
held call can be picked up only from your DYAD even though
the line may appear at other DYADs.

a. To place a line on hold:

    1. First, ask the other party to wait.

    2. Depress the | HOLD EXCL | feature button.

        • Line pickup lamp flutters.

NOTES: The line pickup lamp remains lighted at all other ap-
        pearances of the line.

        After depressing the HOLD EXCL button to hold a
        line, the same button can be used to hold another
        line without losing the previously held call. As many
        lines can be held as there are lines on your DYAD.

        You are not allowed to hold an attendant. Addition-
        ally, if a party has bridged on a line, that line cannot
        be held.

    3. You may originate or receive another call on a se-
        cond EPABX line, if provided.

b. To return to the held call:

    1. Pickup handset and depress the "fluttering" line
        pickup button associated with the held call.

        • Line pickup lamp lights steadily.
        • You are reconnected to the held call.

    2. Resume your conversation.

SECTION 3.00   CALL TRANSFER FEATURES

3.01 Call Transfer. This feature allows you to transfer a call (inside or outside the SATURN EPABX) to another extension.

   a. To transfer a call:

      1. First, ask the other party to wait.

      2. Depress the &boxed; XFER &boxed; button.

         • XFER lamp winks.
         • Recall dial tone is heard.

      3. Dial the destination number.

         • Ringback tone is heard.

NOTES: If busy tone is heard or the party does not answer, depress the XFER button to return to the held party.

       When an outside party requests to be transferred to an extension and the extension is busy, you may invoke the Internal Call Queuing – Standby feature. This feature allows you to camp-on to the busy extension and wait for the party to answer.

       If you desire to transfer the call before the called party answers, hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an outside party and the called party does not answer within a preset time, the call is automatically recalled to your DYAD (three-burst ringing is heard), if idle, otherwise to the attendant. To answer or return to the held call, pick up the handset.

      4. When the called party answers, announce the transfer and hang up.

         • The call is transferred to the called party.
         • XFER lamp extinguishes.

3.02 Call Transfer to Attendant. This feature allows you to transfer a call in progress to the attendant.

   a. To transfer a call to the attendant:

      1. First, ask the other party to wait.

      2. Depress the &boxed; XFER "0" &boxed; feature button.

         • The party is placed on hold.
         • Ringback tone is heard and the attendant is alerted.

NOTE: If you desire to transfer the call before the attendant answers, hang up. The held party will hear ringback tone until the attendant answers.

      3. When the attendant answers, announce the call.

         • Ringback tone is removed.
         • The attendant's extension number is displayed. (18- and 26-button DYADs only)
         e.g., &boxed; ATT 5000 &boxed;

      4. Hang up.

         • The call is transferred to the attendant.

SECTION 4.00 CONFERENCE FEATURES

4.01 Add-On Conference. This feature allows you to add a third party (inside or outside) to your conversation.

a. To add a third party:

1. First, ask the other party to wait.

2. Depress the ☐ XFER ☐ button.

   - XFER lamp winks.
   - Recall dial tone is heard.
   - The party is placed on hold.

3. Dial the desired number of the third party.

   - Ringback tone is heard.

NOTE: If busy tone is heard or the party does not answer, depress the XFER button to return to the held call.

4. When the called party answers, inform the party of the conference.

5. Depress the ☐ XFER ☐ button again.

   - A three-party conference is established.
   - XFER lamp lights steadily.
   - The alphanumeric display (18- and 26-button DYADs only) indicates this is a conference call.
     e.g., ☐ CONF ☐

NOTES: The user that originated the conference may release the third party by depressing the XFER button.

When more than one outside (trunk) call is added, transmission quality may be degraded.

6. You may begin to talk.

4.02 Bridge Call. This feature allows you to enter into an existing conversation on a busy line or direct trunk.

a. To enter into an existing conversation:

1. Select and depress the pickup button associated with the busy line or direct trunk.

2. Pick up the handset.

   - Conference tone is heard by the other parties, after which you are connected in a three-way conversation.

   - The alphanumeric display (18- and 26-button DYADs only) indicates this is a conference call.
     e.g., ☐ CONF ☐

NOTE: If the Call Privacy feature is active on the busy line or direct trunk, or a three-way connection has already been established, bridging is denied and busy tone is heard.

4.03 Meet-Me Conference. This feature allows you to arrange a conference of up to seven extensions or four extensions and three outside lines. Outside parties are connected to the conference by the attendant.

a. To establish a Meet-Me conference:

1. Select and depress the appropriate line pickup button.

   - Line pickup button lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Dial the party you want in the conference.

   - Ringback tone is heard.

4. When the called party answers, inform the party to dial the Meet-Me Conference access code at a prearranged time. If the called party is from "outside" the SATURN System, inform the party to dial the SATURN attendant console and have the attendant transfer the call to the conference by dialing the Meet-Me Conference access code.

NOTE: More than one Meet-Me Conference bridge may be assigned in the SATURN EPABX. The last digit of the Meet-Me Conference access code represents the selected conference bridge.

5. Hang up.

6. Repeat the above steps for up to seven conferees.

NOTES: The attendant only may enter the conference as an eighth conferee.

The maximum number of outside parties allowed in the conference at any one time is three (variable and assigned by data base management).

b. To enter the conference:

1. Select and depress the appropriate line pickup button.

   - Line pickup button lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Dial the pre-announced Meet-Me Conference feature access code or depress the ☐ MEET ME ☐ feature button followed by the conference bridge code.

   - Conference tone is heard; all conferees hear the conference tone as you enter the conference.

   - The alphanumeric display (18- and 26-button DYADs only) indicates this is a conference call.
     e.g., ☐ CONF ☐

   - MEET ME lamp lights steadily.

NOTES: Busy tone is heard if the conference is full. Intercept tone is heard if the conference bridge is not assigned.

When more than one outside (trunk) call is added, transmission quality may be degraded.

4. You may begin to talk.

4.04 Station Controlled Conference. This feature allows you to establish a conference of up to seven parties. As the Conference Master you can add members to the conference, remove members from the conference, leave the conference to consult with a conferee privately, call the attendant, or release from the conference and allow another conference member to take over conference mastership.

The maximum number of parties allowed in the conference is seven; however, the attendant can be added to the conference as an eighth party. The maximum number of outside parties allowed in the conference at any one time is three (variable and assigned by data base management). When more than one outside (trunk) call is added, transmission quality may be degraded.

a. To establish a conference:

 1. Select and depress the appropriate line pickup button.

    • Line pickup lamp lights steadily.

 2. Pick up the handset

    • Dial tone is heard.

 3. Dial the Station Controlled Conference access code.

    • Recall dial tone is heard.

NOTE: Busy tone is heard if a conference circuit is not available.

 4. Dial the number of the party you want to add to the conference.

    • Ringback tone is heard.

NOTE: If the called party does not answer, is busy, or does not wish to be included in the conference, you must hang up. Your phone then rings and, upon answer, you are connected back into the conference. You may proceed adding parties to the conference by depressing the XFER button to leave the conference and following the above procedure beginning at Step 4.

 5. When the called party answers, inform the party of the conference.

    • Ringback tone is removed.

 6. Depress the | XFER | button to add the party to the conference.

    • Conference tone is heard; all conferees hear the conference tone as you and the other party enter the conference.

    • The alphanumeric display (18- and 26-button Dyads only) indicates that this is a conference call. e.g.,

    |_____CONF|

NOTES: If you attempt to add more than seven inside parties or add more than the allowed number of outside parties into the conference, reorder tone is heard for approximately 1½ seconds, after which you are reconnected to the "would be" conferee. To return to the conference, depress the XFER button.

Any party can leave the conference by hanging up.

7. To add each additional party to the conference, depress the | XFER | button to leave the conference and follow the above procedure beginning at Step 4.

b. To remove any conferee (extension only) from the conference and consult with the conferee privately:

 1. Depress the | XFER | button to leave the conference.

    • Recall dial tone is heard.

 2. Dial the conference member remove code.

 3. Dial the extension number of the conferee to be removed.

    • You and the conferee are connected in a private talk state.

NOTE: As the conference master, you have the option of adding the party back to the conference or removing the conferee from the conference totally. To add the conferee back into the conference, depress the XFER button; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings and, upon answer, you are connected back into the conference.

c. To remove the last member added to the conference and consult with the conferee privately:

 1. Depress the | XFER | button to leave the conference.

    • Recall dial tone is heard.

 2. Dial the last member added access code.

 3. You and the conferee are connected in a private talk state.

NOTE: As the conference master, you have the option of adding the party back to the conference or removing the conferee from the conference totally. To add the conferee back into the conference, depress the XFER button; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings and, upon answer, you are connected back into the conference.

d. To transfer the position of conference mastership to another conferee (SATURN EPABX extension only):

 1. Inform the desired conferee that you are releasing from the conference and that conference mastership can be gained by hookswitch flashing (depressing the XFER button on DYADs or momentarily depressing the hookswitch on SLTs) after you hang up.

 2. Hang up.

NOTE: The first conferee to hookflash now becomes the conference master.

When all parties in the conference hang up, the conference circuit is released.

SECTION 5.00   CALL FORWARDING FEATURES

5.01 Call Forwarding – All Calls. This feature allows you to have all calls terminating at your DYAD, forwarded to another extension or to the attendant.

Activation/deactivation of Call Forwarding – All Calls over the DYAD's prime line.

  a. To forward all incoming calls:

    1. Do not pick up the handset.

    2. Depress the [FWD ALL] feature button.

      • Dial tone is heard over the DYAD's speaker.

    3. Dial the extension number to which you want all your calls forwarded.

      • Confirmation tone is heard over the DYAD's speaker.

      • FWD ALL lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your DYAD. Additionally, a call forwarding destination display (18- and 26-button DYADs only) is provided when your DYAD is idle. e.g.,

|FWD   TO   1219|

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback and station recalls are not forwarded.

  b. To cancel Call Forwarding – All Calls:

    Depress the [FWD ALL] feature button, anytime.

      • FWD ALL lamp extinguishes.

      • Call forwarding destination display (18- and 26-button DYADs only) is extinguished.

Activation/deactivation of Call Forwarding – All Calls over any line appearing on the DYAD (if allowed by class of service).

  a. To forward all incoming calls:

    1. Select and depress the appropriate line pickup button.

      • Line pickup button lamp lights steadily.

    2. Pick up the handset.

      • Dial tone is heard.

    3. Depress the [FWD ALL] feature button or dial the Call Forwarding – All Calls activation code.

    4. Dial the extension number to which you want all your calls forwarded.

      • Confirmation tone is heard indicating that the Call Forwarding – All Calls feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

    5. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your DYAD. (prime line only). Additionally, a call forwarding destination display (18- and 26-button DYADs only) is provided (prime line only) when your DYAD is idle. e.g.,

|FWD   TO   1219|

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

  b. To cancel Call Forwarding – All Calls:

    1. Select and depress the line pickup button from which Call Forwarding – All Calls was activated.

      • Line pickup button lamp lights steadily.

    2. Pick up the handset

      • Dial tone is heard.

    3. Dial the call forwarding cancellation code or Depress the [FWD ALL] feature button.

      • Confirmation tone is heard indicating that the Call Forwarding – All Calls feature has been cancelled.

    4. Hang up.

5.02 Call Forwarding to Public Network. This feature allows you to have all calls terminating at your DYAD, forwarded to an outside destination number.

  a. To forward all calls:

    1. Select and depress the appropriate line pickup button.

      • Line pickup button lamp lights steadily.

    2. Pick up the handset.

      • Dial tone is heard.

    3. Dial the Call Forwarding to Public Network activation code.

    4. Dial the trunk group access code (e.g., "9" for outside) and the outside number (e.g., 9948800).

5-1

- After a short pause (approximately five seconds), confirmation tone is heard indicating that the Call Forwarding to Public Network feature is active.

NOTES: You may expedite receiving confirmation tone by depressing the # key immediately after dialing the last digit of the outside number.

If intercept tone or reorder tone is heard, your call forwarding request was not granted.

5. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your DYAD. Additionally, a call forwarding destination display (18- and 26-button DYADs only) is provided when your DYAD is idle,

e.g., FWD TO NETWORK

You may continue to originate calls while Call Forwarding to Public Network is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding to Public Network:

1. Select and depress the line pickup button from which Call Forwarding to Public Network was activated.

   - Line pickup button lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Dial the call forwarding cancellation code.

   - Confirmation tone is heard indicating that the Call Forwarding to Public Network feature has been cancelled.

4. Hang up.

5.03 Call Forwarding – Busy Lines. This feature allows you to have all calls terminating at your DYAD, forwarded to another extension or to the attendant when your extension is busy. When your DYAD is idle, incoming calls are completed as usual.

Activation/deactivation of Call Forwarding – Busy Lines over the DYAD's prime line.

a. To forward incoming calls:

1. Do not pick up the handset

2. Depress the FWD BUSY feature button.

   - Dial tone is heard over the DYAD's speaker.

3. Dial the extension number to which you want your calls forwarded.

   - Confirmation tone is heard over the DYAD's speaker.

   - FWD BUSY lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

As a reminder that call forwarding is in effect, a call forwarding destination display (18- and 26-button DYADs only) is provided

when your DYAD is idle e.g., FWD TO 1219

When Call Forwarding – Busy Lines is in effect, incoming calls will not wait (via Internal Call Queuing – Standby and Internal Call Queuing – Callback) on your prime line. If the forwarded-to telephone is busy, forwarded calls will wait at the forwarded-to telephone.

b. To cancel Call Forwarding – Busy Lines:

Depress the FWD BUSY feature button.

   - FWD BUSY lamp extinguishes.

   - Call forwarding destination display is extinguished.

Activation/deactivation of Call Forwarding – Busy Lines over any line appearing on the DYAD (if allowed by class of service).

a. To forward incoming calls:

1. Select and depress the appropriate line pickup button.

   - Line pickup button lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Depress the FWD BUSY feature button or dial the Call Forwarding – Busy Lines activation code.

4. Dial the extension number to which you want your calls forwarded.

   - Confirmation tone is heard indicating that the Call Forwarding – Busy Lines feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

5. Hang up.

As a reminder that call forwarding is in effect, a call forwarding destination display (18- and 26-button DYADs only) is provided (prime line only) when your DYAD is idle. e.g.,

FWD TO 1219

When Call Forwarding – Busy Lines is in effect, incoming calls will not wait (via activation of the Internal Call Queuing – Standby and Internal Call Queuing – Callback features) on the associated line. If the forwarded-to telephone is busy, forwarded calls will wait at the forwarded-to telephone.

b. To cancel Call Forwarding – Busy Lines:

1. Select and depress the line pickup button from which Call Forwarding – Busy Lines was activated.

   - Line pickup button lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Dial the call forwarding cancellation code.

   - Confirmation tone is heard indicating that the Call Forwarding – Busy Lines feature has been cancelled.

4. Hang Up.

5.04 Call Forwarding – No Answer. This feature allows you to have all calls terminating at your DYAD that are not answered within a predetermined period of time (three rings, nominal), forwarded to another telephone or to the attendant. When your DYAD is busy, call forwarding does not occur and the usual station hunting, call waiting, and automatic callback arrangements (if assigned) are applied.

Activation/deactivation of Call Forwarding – No Answer over the DYAD's prime line.

a. To forward incoming unanswered calls:

   1. Do not pick up the handset.

   2. Depress the [FWD NO ANS] feature button.

     • Dial tone is heard over the DYAD's speaker.

   3. Dial the extension number to which you want your unanswered calls forwarded.

     • Confirmation tone is heard over the DYAD's speaker.

     • FWD NO ANS lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

As a reminder that call forwarding is in effect, a call forwarding destination display (18- and 26-button DYADs only) is provided when your DYAD is idle. e.g., [FWD TO 1219]

'ou may continue to originate calls while Call Forwarding – No Answers is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback and station recalls are not forwarded.

b. To cancel Call Forwarding – No Answer:

   Depress the [FWD NO ANS] feature button, anytime.

     • FWD NO ANS lamp extinguishes.

     • Call forwarding destination display is extinguished.

Activation/deactivation of Call Forwarding – No Answer over any line appearing on the DYAD (if allowed by class of service).

a. To forward incoming unanswered calls over any line appearing on your DYAD:

   1. Select and depress the appropriate line pickup button.

     • Line pickup button lamp lights steadily.

   2. Pick up the handset.

     • Dial tone is heard.

   3. Depress the [FWD NO ANS] feature button or dial the Call Forwarding – No Answer activation code.

   4. Dial the extension number to which you want your unanswered calls forwarded.

     • Confirmation tone is heard indicating that the Call Forwarding – No Answer feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

   5. Hang up.

As a reminder that call forwarding is in effect, a call forwarding destination display (18- and 26-button DYADs only) is provided (prime line only) when your DYAD is idle. e.g.,

[FWD TO 1219]

You may continue to originate calls while Call Forwarding – No Answer is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – No Answer:

   1. Select and depress the line pickup button from which Call Forwarding – No Answer was activated.

     • Line pickup button lamp lights steadily.

   2. Pick up the handset.

     • Dial tone is heard.

   3. Dial the call forwarding cancellation code or Depress the [FWD NO ANS] feature button.

     • Confirmation tone is heard indicating that the Call Forwarding – No Answer feature has been cancelled.

   4. Hang up.

5.05 Call Forwarding – Secretarial. This feature allows you to have all calls terminating at your DYAD, forwarded to another predetermined SATURN extension (assigned by data base management).

Activation/deactivation of Call Forwarding – Secretarial over the DYAD's prime line.

a. To forward all incoming calls:

   1. Do not pick up the handset.

   2. Depress the [FWD TO] feature button.

     • FWD TO lamp lights steadily.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your DYAD. Additionally, a call forwarding destination display (18- and 26-button DYADs only) is provided when your DYAD is idle.

e.g., [FWD TO 1219]

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – Secretarial is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback and station recalls are not forwarded.

b. To cancel Call Forwarding – Secretarial:

2. Depress the ⌈ FWD / TO ⌉ feature button.

   • FWD TO lamp extinguishes indicating that the Call Forwarding – Secretarial feature has been cancelled.

Activation/deactivation of Call Forwarding – Secretarial over any line appearing on the DYAD (if allowed by class of service).

a. To forward all incoming calls:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the ⌈ FWD / TO ⌉ feature button or dial the Call Forwarding – Secretarial activation code.

   • Confirmation tone is heard indicating that the Call Forwarding – Secretarial feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

4. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded (prime line only), one short burst of ringing is heard from your DYAD. Additionally, a call forwarding destination display (18- and 26-button DYADs only) is provided (prime line only) when your DYAD is idle, e.g., ⌈ FWD   TO   1219 ⌉

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if allowed).

You may continue to originate calls while Call Forwarding – All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – Secretarial:

1. Select and depress the line pickup button from which Call Forwarding – Secretarial was activated.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating that the Call Forwarding – Secretarial feature has been cancelled.

4. Hang up.

5.06 Call Forwarding – Return. This feature allows you to transfer a forwarded-call to the extention that activated call forwarding.

a. To return a forwarded-call:

1. First, ask the connected party to wait.

2. Depress the ⌈ XFER ⌉ feature button.

   • XFER lamp winks.
   • Recall dial tone is heard.

3. Dial the Call Forwarding – Return access code.

   • Ringback tone is heard.

NOTES: If busy tone is heard or the party does not answer, depress the XFER button to return to the held party.

When an outside party requests to be transferred to an extension and the extension is busy, you may invoke the Internal Call Queuing – Standby feature. This feature allows you to camp-on to the busy extension and wait for the party to answer.

If you desire to transfer the call before the called party answers (ringback tone must be heard), hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an "outside" party and the called party does not answer within a preset time, the call is automatically recalled to your DYAD (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

4. When the party at the forwarding station answers, announce the transfer.

   • Ringback tone is removed.

5. Hang up.

   • The call is transferred to the called party.

5.07 Forced Call Forwarding. This feature allows you to forward a waiting or ringing call on your prime line extension to another preassigned SATURN extension. Waiting or ringing calls on other lines appearing at your DYAD cannot be forwarded.

a. To forward a waiting or ringing call:

Depress the ⌈ FWD / FORCE ⌉ feature button.

SECTION 6.00 CALL QUEUING FEATURES

6.01 Internal Call Queuing – Callback. This feature allows you, upon dialing a busy extension number, to enter into a queue, hang up, and be called back when the extension becomes available.

   a. To establish an automatic callback condition.

      1. You have dialed a busy extension and busy tone is heard.

      2. Do not hang up. Listen to busy tone until busy tone changes to a steady low tone (approximately five seconds). Steady low tone is confirmation that you may invoke callback queuing.

      3. Hang up.

You may originate or receive other calls while waiting for the callback however, the callback sequence does not take place until both your extension and the previously dialed extension are idle at the same time.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second callback is initiated, the original callback is automatically cancelled.

      4. When both the called extension and your extension become idle,

        • Three-burst ringing is heard.

NOTE: If you do not answer the callback attempt within approximately 18 seconds, callback queuing is automatically cancelled.

      5. Pick up the handset.

        • Ringback tone is heard.
        • Called extension rings.

      6. When the called party answers, you may begin to talk.

   b. To cancel an automatic callback:

      1. Pick up the handset.

        • Dial tone is heard.

      2. Dial the automatic callback cancellation code.

        • Confirmation tone is heard indicating the cancellation of the callback.

      3. Hang up.

6.02 Internal Call Queuing – Standby. This feature allows you, upon dialing a busy extension, to enter into a queue and wait for the called party to answer. While in the standby queue, you hear a special ringback tone and the called party hears a call waiting tone.

   a. To establish a standby queueing condition:

      1. You have dialed a busy extension and busy or special ringback tone is heard.

NOTE: On some telephones, Internal Call Queuing – Standby is activated on an automatic originating or automatic terminating basis. If your DYAD is assigned the automatic originating option or the called party's telephone is assigned the automatic terminating option, ignore the remainder of this procedure; when special ringback tone is heard simply wait for the called party to answer.

      2. Do not hang up. Listen to busy tone until it changes to a steady low tone (approximately five seconds).

NOTE: Steady low tone is confirmation that callback queuing can be invoked, if desired, by hanging up. Refer to the feature, "Internal Call Queuing – Callback."

      3. Again do not hang up. Wait until steady low tone changes to a special ringback tone (approximately five seconds). This is confirmation that you have been placed in the standby queuing mode.

        • The called party hears the call waiting tone.

      4. Wait until the called party answers the waiting call.

NOTE: You may convert from standby queuing to callback queuing, any time, by hanging up.

      5. When the called party answers, you may begin to talk.

6.03 Outgoing Call Queuing – Callback. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue, hang up, and be called back when a trunk becomes available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

   a. To activate Outgoing Call Queuing – Callback:

      1. You have dialed a trunk group access code (e.g., 9, 82, 83, etc.) and encountered busy tone.

      2. Do not hang up. Listen to busy tone until you hear a steady low tone (approximately five seconds). Steady low tone is confirmation that you may invoke callback queuing.

      3. Hang up.

You can originate or receive calls while callback queuing is active. When a trunk becomes available and your DYAD is idle, a callback is attempted.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second automatic callback is initiated, the original callback is cancelled.

      4. When a trunk becomes available,

        • Three-burst ringing is heard.

NOTE: If you do not answer the callback attempt within 18 seconds (nominal), callback queuing is automatically cancelled.

      5. Pick up the handset.

        • Dial tone is heard.

      6. Complete dialing the desired number (do not dial the trunk group access code).

b. To cancel an automatic callback:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the automatic callback cancellation code.

   • Confirmation tone is heard indicating the cancellation of the callback.

3. Hang up.

6.04 Outgoing Call Queuing – Standby. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue and wait for a trunk to become available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

a. To activate Outgoing Call Queuing – Standby:

1. You have dialed a trunk group access code (e.g., 9, 82, 83, etc.) and encountered busy tone.

2. Do not hang up. Listen to busy tone until you hear a steady low tone (approximately five seconds).

NOTE: Steady low tone is confirmation that callback queuing can be invoked, if desired, by hanging up. Refer to the feature, "Outgoing Call Queuing – Callback."

3. Again do not hang up. Listen to steady low tone (approximately five seconds) until you hear silence (or music, if provided). This is confirmation that you have been placed in the standby queuing mode.

4. Continue to listen to silence (or music, if provided) until a trunk becomes available.

   • Dial tone is heard when a trunk becomes available.

NOTE: You may convert from standby queuing to callback queuing, anytime after hearing steady low tone, by hanging up. Refer to the feature, "Outgoing Call Queuing – Callback."

5. Upon hearing dial tone, complete dialing the desired number (do not redial the trunk group access code).

SECTION 7.00   CALL PICKUP FEATURES

7.01 Call Pickup – Directed. This feature allows you to answer an incoming call that is ringing at another telephone.

a. To answer a call ringing at another telephone:

1. Select and depress the appropriate pickup button.

    • Line pickup button lights steadily.

2. Pick up the handset.

    • Dial tone is heard.

3. Depress the $\boxed{\begin{smallmatrix}\text{PICKUP}\\\text{DIR}\end{smallmatrix}}$ feature button or dial the Call Pickup – Directed feature access code.

4. Dial the extension number of the telephone that is ringing.

    • Ringing ceases at the other telephone and you are automatically connected to the incoming call.

    • The calling party's extension number or trunk identity (e.g., 1219 or LOCAL) and the extension number of the ringing phone (e.g., 2503) appears on the alphanumeric display (18- and 26-button DYADs only) e.g.,

PU 2503   1219

5. You may begin to talk.

7.02 Call Pickup – Group. This feature allows you to answer an incoming call that is ringing at another telephone within your pickup group. Your pickup group consists of a group of extensions for which any ringing telephone may be answered by any member in the pickup group.

a. To answer a call ringing at another telephone:

1. Select and depress the appropriate pickup button.

    • Line pickup button lights steadily.

2. Pick up the handset.

    • Dial tone is heard.

3. Depress the $\boxed{\begin{smallmatrix}\text{PICKUP}\\\text{GROUP}\end{smallmatrix}}$ feature button or dial the Call Pickup – Group feature access code.

    • Ringing ceases at the other telephone and you are connected to the incoming call.

    • The calling party's extension number or trunk identity (e.g., 1219 or LOCAL) and the extension number of the ringing phone (e.g., 2503) appears on the alphanumeric display (18- and 26-button DYADs only) e.g.,

PU 2503   1219

4. You may begin to talk.

SECTION 8.00 DIRECT ACCESS FEATURES

8.01 Direct Station Selection. The Direct Station Selection (DSS) feature allows you to place a call to a party at a predesignated SATURN extension by depressing a dedicated feature button instead of dialing the party's extension number.

    a. To place a DSS call:

        1. Determine if the extension to be called is idle (a lighted DSS lamp indicates the extension is busy and a dark lamp indicates the extension is idle).

        2. Select and depress a line pickup button.

          • Line pickup lamp lights steadily.

        3. Pick up the handset.

          • Dial tone is heard.

        4. Depress the labeled DSS feature button.

          • Ringback tone is heard.

          • The called party's extension number appears on the alphanumeric display (18- and 26-button DYADs only).

          • The DSS lamp flashes.

        5. When the called party answers, you may begin to talk.

8.02 Direct Trunk Group Selection. This feature allows you to access an idle trunk in a designated trunk group by depressing a Direct Trunk Group Selection pickup button. The busy/idle status of the trunk group is indicated by the lamp associated with the pickup button. No incoming calls can terminate on this pickup button.

    a. To establish an outside call:

        1. Determine if a trunk is available in the trunk group associated with the type of outside call to be dialed (e.g., Central Office, Florida WATS, National WATS, etc.). The busy/idle status of the trunk group is as follows:

          a. Direct Trunk Group Selection lamp dark – At least one trunk is idle in the trunk group.

          b. Direct Trunk Group Selection lamp lighted – All trunks in the trunk group are busy.

        2. If a trunk is available, depress the associated Direct Trunk Group Selection pickup button.

          • Associated Direct Trunk Group Selection lamp momentarily lights steadily and remains lighted if all trunks in the trunk group are busy.

NOTE: If other DYADs are provided with the same Direct Trunk Group Selection button, the associated lamp on their DYADs remain dark unless that was the last idle trunk in the trunk group.

        3. Pick up the handset.

          • Dial tone is heard.

          •

        4. Dial the desired number.

8.03 Direct Trunk Selection. This feature allows you to originate or receive calls over a specific trunk by depressing a pickup button on your DYAD. The busy/idle status of the trunk is indicated by the lamp associated with the pickup button.

    a. To establish an outside call:

        1. Determine if the trunk is busy or idle. The busy/idle status of the desired trunk is as follows:

          a. Direct Trunk Selection lamp dark – Trunk is idle.

          b. Direct Trunk Selection lamp lighted – Trunk is busy.

        2. If the trunk is idle, depress the associated Direct Trunk Selection pickup button.

          • Direct Trunk Selection lamp lights steadily.

NOTE: If other DYADs are provided with the same Direct Trunk Selection button, the associated lamp on their DYADs also light steadily.

        3. Pick up the handset.

          • Dial tone is heard.

        4. Dial the desired outside number.

    b. To answer an incoming call:

        1. The Direct Trunk Selection lamp flashes and your DYAD rings.

        2. Depress the associated Direct Trunk Selection pickup button.

          • Direct Trunk Selection lamp lights steadily.

        3. Pick up the handset.

        4. You may begin to talk.

8.04 Station-Defined Direct Dial. This feature allows you to depress a dedicated feature button and have the SATURN System automatically dial the telephone number (inside or outside number) assigned to that button. One or more of these feature buttons may be assigned on your DYAD. Each button is assigned to a telephone number in SATURN EPABX memory.

Note that on some DYADs the destination number may be changed by using the Speed Calling – Individual feature (18- and 26-button DYADS only). At these DYADs, the destination number is indexed to one of the speed calling codes (0-9). To change the destination number associated with the speed calling code, refer to the operating instructions of the Speed Calling – Individual feature.

    a. To initiate a call to the stored number:

        1. Select and depress the appropriate line pickup button.

          • Associated line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the ⌑ DIAL ⌑ feature button.

   • Ringback tone is heard.

• The destination number is displayed (18-26-button DYADs only) e.g.,

    | 9 994 8800 |

4. When the called party answers, you may start talking.

SECTION 9.00   INTERCOM FEATURES

9.01 Automatic Intercom. This feature allows you to place an intercom call to another predetermined DYAD. This feature overrides the Do Not Disturb feature and Call Forwarding features, if active at the called DYAD.

a. To place an Automatic Intercom call:

   1. Depress the [ICOM] pickup button.

   - ICOM ___ lamp lights steadily.

   2. Pick up the handset.

   - Ringback tone is heard.

   - The extension number of the called station is displayed (18- and 26-button DYADs only).

   3. When the called party answers, you may begin to talk.

b. To answer an Automatic Intercom call:

   1. Your automatic intercom lamp flashes and you receive three-burst ringing.

   2. Depress the [ICOM] pickup button.

   - ICOM___ lamp lights steadily.

   - The extension number of the calling party is displayed (18- and 26-button DYADs only).

   3. Pick up the handset.

   - Three-burst ringing ceases.

   - You are connected to the calling party.

   4. You may begin to talk.

9.02 Manual Intercom and Signaling. This feature allows you to connect to a common intercom path by depressing a dedicated intercom pickup button. A maximum of eight intercom pickup appearances may be connected within each intercom group and a maximum of eight parties simultaneously connected at any one time. Signaling of another preassigned DYAD within the intercom group is performed by depressing the Manual Signaling feature button.

a. To place a Manual Intercom call:

   1. Determine if the intercom is idle.

   a. ICOM lamp dark – Intercom is idle.

   b. ICOM lamp lighted – Intercom is busy.

NOTE: A call origination attempt over a busy intercom will cause you to bridge onto the existing intercom connection.

   2. Depress the [ICOM] pickup button.

- ICOM lamp lights steadily indicating you are connected to the intercom.

NOTE: · Reorder tone is heard if the intercom is full (seven parties simultaneously connected).

   3. Depress the [BUZZ] feature button to signal the other DYAD.

   - The other DYAD's audible alert tone sounds (your DYAD's audible alert tone also sounds) for as long as the BUZZ button is depressed; all other alerting in progress is preempted and resumes after the button is released.

b. To answer a Manual Intercom Call:

   1. The audible alert tone is heard at your DYAD.

   2. Depress the [ICOM] pickup button.

   3. Pick up the handset.

   4. You may begin to talk.

9.03 Executive Intercom. This feature allows you to place a call to another DYAD within a prearranged executive intercom group. This feature overrides the Do Not Disturb feature and Call Forwarding features, if active at the called DYAD.

a. To place an Executive Intercom call:

   1. Depress the [ICOM DIAL_] feature button.

   - ICOM DIAL ___ lamp lights steadily.

   2. Pick up the handset.

   - Dial tone is heard.

   3. Dial the single digit code that corresponds to the desired party.

   - Ringback tone is heard.

   4. When the called party answers, you may begin to talk.

b. To answer an Executive Intercom call:

   1. Your ICOM DIAL ___ lamp flashes and three-burst ringing is heard.

   2. Depress the [ICOM DIAL_] feature button.

   3. Pick up the handset.

   - Three-burst ringing ceases.
   - ICOM DIAL ___ lamp lights steadily.
   - You are connected to the calling party.

   4. You may begin to talk.

SECTION 10.00 PRIVACY FEATURES

10.01 Executive Override. This feature allows you, upon encountering busy tone, to enter into the existing conversation for the intended purpose of announcing a high priority or emergency call. Before the override occurs a warning tone is heard by the two conversing parties alerting them of the impending override.

By using the Executive Override feature button (OVER RIDE).

a. To override a busy call:

1. While listening to busy tone, depress the ⌈OVER RIDE⌋ feature button.

   - Executive Override tone is heard followed by the connection to the existing conversation.

   - OVER RIDE lamp lights steadily.

   - The alphanumeric display (18- and 26-button DYADs only) indicates that this is now a conference call, e.g., ⌈   CONF⌋

NOTE: Reorder tone is heard if the connection is denied (e.g., the telephone is assigned Data Line Security or Executive Override Security).

2. You may begin to talk.

NOTE: The Busy Override Injection tone is heard repeatedly every 8 to 20 seconds apart after overriding a call in progress.

By using the Executive Override feature access code.

a. To override a busy call:

1. While listening to busy or special ringback tone, depress the XFER feature button.

   - Recall dial tone is heard.

2. Dial the Executive Override feature access code.

   - The alphanumeric display (18- and 26-button DYADs only) indicates that this is now a conference call, e.g., ⌈   CONF⌋

   - Executive Override tone is heard followed by the connection to the existing conversation.

NOTE: Reorder tone is heard if the connection is denied (e.g., the telephone is assigned Data Line Security or Executive Override Security.

3. You may begin to talk.

NOTE: The Busy Override Injection tone is heard repeatedly every 8 to 20 seconds apart after overriding a call in progress.

10.02 Executive Override – Automatic. This feature allows you to camp-on to a busy extension and automatically break into the existing conversation if the called party does not answer your waiting call within a predetermined period of time.

a. To activate Executive Override – Automatic:

1. You have dialed an extension number and special

ringback tone is heard.

   - Either special ringback tone or, if your DYAD is classmarked for callback queuing, busy tone followed by low tone followed by special ringback tone is heard indicating that the extension line is busy. At this time call waiting tone is also applied to the called party.

NOTE: If your DYAD is also provided with the Internal Call Queuing – Standby feature and a busy extension is dialed, busy tone is heard instead of special ringback tone. You must wait until busy tone changes to low tone (approximately five seconds) and low tone changes to special ringback tone (approximately five seconds) before the called party's line is camped-on (call waiting tone is applied).

2. Wait until the called party answers the waiting call.

3. If the called party does not answer your waiting call within a predetermined time,

   - Executive Override tone is heard followed by a "break-in" to the existing conversation.

   - The alphanumeric display (18- and 26-button DYADs only) indicates that this is now a conference call, e.g., ⌈   CONF⌋

4. You may begin to talk.

NOTE: Busy Override Injection tone is heard repeatedly every 8 to 20 seconds apart after overriding the call in progress.

10.03 Do Not Disturb. This feature allows you to make your DYAD busy to all incoming calls whenever you desire not to be disturbed.

Activation of Do Not Disturb by using the DND feature button will "busy out" your prime line extension only. For all non-prime lines appearing on your DYAD, incoming calls will cause the LED in the respective line pickup button to flash however, ringing will be inhibited.

Activation of Do Not Disturb can be performed on any line appearing at your DYAD (including your prime line) by dialing the Do Not Disturb feature activation code, if allowed by the line's class of service.

By depressing the Do Not Disturb feature button (DND).

a. To make your DYAD busy to incoming calls:

1. Depress the ⌈DND⌋ feature button (the button can be depressed while you're busy on a call or when the DYAD is idle).

   - DND lamp lights steadily indicating that the Do Not Disturb feature is activated.

   - When your DYAD is idle, a Do Not Disturb indication (18- and 26-button DYADS only) is displayed. e.g., ⌈DND ALL   ⌋

2. Hang up if off-hook.

You can originate calls while Do Not Disturb is in effect; however, other calls cannot wait on your DYAD's prime line. Intercom calls are not affected by activation of the Do Not Disturb feature. Messages may also wait at your DYAD (18- and 26-button DYADs only).

Each time you pick up the handset recall dial tone is heard as a reminder that your DYAD is in the busy mode.

b. To re-establish normal operation to your DYAD:

1. Depress the ⌷ DND ⌷ feature button (the button can be depressed while you're busy on a call or when the DYAD is idle).

   • DND lamp extinguishes indicating that the Do Not Disturb feature is deactivated.

   • Alphanumeric display (18- and 26-button DYADs only) no longer displays DND ALL when your phone is idle.

2. Hang up if off-hook.

By dialing the Do Not Disturb feature access code.

a. To make your DYAD busy to incoming calls:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the Do Not Disturb feature activation code.

   • Confirmation tone is heard.

   • Your DYAD is now made busy to incoming calls on the prime line only. Audible tone alerting will be inhibited on all other lines appearing on your DYAD.

   • When your DYAD is idle, a Do Not Disturb indication (18- and 26-button DYADS only) is displayed. e.g., ⌷DND ALL⌷

4. Hang up.

You can originate calls while Do Not Disturb is in effect; however, other calls cannot wait on the associated line. Intercom calls and voice calls are not affected by activation of the Do Not Disturb feature. Messages may also wait at your DYAD (18- and 26-button DYADs only).

Each time you pick up the handset recall dial tone is heard as a reminder that your DYAD is in the busy mode.

b. To re-establish normal operation to your DYAD:

1. Pick up the handset.

   • Recall dial tone is heard indicating Do Not Disturb is in effect.

2. Dial the Do Not Disturb cancellation code.

   • Confirmation tone is heard indicating cancellation of the Do Not Disturb feature.

   • Alphanumeric display (18- and 26-button DYADs only) no longer displays the Do Not Disturb indication.

3. Hang up.

10.04 Call Privacy. Activation of the Call Privacy feature on a specific line prevents all other parties from bridging on that line. This feature is assigned to DYADs on an automatic activating and manual activating basis. If your DYAD is assigned the automatic activating option, each time you receive or place a call, Call Privacy is automatically activated.

For DYADs assigned the automatic activation option.

a. To deactivate Call Privacy:

   While in an established conversation, depress the ⌷ PRIV ⌷ feature button.

   • PRIV lamp extinguishes indicating Call Privacy is deactivated. (The PRIV lamp remains extinguished until the call is disconnected.)

NOTES: A third party can now bridge on the line by depressing associated line pickup button.

   Call Privacy may be reactivated by redepressing the PRIV feature button.

For DYADs assigned the manual activation option.

a. To activate Call Privacy:

   Depress the ⌷ PRIV ⌷ feature button (the button can be depressed while you're busy on a call or when the DYAD is idle).

   • PRIV lamp lights steadily indicating that Call Privacy is active.

NOTES: Any party attempting to bridge on the line receives busy tone. If a party has already bridged on the line, the bridged party is disconnected from the call and busy tone is heard.

b. To deactivate Call Privacy:

   Depress the ⌷ PRIV ⌷ feature button (the button can be depressed while you are busy on a call or when the DYAD is idle).

   • PRIV lamp extinguishes indicating that the Call Privacy feature is deactivated.

10.05 Station Ringer Cutoff. This feature allows you to disable your DYAD's audible alert tone. When disabled, the only indication that you receive of an alerting call is the pickup button's flashing lamp.

a. To disable the audible alert tone:

   Depress the ⌷RINGER OFF⌷ feature button, anytime.

   • RINGER OFF lamp lights steadily.

b. To enable the audible alert tone:

   Depress the ⌷RINGER OFF⌷ feature button.

   • RINGER OFF lamp extinguishes.

SECTION 11.00   SPEED CALLING FEATURES

11.01 Last Number Redial. This feature allows you to have the last phone number dialed from your DYAD automatically redialed by the SATURN System. This feature is normally used after dialing a busy number or when the called party does not answer.

a. To display the last number dialed from your DYAD (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Depress the ⌐LAST NO.⌐ feature button.

   * The number appears on the alphanumeric display. e.g., ⌐ 9 994 8800 ⌐

b. To place a call to the last number dialed from your DYAD:

1. Select and depress the appropriate line pickup button.

   * Associated line pickup lamp lights steadily.

2. Pick up the handset.

   * Dial tone is heard.

3. Depress the ⌐LAST NO.⌐ feature button or dial the Last Number Redial feature access code.

   * The SATURN System automatically dials the last phone number dialed from your DYAD.

   * Ringback tone is heard.

   * The phone number appears in the alphanumeric display (18- and 26-button DYADs only) e.g., ⌐ 9 994 8800 ⌐

NOTE: The SATURN System will redial only the last valid destination phone number. Unassigned extension numbers, partial dialed numbers, and feature access codes are not dialed.

4. When the called party answers, you may begin to talk.

11.02 Saved Number Redial. This feature allows you to store, into system memory, a telephone number that you have just dialed by depressing a feature button and have this number automatically redialed at a later time by depressing the same feature button. Only one number can be stored at a time from your DYAD.

a. To display the stored number (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Depress the ⌐SAVE NO.⌐ feature button.

   * The number appears on the alphanumeric display (18- and 26-button DYADs only) e.g., ⌐ 9 994 8800 ⌐

b. To store a number:

1. Upon dialing a do-not-answer (ringback tone is heard) or busy (busy tone is heard) number, or while established in conversation with a called party, depress the ⌐SAVE NO.⌐ feature button to store the just dialed number.

   * SAVE NO. lamp lights steadily.

   * After you hang up, the SAVE NO. lamp extinguishes; however, the number is stored in memory.

NOTE: The number is saved regardless of whether the called party answers or is busy.

c. To initiate a call to the party associated with the stored number:

1. Select and depress the appropriate line pickup button.

   * Associated line pickup lamp lights steadily.

2. Pick up the handset.

   * Dial tone is heard.

3. Depress the ⌐SAVE NO.⌐ feature button.

   * SAVE NO. lamp lights steadily during system dialing then extinguishes.

   * Ringback tone is heard.

   * The dialed digits appear on the alphanumeric display (18- and 26-button DYADs only) e.g., ⌐ 9 994 8800 ⌐

4. When the called party answers, you may begin to talk.

11.03 Speed Calling – Individual. This feature allows you to establish a personal speed call list of up to 10 frequently called telephone numbers. Each number (internal or external to the SATURN System) is assigned a one-digit code (0 to 9) and programmed into SATURN memory from your DYAD.

By using the Speed Calling – Individual feature button (SPEED IND).

a. To display the speed call list (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Depress the ⌐SPEED IND⌐ feature button.

   * SPEED IND lamp lights steadily.

   * The speed call code and the telephone number of the first member of the speed call list is displayed. e.g., ⌐0   99948800⌐

NOTE: VACANT is displayed if no telephone number has been assigned to the speed calling code.

3. You can scroll through the speed call list by

repeatedly depressing the SPEED IND feature button.

NOTES: After the last member of the speed call list is displayed, depressing the SPEED IND feature button again causes the display to go blank and SPEED IND lamp to extinguish.

If you desire to place a call to a displayed member number while in the display mode, select any line pickup button and pick up the handset. The SATURN System will automatically dial the displayed number.

b. To store or change speed calling codes (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Use the display procedure to scroll to the appropriate speed call code/telephone number.

3. Do not pick up the handset.

4. Depress the ∗ key on the DYAD's keypad to enter the change mode.

   • Speed IND lamp flashes.

   • Alphanumeric display prompts you to enter a new number. e.g., `0   ENTER NEW NO`

5. Dial the desired telephone number corresponding to the speed calling code. Be sure to enter the complete number including any prefix digits (e.g., 9 1 800 342 8300).

NOTE: The destination may be a number that requires supplementary dialing.

6. Depress the SPEED IND feature button to store the new number.

   • SPEED IND lamp lights steadily indicating the number is stored in memory.

   • The dialed number is displayed along with the corresponding speed calling code. e.g., `0        99948800`

NOTE: If the action is unsuccessful for any reason, the SATURN System responds with an error message (e.g. 3 ERROR-REENTER).

c. To place a speed call (18- and 26-button DYADs only):

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the SPEED IND feature button.

   • SPEED IND lamp lights steadily.

4. Dial the one-digit speed calling code corresponding to the desired telephone destination number.

   • SPEED IND lamp extinguishes.

   • Telephone number associated with the dialed speed calling code appears on the alphanumeric display.

   • Ringback tone is heard.

5. When the called party answers, you may begin to talk.

By using the Speed Calling – Individual access code.

a. To store or change speed calling numbers:

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the Speed calling – store/change code.

4. Dial the speed call code (0 to 9).

5. Dial the desired telephone number corresponding to the speed calling code. Be sure to enter the complete number including any prefix digits (e.g., 9 1 800 342 8300).

   • Confirmation tone is heard.

NOTES: To expedite receiving dial tone, depress the # key immediately after entering the last digit of the telephone number.

The destination may be a number that requires supplementary dialing.

6. Hang up.

b. To place a speed call:

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the Speed Calling – Individual feature access code.

4. Dial the one-digit speed calling code corresponding to the desired telephone destination number.

   • Telephone number associated with the dialed speed calling code appears on the alphanumeric display (18- and 26-button DYADs only).

   • Ringback tone is heard.

5. When the called party answers, you may begin to talk.

11.04 Speed Calling – Group. This feature allows you to place speed calls to frequently called destinations. The destina-

tion numbers (normally outside telephone numbers) are stored in SATURN EPABX memory, along with a two-digit code associated with each number. These codes are normally listed in your company's telephone directory.

a. To place a speed call:

1. Select and depress the appropriate line pickup button.

   • Associated line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the [SPEED GRP__] feature button or dial the Speed Calling – Group feature access code.

   • SPEED GRP__ lamp lights steadily.

NOTE: In SATURN Systems utilizing only one speed calling group, the SPEED SYSTEM feature button is used.

4. Dial the two-digit code corresponding to the desired telephone number.

   • SPEED GRP__ lamp extinguishes after system dialing.

   • Ringback tone is heard.

   • Telephone number associated with the dialed speed call code is displayed (18- and 26-button DYADs only).

5. When the called party answers, you may begin to talk.

SECTION 12.00 ADDITIONAL FEATURES

12.01 Least Cost Routing. The Least Cost Routing (LCR) feature is used in some SATURN EPABX Systems to route outgoing (trunk) calls over the least costly route available at the time of call placement.

   a. To place an outside call:

      1. Select and depress the appropriate line pickup button.

         • Line pickup button lamp lights steadily.

      2. Pick up the handset.

         • Dial tone is heard.

      3. Dial the LCR access code.

         • Dial tone is heard.

      4. Dial the outside destination number.

         • Confirmation tone (three-bursts of tone) is heard indicating that the dialed number has been accepted and a route has been found.

         • The SATURN System then dials the destination number. Ringback tone is heard if the destination number is idle. Busy tone is heard if the destination number is busy.

NOTES: If Route Advance Tone (one short burst of tone) is heard immediately after dialing the destination number, wait until you hear confirmation tone. Route Advance tone indicates that the SATURN System has accepted the dialed number and is searching for an idle route. Additional Route Advance Tones may be heard as the SATURN System searches for alternate routes to your destination.

If Expensive Facility Tone (one burst of tone) is heard immediately after hearing confirmation tone, the SATURN System has found a more expensive route. If you desire not to place the call over a more expensive route, hang up.

If a route is not found within a preset period of time, the SATURN System provides a steady burst of low tone (if Callback Queuing is assigned) to indicate that Callback Queuing can be invoked, if desired. Callback Queuing allows you to hang up and be called back (three-burst ringing is heard) when a route becomes available. To answer the callback, pick up the handset, listen for confirmation tone followed by ringback tone. When the called party answers, you may begin to talk. If you do not answer the callback attempt within approximately 18 seconds, the callback is temporarily cancelled. Additional callbacks (maximum of nine) will be attempted every five minutes.

      5. When the called party answers, you may begin to talk.

   b. To cancel callback queuing:

      1. Pick up the handset.

         • Dial tone is heard.

      2. Dial the automatic callback cancellation code.

         • Confirmation tone is heard indicating the cancellation of the callback.

      3. Hang up.

12.02 SMDR Account Codes. If your DYAD is equipped with an ACCT feature button, you may display the default account code or the previously entered special account code (18- and 26-button DYADs only). You may also change the account code to another account code, any time during an established call.

   a. To enter a special account code.

      1. After dialing a trunk access code (e.g., "9" for outside) or an LCR access code, if you hear recall dial tone, enter a valid account code.

         • Dial tone is heard.

NOTE: The account code must be entered within a preset period of time or else the trunk is released and re-order tone is heard.

      2. Complete the call by dialing the desired destination number (do not redial the trunk or LCR access code).

   b. To display the account code associated with your DYAD (18- and 26-button DYADs only):

      1. Depress the | ACCT | feature button (the button can be depressed while you're busy on a call or when the DYAD is idle).

         • The default account code or previously entered special account code is displayed e.g.,
         | ACCT   10828397689 |

NOTES: After a preset period of time, the alphanumeric display is restored to the original call display.

If a special account code had been previously entered, the special account code is displayed for that call. The default account code is restored automatically at the end of the call during which such change has been made.

   c. To change an account code to another code (18- and 26-button DYADs only).

      1. During an established call, depress the | ACCT | feature button.

         • The current account code (default or previously entered special account code) is displayed. e.g.,
         | ACCT   19305784385 |

      2. Depress the ∗ key on the DYAD's keypad.

         • If the call is being recorded by SMDR, the current displayed account code is removed and the account code indicator is displayed, e.g.,
         | ACCT |

- If the call is not being recorded by SMDR, depressing the * key (or any additional dialing) has no effect on the alphanumeric display. The default account code remains displayed for approximately 15 seconds after depressing the ACCT feature button.

3. Dial the new account code.

- As the digits are dialed, the digits are scrolled from left to right across the alphanumeric display.

NOTE: If a mistake is made in dialing the new account code, depress the ACCT feature button (current account code is displayed), depress the * key on the keypad (ACCT is displayed), and dial the new account code.

4. Upon completion of dialing the correct account code, depress the # key on the DYAD's keypad.

- If a valid account code was entered, the alphanumeric display is restored to the original call display, e.g.,

| LOCAL |

- If an invalid account code was entered, an error message is displayed (e.g., VOID 12131415100). After five seconds, the alphanumeric display is restored back to the current account code. (e.g., ACCT 21010117171).

12.03 I-Use Indication. For DYADs provided with multiple lines, this feature is useful in determining which line the user is presently utilizing when other lines and features are in use.

a. To activate:

Depress the [I-USE] feature button.

- All button lamps momentarily go dark for approximately 1½ seconds with the exception of the lamp corresponding to the line you're on.

12.04 Duration of Call Display. (18- and 26-button DYADs only) This feature allows you to display the elapsed time you have been engaged on a particular call.

a. To display the elapsed time of the call:

Depress the [CALL TIMER] feature button, anytime, during the call.

- CALL TIMER lamp lights steadily until the end of the call.

- The elapsed time of the call is momentarily displayed. e.g., | 3:23 |

NOTE: After completion of the call, the total time duration for that call is displayed for a predetermined period of time. Note that if a new call is begun the display extinguishes.

12.05 Time of Day Display. (18- and 26-button DYADs only) This feature allows you to display the time of the day on the alphanumeric display.

a. To display the time:

Depress the [TIME] feature button, anytime.

- The time is displayed for 1½ seconds (nomi-

nal) after which it is replaced by whatever previous display existed. e.g.,

| 4:35 PM |

12.06 Call Tracing. This feature allows you to have a connected call's data recorded on the Station Message Detail Recording (SMDR) printer. The SMDR printer prints out the calling party's extension number (if an internal call) or the incoming trunk and trunk group number (if an external call), the called number, the date and time of the call, and a special character on the SMDR report that the call was traced.

a. To trace a call:

1. While connected to a call, depress the [XFER] button.

- XFER lamp winks.
- Recall dial tone is heard.
- The call is placed on Consultation Hold.

2. Dial the Call Tracing feature access code.

- Confirmation tone is heard indicating the call's data has been recorded.

- You are automatically reconnected to the call.

NOTE: Reorder tone is heard if your phone is not allowed to activate this feature.

3. Hang up or continue talking to the other party.

12.07 Message Waiting. This feature allows you to send a message waiting indication to a party at another extension. This feature also provides a means for you to respond to the message or cancel the message.

a. To activate Message Waiting after dialing a do-not-answer or busy extension:

1. While listening to ringback tone or busy tone, depress the [MSG SET] feature button or depress the [XFER] button and dial the message waiting activation code.

- MSG SET lamp momentarily lights steadily, then extinguishes.

- Confirmation tone is heard.

- The message waiting lamp flashes at the called telephone.

NOTE: If the called telephone is unable to accept any more messages (maximum of four), busy tone is heard. If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

2. Hang up.

- MSG SET lamp extinguishes.

b. To activate Message Waiting without first attempting to call the other party:

1. Select and depress the appropriate line pickup button.

- Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the ⌈ MSG SET ⌉ feature button or dial the Message Waiting activation code.

4. Dial the extension number of the party you wish to leave a message waiting indication.

   • Confirmation tone is heard.

NOTE: If the called telephone is unable to accept any more messages (maximum of four), busy tone is heard. If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

5. Hang up.

   • MSG SET lamp extinguishes.

c. To display each message waiting at your DYAD (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Depress the ⌈ MSG CALL BK ⌉ feature button repeatedly to scroll through the waiting messages.

   • Each depression of the MSG CALL BK feature button displays the next succeeding message.

d. To respond to a message waiting at your DYAD:

1. The MSG CALL BK lamp flashes and/or a message is displayed requesting you to call another extension (18- and 26-button DYADs only) e.g.,

   ⌈ CALL   1219 ⌉

2. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

3. Pick up the handset.

   • Dial tone is heard.

NOTE: At this point, you can simply dial the extension number displayed in the alphanumeric display (18- and 26-button DYADs only) or inititate an automatic callback as described in the following procedure.

4. Depress the ⌈ MSG CALL BK ⌉ feature button or dial the Message Waiting – Automatic Callback access code.

   • The SATURN System automatically dials the extension number of the party that sent the message.

   • Ringback tone is heard.

NOTE: If busy tone is heard, the extension is busy; try initiating the callback at a later time.

5. When the party answers, ask for the message.

NOTE: The completion of an automatic callback automatically cancels the associated message.

e. To cancel a message you sent to another telephone:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the Message Waiting – Sent cancellation code or depress the ⌈ MSG CANCEL ⌉ feature button.

4. Dial the extension number to which the message was sent.

   • Confirmation tone is heard indicating that message waiting has been cancelled.

NOTE: Reorder tone is heard instead of confirmation tone if an invalid access code is dialed or the message was already cancelled at the called telephone.

5. Hang up.

f. To cancel a message that is waiting at your DYAD:

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the ⌈ MSG CANCEL ⌉ feature button or dial the Message Waiting – Received cancellation code.

   • Confirmation tone is heard.

   • The alphanumeric display goes blank unless another message (maximum of four) is waiting at your DYAD (18- and 26-button DYADs only).

4. Repeat the above procedure for each message to be cancelled.

5. Hang up.

g. To cancel a particular message that is waiting at your DYAD (18- and 26-button DYADs only):

1. Do not pick up the handset.

2. Scroll through the waiting messages (maximum of four) by repeatedly depressing the ⌈ MSG CALL BK ⌉ feature button. Display the message to be cancelled.

3. Depress the ⌈ MSG CANCEL ⌉ feature button.

   • The alphanumeric display goes blank unless another message is waiting.

   • The MSG CALL BK lamp extinguishes if no other messages exist, otherwise the MSG CALL BK lamp continues to flash and the next message appears on the alphanumeric display.

12.08 Stop Hunt. This feature allows a sequential hunt group to be temporarily reduced in size.

a. To shorten the sequential hunt group:

1. Dial the Stop Hunt activation code from the extension at which all succeeding extensions are to be excluded from the hunting list. For example, if the hunt sequence includes extensions 234-235-236-237-238-239 and you want to exclude extensions 238 and 239, dial the Stop Hunt access code from extension 237.

   • Confirmation tone is heard indicating the successful activation of the Stop Hunt feature.

2. Hang up.

b. To return the hunt group to full size:

1. Dial the Stop Hunt cancellation code from the extension that activated Stop Hunt.

   • Confirmation tone is heard indicating the successful cancellation of the Stop Hunt feature.

2. Hang up.

12.09 Mobile Authorization Codes. This feature allows you to place a call from a telephone that otherwise would be restricted by its Class-of-Service. An authorization code, which is assigned to a Class-of-Service with its own call restrictions, must be dialed.

a. To override a call restriction:

1. Select and depress the appropriate **line pickup** button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the mobile authorization access code.

4. Dial an authorization code.

   • Recall dial tone is heard indicating that the Class-of-Service assigned to the dialed authorization code is now in effect.

NOTE: Intercept tone is heard if an invalid authorization code is dialed.

5. Place the call previously restricted.

NOTE: If you are still restricted from placing the call, the Class-of-Service assigned to the dialed authorization code may not allow it.

After you have completed the call and hanged up, the Class-of-Service defined by the authorization code is removed and the telephone's original Class-of-Service returns active.

12.10 Universal Night Answer – Zoned. This feature allows you to answer incoming calls ringing the night bell(s) when the SATURN EPABX System is in the night service mode.

a. To answer an incoming call:

1. You hear the night bell(s) ringing.

2. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

3. Pick up the handset.

   • Dial tone is heard.

4. Depress the | UNA | feature button or dial the appropriate Universal Night Answer access code.

   • A talking connection is established between you and the incoming party.

NOTES: If reorder tone is heard, the night call already has been answered. If intercept tone is heard, you are not allowed to answer incoming night calls from your DYAD.

   In some SATURN Systems, multiple night answering zones are provided. In these systems, depress the associated UNA ZONE ___ feature button or dial the associated Universal Night Answering – Zoned access code (1 to 4).

5. You may begin to talk.

12.11 Voice Paging Access – Zoned and Area. This feature allows you to page another party over the loudspeaker system.

a. To page a party:

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the | PAGE | feature button or dial the associated Voice Paging access code.

   • PAGE is displayed (18- and 26-button DYADs only) e.g., | PAGE |

NOTE: In some SATURN Systems, multiple Voice Paging zones are provided. In these systems, depress the associated PAGE ZONE ___ feature button or dial the associated Universal Night Answer – Zoned access code (1 to 4).

4. Speak slowly and distinctly into the handset.

5. Hang up.

12.12 Call Release. This feature allows you to place your DYAD in the on-hook/off-hook state when the DYAD's handset is off the hookswitch. This feature is useful in applications where the handset is placed in an accoustically coupled device (i.e. modem) or when a headset is used instead of the handset.

a. To place your DYAD in the on-hook state (idle) when the handset is off the hookswitch:

   Depress the | RLS | feature button.

   • Line pickup lamp extinguishes.

b. To place your DYAD in the off-hook state (busy) when the handset is off the hookswitch:

Depress the ☐ RLS ☐ feature button.

- The automatic preference feature connects the appropriate line.

- Line pickup button lights steadily.

- Dial tone is heard.

NOTE: If the handset is on the hookswitch and your DYAD is idle, depressing the RLS feature button is ignored. If the DYAD's handset is on the hookswitch and your DYAD is non-idle (i.e., Hands-Free or On-Hook Dialing feature is active), depressing the RLS feature button will disconnect the call.

Table 12.00 Feature Access Codes and Button Labels

FEATURE	ACCESS CODE	BUTTON LABEL
HOLD FEATURES		
Consultation Hold	none	XFER
Call Hold	———	PARK PRIV
Call Hold – Flip-Flop (Broker)	———	SPLIT
Call Park	———	PARK
Manual Hold	none	HOLD
Exclusive Hold	none	HOLD EXCEL
CALL TRANSFER FEATURES		
Call Transfer	none	XFER
Call Transfer to Attendant.	none	XFER "0"
CONFERENCE FEATURES		
Add-On Conference	none	XFER
Bridge Call	none	see note 1
Meet-Me Conference	———	MEET ME
Station Controlled Conference		
To access conference	———	none
To remove any conferee	———	none
To remove last conferee	———	none
CALL FORWARDING FEATURES		
Call Forwarding – All Calls		
To activate	———	FWD ALL
To cancel	———	FWD ALL
Call Forwarding to Public Network		
To activate	———	none
To cancel	———	none
Call Forwarding – Busy Lines		
To activate	———	FWD BUSY
To cancel	———	FWD BUSY
Call Forwarding – No Answer		
To activate	———	FWD NO ANS
To cancel	———	FWD NO ANS
Call Forwarding – Secretarial		
To activate	———	FWD TO
To cancel	———	FWD TO
Call Forwarding – Return	———	none
Forced Call Forwarding	none	FWD FORCE

Note 1: Activate by depressing the associated busy line pickup button.

Table 12.00 Feature Access Codes and Button Labels (Continued)

FEATURE	ACCESS CODE	BUTTON LABEL
CALL QUEUING FEATURES		
Internal Call Queuing – Callback		
To cancel callback		none
Internal Call Queuing – Standby	none	none
Outgoing Call Queuing – Callback		
To cancel callback		none
Outgoing Call Queuing – Standby	none	none
CALL PICKUP FEATURES		
Call Pickup – Directed		PICKUP DIR
Call Pickup – Group		PICKUP GRP
DIRECT ACCESS FEATURES		
Direct Station Selection		see note 2
Direct Trunk Group Selection		see note 2
Direct Trunk Selection		see note 2
Direct Destination Selection	none	DIAL ____
INTERCOM FEATURES		
Automatic Intercom	none	ICOM ____
Manual Intercom	none	ICOM
and Signaling	none	BUZZ
Executive Intercom	none	ICOM DIAL ____
PRIVACY FEATURES		
Executive Override		OVER RIDE
Executive Override – Automatic	none	none
Do Not Disturb		
To activate		DND
To cancel		DND
Call Privacy	none	PRIV
Station Ringer Cutoff	none	RINGER OFF
SPEED CALLING FEATURES		
Last Number Redial		LAST NO.
Saved Number Redial	none	SAVE NO.
Speed Calling – Individual		
To store or change		SPEED IND
To place a Call		SPEED IND

Note 2: Customer defined button label.

Table 12.00   Feature Access Codes and Button Labels (Continued)

FEATURE	ACCESS CODE	BUTTON LABEL
SPEED CALLING FEATURES		
Speed Calling – Group		
Group 1	_____	SPEED GRP 1
Group 2	_____	SPEED GRP 2
Group 3	_____	SPEED GRP 3
Group 4	_____	SPEED GRP 4
VOICE CALLING FEATURES		
Voice Calling – Dial	none	VOICE CALL
Voice Calling – DSS.................................	none	VOICE ____
SPECIAL CALLING FEATURES		
On-Hook Dialing	none	ON-HK DIAL
Hands-Free Operation	none	HANDS FREE
ADDITIONAL FEATURES		
Least Cost Routing		
To access	_____	none
To cancel callback	_____	none
To display and change	none	ACCT
I-Use Indication....................................	none	I-USE
SMDR Account Codes		
Duration of Call Display	none	CALL TIMER
Call Tracing.......................................	_____	none
Time of Day Display	none	TIME
Message Waiting		
To activate	_____	MSG SET
To respond....................................	_____	MSG CALL BK
To cancel sent message.........................	_____	none
To cancel received message	_____	MSG CANCEL
Mobile Authorization Codes	_____	none
Stop Hunt		
To activate	_____	none
To cancel	_____	none
Universal Night Answer		
All zones	_____	UNA
Zone 1..	_____	UNA ZONE 1
Zone 2..	_____	UNA ZONE 2
Zone 3..	_____	UNA ZONE 3
Zone 4..	_____	UNA ZONE 4
Voice Paging Access		
Zone 1..	_____	PAGE ZONE 1
Zone 2..	_____	PAGE ZONE 2
Zone 3..	_____	PAGE ZONE 3
Zone 4..	_____	PAGE ZONE 4
Zone Combination...............................	_____	PAGE
Call Release	none	RLS

SATURN® EPABX

OC1E

™JR-DYAD USER INSTRUCTIONS

CONTENTS

LIST OF FIGURES

LIST OF TABLES

SECTION 1.00 INTRODUCTION

1.01 General. This document provides step-by-step instructions for accessing SATURN Electronic Private Automatic Branch Exchange (EPABX) features from the SATURN JR-DYAD. The JR-DYAD has sixteen buttons for line appearances and feature access. See Figure 1.00. Eight of the buttons are assigned fixed features and are labeled as follows:

Hang Up   – On-hook Dialing release, On/Off-Hook for headset use
On Hook Dial – On-hook dialing
Store   – Speed Dial programming
Speed Dial   – Speed Dial activation
Group Pickup – Group Pick-Up feature activation
Redial   – Last Number Redial
Xfer Conf   – Hookflash/Transfer/Conference
Hold (red)   – Manual Hold feature

The operation of these buttons is discussed in Section 2.00.

The remaining eight buttons, which have visual indicators, are system programmable for each station for feature activation or line appearances. Their operation is discussed in Sections 3.00 through 14.00.

1.02 Feature Access. The instructions provided in this document are for features that can be accessed by depressing a button or dialing an access code. If the JR-DYAD does not have a button for a particular feature, the feature may be accessed by dialing an access code, if it is allowed by the class of service assigned to the station.

Table 14.00 at the back of this document lists the feature access codes and the associated button labels.

1.03 To Place a Call. The following procedures can be used to place a call:

    a.   Handset operation

        To place a call from the JR-DYAD select and depress an idle line pickup button, pick up the handset, listen for dial tone, and dial the destination number.

    b.   On-Hook dialing (see paragraph 2.02)

1.04 To Answer a Call. The following procedures can be used to answer a call:

To answer an incoming call at the JR-DYAD depress the flashing pickup button, pickup the handset and talk to the calling party.

1.05 Automatic Line Preferences. Connection to a given pickup line on your JR-DYAD may be provided on an automatic basis. Each JR-DYAD can be assigned one originating and one terminating preference. The originating preference options are: Prime Line Preference, Last Line Preference, and Idle Line Preference. The terminating preference options are: Ringing Line Preference and Incoming Line Preference. If an automatic line preference is not assigned to your JR-DYAD, you must depress a pickup button each time you originate and answer a call.

a. Originating Preferences:

      1.   Prime Line Preference – Automatically selects the prime line pickup button when you pick up the handset to place a call.

      2.   Last Line Preference – Automatically selects the same line pickup button to which you were connected on your last call when you pick up the handset to place a call.

      3.   Idle Line Preference – Automatically selects an idle line pickup button when you pick up the handset to place a call.

b.   Terminating Preferences:

      1.   Ringing Line Preference – Automatically selects a pickup button associated with a call that is ringing your JR-DYAD. Pickup buttons associated with lines that are not assigned to ring at your station are not selected.

      2.   Incoming Line Preference – Automatically selects a pickup button associated with an incoming call. Automatic selection occurs regardless of whether the line is in the ringing or alerting-only state.

A terminating line preference will take precedence over an originating line preference when an incoming call exists. You may override an automatic line preference by manually depressing another pickup button prior to picking up the handset.

1.06 Discriminating Alerting Tone. Several types of distinctive alerting tone patterns are provided so that you can distinguish between the different types of incoming calls. The alerting patterns are:

    a.   One burst of tone (normal ringing) – Identifies an incoming call from another SATURN EPABX telephone.

    b.   Two bursts of tone – Identifies an incoming, "outside" call, including attendant-extended calls.

    c.   Three bursts of tone – Identifies calls initiated by the following:

       •   Call Hold automatic recall
       •   Call Transfer Security recall
       •   Executive Intercom calls
       •   Internal Call Queuing – Callback
       •   Outgoing Call Queuing – Callback
       •   Station-Controlled Conference recall to conference master

1.07 Call Progress Tones. The following call progress tones are used to inform you of the status of a call:

    a.   Busy Tone – Tone heard when a called party's telephone is busy (60 impulses per minute)

    b.   Busy Override Injection Tone – Single burst of tone heard repeatedly every 8 to 20 seconds apart AFTER an attendant or executive overrider has intruded on the call in progress. This tone continues for the entire time the attendant or executive overrider is present on your conversation.

    c.   Busy Override Tone – Three short bursts of tone heard two seconds apart BEFORE an overriding attendant intrudes on a call in progress.

    d.   Call Waiting Tone – One burst of tone heard when a

SATURN EPABX telephone call is waiting to be answered, or two bursts of tone heard when an outside trunk call is waiting to be answered at your JR-DYAD. This tone is repeated after 10 seconds if the waiting party is still present.

e. Conference Tone – One burst of tone heard when a called party is being added to a conference to which you are connected.

f. Confirmation Tone – Three rapid bursts of tone indicating the action taken by you has been accepted (e.g., activation of a Call Forwarding feature).

g. Dial Tone – Continuous tone heard indicating that dialing can begin.

h. Executive Override Tone – One three-second burst of high pitch tone heard BEFORE an executive overrider intrudes on a call in progress.

i. Expensive Facility Tone – One second burst of high pitch tone heard when the SATURN System selects a more expensive route for call routing via the Least Cost Routing (LCR) feature.

j. Intercept Tone – A continuous alternating low and high pitch tone indicating an invalid or unauthorized feature code or extension number was dialed.

k. Low Tone – Steady tone heard after receiving busy tone indicating successful activation of such features as Outgoing Call Queuing Callback and Internal Call Queuing – Callback.

l. Recall Dial Tone – Three rapid bursts of tone followed by dial tone indicating the action taken by you has been accepted and you can now dial additional digits (e.g., for transferring a call via the Call Transfer feature).

m. Reorder Tone – Tone heard when a network blocking condition exists or activation of a feature was not granted (120 impulses per minute)

n. Ringback Tone – Tone heard when a called party's telephone is ringing.

o. Route Advance Tone – One short burst of tone heard each time the SATURN System searches for an idle route via the LCR feature.

p. Special Ringback Tone – Tone that sounds similar to ringback tone, except for the distinctive low signal at the end of each tone cycle. Special ringback tone indicates you are in a waiting state for a busy telephone and is heard during activation of the following features:

- Internal Call Queuing – Standby
- Outgoing Call Queuing – Standby
- Executive Override – Automatic

1.08 Speaker Volume Control. You may control the voice and call progress tone levels and the audible alert tone level of the JR-DYAD speaker with the two controls on the JR-DYAD. Use the thumbwheel control on the line cord side of the set to adjust voice and call progress tones, and the control on the underside of the JR-DYAD to adjust the audible alert tone level.

NOTE: The voice level heard from your handset is not adjustable.

1.09 Pickup Button Indications. The JR-DYAD can be provided with multiple line and/or trunk pickup buttons. The current status of a line/trunk is displayed via a corresponding lamp located by each pickup button:

a. Dark — Indicates that the line/trunk is idle.

b. Lighted Steady — Indicates that the line/trunk is busy.

c. Flashing (lamp blinks 60 times per minute) — Indicates that the line/trunk has an incoming call.

d. Winking (lamp blinks 120 times per minute) — Indicates that the line/trunk has been placed on Manual hold via the Hold button.

e. Fluttering (lamp blinks 600 times per minute) — Indicates that the line/trunk has been placed on Exclusive hold via the HOLD EXCL button.

1.10 Feature Button Indications. Feature buttons are used to activate features at your JR-DYAD. For some features, the button lamp indicates the active/inactive status of the feature. Generally, when the feature is active the lamp is lighted, and when the feature is inactive, the lamp is dark.
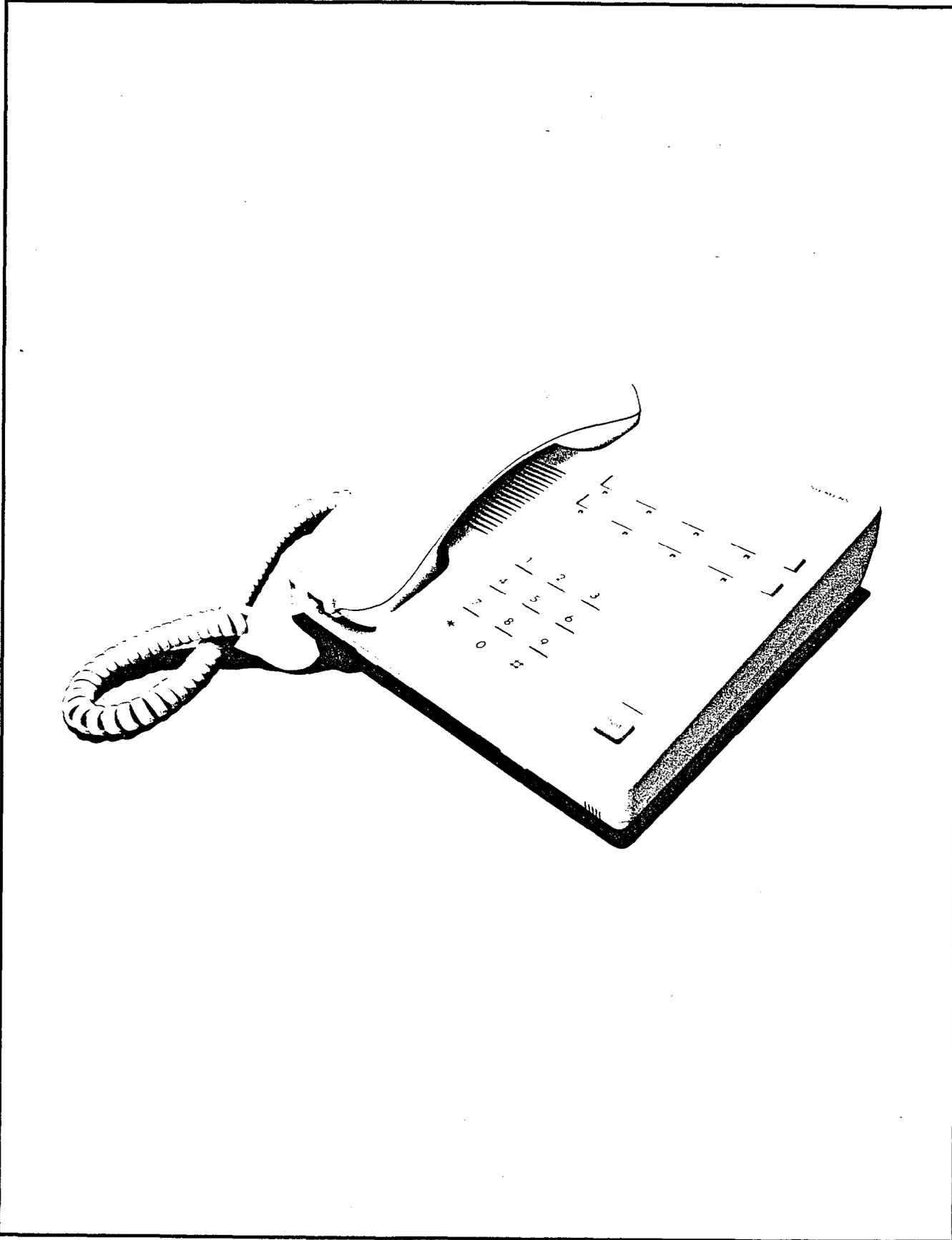
Figure 1.00 JR-DYAD Digital Telephone

SECTION 2.00   JR-DYAD FIXED FEATURE BUTTONS

2.01 Hang Up. Depressing the Hang Up button will cause a change in the on-/off-hook state of the JR-DYAD. This function can substitute for removing or replacing the handset on the hookswitch when a series of consecutive calls are being made or when a headset is being used instead of a handset.

2.02 On Hook Dial. Depressing this button allows placing a call to another party without lifting the handset. Call progress tones such as dial tone, busy tone, ringback tone and others and the called party's voice are heard over the JR-DYAD loudspeaker.

To place a call depress an idle pickup button then depress the On Hook Dial button, listen for dial tone, and dial the destination number. If busy tone is heard, disconnect the call by depressing the On Hook Dial button or the Hang Up button.

Some JR-DYADs may be assigned "single button" operation in which case depressing an idle pickup button automatically enables On-Hook dialing. In this case, after depressing the idle pickup button and hearing dialtone, dial the destination number.

If the called station is idle, ringback tone is heard over the loudspeaker. When the called party answers, the voice is heard over the loudspeaker. To talk to the party, pick up the handset.

To hang up, place the handset on the hookswitch or depress the Hang Up button. After the telephone is idle and the handset is off the hookswitch, the phone will still ring for incoming calls. To answer, depress the Hang Up button.

2.03 Store. Depressing this button allows the user to to establish a personal speed calling list of one to ten frequently called telephone numbers up to 25 digits each. Each number (internal or external to the SATURN system) is assigned a one-digit code (0-9) and programmed into the JR-DYAD memory.

a. To store or change repertory dialing codes:

   1. Do not pick up the handset.

   2. Depress the STORE button.

   3. Depress one of the numbers 0-9 on the key pad to indicate which cell in the JR-DYAD memory is to be programmed.

   4. Enter the number to be stored, including * and #, (up to 25 digits) from the dial.

   5. Depress the STORE button to indicate the end of the storage sequence.

2.04 Speed Dial. Depressing this button permits a number in the repertory dialing list to be called.

a. To initiate a call using speed dialing:

   1. Depress the On Hook Dial button, or pick up the handset.

- Dial tone is heard.

   2. Depress the Speed Dial button.

- 3. Depress the number (0-9) indicating which stored number is to be dialed.

The JR-DYAD sends the stored number to the EPABX. The set sends the stored number as if it were dialed manually.

The stored number is supported in the JR-DYAD memory by a long life (up to three years) battery. This support continues even though the station set is unplugged.

2.05 Group Pickup. Depressing this button permits an incoming call that is ringing at another station within a pickup group to be answered by any other member of the pickup group.

a. To answer a call ringing at another station in the pickup group:

   1. Select and depress an idle pickup button.

   2. Pickup the handset.

- Dial tone is heard.

   3. Depress the Group Pickup button.

- Ringing ceases at the ringing station and you are connected to the incoming call. Intercept tone is heard if no phone is ringing in your pickup group.

   4. You may begin to talk.

2.06 Redial. Depressing this button causes the last number dialed by Speed Dial or manually, up to 25 digits, to be sent to the EPABX.

a. To place a call to the last number dialed from the JR-DYAD:

   1. Select and depress an idle pickup button.

   2. Pick up the handset.

- Dial tone is heard.

   3. Depress the REDIAL button.

- Ringback tone is heard.

   4. When the called party answers, you may begin to talk.

2.07 Xfer Conf. This button is used for two functions: call transfers and for establishing conferences.

a. Call Transfer. The Xfer Conf button permits the transfer of a call, from inside or outside the SATURN EPABX, to another extension.

To transfer a call:

1. Ask the other party to wait.

2. Depress the [Xfer Conf] button.

   • Recall dial tone is heard.

3. Dial the destination number.

   • Ringback tone is heard.

If busy tone is heard or the party does not answer, depress the, Xfer Conf button to return to the held party.

When an outside party requests to be transferred to an extension and the extension is busy, the internal Call Queuing – Standby feature can be invoked. This feature allows camping-on of the busy extension and waiting for the party to answer.

If it is desired to transfer the call before the called party answers, hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an outside party and the called party does not answer within a preset time, the call is automatically recalled to the transferring JR-DYAD (three burst alerting tone is heard), if idle, or to the Attendant if busy. To answer or return to the held call pick up the handset.

4. When the called party answers, announce the call and hang up.

   • The call is transferred to the called party.

b. Add-On Conference. The Xfer Conf button also permits the addition of a third party (inside or outside) to a conversation.

   To add a third party:

   1. Ask the other party to wait.

   2. Depress the [Xfer Conf] button.

      • Recall dial tone is heard.

      • The party is placed on hold.

   3. Dial the number of the third party.

      • Ringback tone is heard.

      If busy tone is heard, or the party does not answer, depress the Xfer Conf button to return to the held call.

   4. When the called party answers, inform the party of the conference.

   5. Depress the [Xfer Conf] button again.

      • A three party conference is established

      The user that originated the conference may release the third party by depressing the Xfer Conf button.

      When more than one outside (trunk) call is added, transmission quality may be degraded.

6. Conversation may begin.

c. Consultation Hold. The Xfer Conf button also allows a caller (inside or outside) to be placed on hold and another call to be made on the same line.

   1. To place a party on hold and originate another call:

      (a) Ask the other party to wait.

      (b) Depress the [Xfer Conf] button.

         • Recall dial tone is heard.

         • The party is placed on hold.

      (c) Dial the destination number.

         • Ringback tone is heard.

         If busy tone is heard or the called party does not answer, depress the Xfer Conf button to return to the held call.

      (d) When the called party answers begin to talk.

   2. To return to the held party

      (a) Wait until the consulted party hangs up.

         • The call is automatically reconnected to the previously held party.

      (b) Resume your conversation.

2.08 Hold. Depressing this button allows you to place a line on hold for the purpose of holding a call or originating or receiving another call on a second SATURN EPABX line. The held call can be picked up at any JR-DYAD with an appearance of the held line.

a. To place a line on hold:

   1. Ask the other party to wait.

   2. Depress the red [Hold] feature button.

   3. The receiver may be hung up without losing the call, or another call can be originated or received on another line.

      Any JR-DYAD with the same appearance of the held line may be used to pick up the held call. After depressing the Hold button to hold a line, the same button can be used to hold another line, without losing the previously held call. As many calls can be held as there are lines on the JR-DYAD.

      The attendant can not be placed on hold. If a party has bridged on a line, that party cannot be held.

b. To return to the held call:

   1. Pickup the handset. Depress the line pickup button associated with the held call.

      • The call is reconnected.

   2. Resume the conversation.

SECTION 3.00   JR-DYAD PROGRAMMABLE BUTTONS

The remaining eight buttons, which have visual indicators, are system programmable for each station for feature activation or line appearances. Their operation is discussed in Sections 4.00 through 14.00.

SECTION 4.00   HOLD FEATURES

4.01 Call Hold. This feature allows you to place any call (inside or outside) on hold and hang up without losing the call. After holding the call, you may originate or receive other calls on the same extension line and return to the held call or alternate between the two calls (holding one call while speaking to the other).

By using the Call Hold feature button (PARK PRIV):

   a. To place a party on hold:

      1. First, ask the other party to wait.

      2. Depress the [PARK PRIV] feature button.

         • Confirmation tone is heard.
         • The party is placed on "Call Hold".
         • PARK PRIV lamp winks.

      3. Hang up.

   NOTE: If the held party is from "outside" the SATURN EPABX, you must return to the held party within a preset period of time or the call is recalled to your station (three-burst alerting tone is heard), if idle, otherwise, to the attendant. To answer/return to the held call, pick up the handset.

   b. To return to a held call or alternate between two calls:

      1. Pick up the handset or depress the [PARK PRIV] feature button (if connected to another call).

         • You are reconnected to the previously held party and the other party, if any, is placed on hold.
         • PARK PRIV lamp extinguishes when no call is on hold.

      2. Resume your conversation.

         By using the Call Hold feature access code:

   a. To place a party on hold:

      1. First, ask the other party to wait.

      2. Depress the [Xfer Conf] button.

         • Recall dial tone is heard.

      3. Dial the Call Hold feature access code.

         • Confirmation tone is heard.
         • The party is placed on "call hold."

      4. Hang up.

   NOTE: If the held party is from "outside" the SATURN EPABX, you must return to the held party within a preset period of time or the call is recalled to your station (three-burst alerting tone is heard), if idle, otherwise, to the attendant. To answer/return to the held call, pick up the handset.

   b. To return to a held call or alternate between two calls:

      1. Pick up the handset or depress the [Xfer Conf] button (if connected to another call).

         • Dial tone/recall dial tone is heard.

      2. Dial the Call Hold feature access code.

         • You are reconnected to the previously held party and the other party, if any, is placed on hold.

      3. Resume your conversation.

4.02 Call Hold – Flip-Flop (Broker). This feature allows you, upon hearing a call waiting tone, to place the call in progress (inside or outside call) on hold and establish a connection to the waiting call. When no call is waiting, this feature allows you to place a call in progress on hold and originate another call on the same extension line. In either case, you can return to the held call or alternate between the two calls (holding one call while speaking to the other).

By using the Call Hold – Flip-Flop feature button [SPLIT]

   a. To place a party on hold and answer a waiting call:

      1. First, ask the other party to wait.

      2. Depress the [SPLIT] feature button.

         • SPLIT lamp winks.
         • You are connected to the waiting party and the other party is placed on hold.

      3. You may begin to talk.

   b. To place a party on hold and originate another call:

      1. First, ask the other party to wait.

      2. Depress the [SPLIT] feature button.

         • SPLIT lamp winks.
         • Dial tone is heard.
         • The party is placed on hold.

      3. Dial the phone number of the desired party.

         • Ringback tone is heard.

      4. When the called party answers, you may begin to talk.

   c. To return to a held party:

      1. Wait until the other party hangs up.

         • You are automatically connected to the previously held party.

      2. Resume your conversation.

   d. To alternate between two calls:

      1. Depress the [SPLIT] feature button.

- You are reconnected to the previously held party, and the other party, if any, is placed on hold.

NOTE: If you accidentally hang up while a call is on hold, the call is automatically recalled (one burst alerting tone) to your JR-DYAD. To answer/return to the held call, pick up the handset.

2. Resume your conversation.

By using the Call Hold – Flip-Flop feature access code:

a. To place a party on hold and answer a waiting call:

1. First, ask the other party to wait.

2. Depress the [Xfer Conf] feature button.

- Recall dial tone is heard.

3. Dial the Call Hold – Flip-Flop feature access code.

- You are connected to the waiting party and the other party is placed on hold.

4. You may begin to talk.

b. To place a party on hold and originate another call:

1. First, ask the other party to wait.

2. Depress the [Xfer Conf] feature button.

- Recall dial tone is heard.

3. Dial the Call Hold – Flip-Flop feature access code.

- Dial tone is heard.
- The party is placed on hold.

4. Dial the phone number of the desired party.

- Ringback tone is heard.

NOTE: If the called party does not answer your call or the line is busy, depress the Xfer Conf button to return to the held party.

5. When the called party answers, you may begin to talk.

c. To return to a held party:

1. Wait until the other party hangs up.

- You are automatically connected to the previously held party.

2. Resume your conversation.

d. To alternate between two calls:

1. Depress the [Xfer Conf] feature button.

- You are reconnected to the previously held party, and the other party, if any, is placed on hold.

NOTE: If you accidentally hang up while a call is on hold, the call is automatically recalled (one burst alerting

tone) to your JR-DYAD. To answer/return to the held call, pick up the handset.

2. Resume your conversation.

4.03 Call Park. This feature allows you to place a call (inside or outside) on "system hold" (referred to as parked) and return to the parked party from the same or another SATURN EPABX telephone. The call is placed in one of ten selected park locations. A unique access code is assigned to each park location.

a. To park an established call:

1. First, ask the other party to wait.

2. Depress the [Xfer Conf] feature button.

- Recall dial tone is heard.

3. Dial the Call Park feature access code.

4. Dial the Call Park location code (0 to 9).

- Confirmation tone is heard.
- The call is parked at the dialed location.

NOTE: If the dialed Call Park location is not available, busy tone is heard. If this occurs, depress the Xfer Conf button to return to the held party and repeat the process using a different location code.

5. Hang up. You are free to originate or receive other calls.

NOTE: If you park an outside call and you do not return to the party within a preset period of time, the call is automatically recalled to your JR-DYAD, if idle, otherwise to the attendant.

b. To return to the parked call:

1. Pick up the handset at any nonrestricted telephone.

- Dial tone is heard.

2. Dial the Call Park feature access code.

3. Dial the Call Park location code which was used to park the call.

- You are connected to the parked call.

NOTE: If reorder tone is heard, the held party has disconnected. If intercept tone is heard, the telephone is restricted from Call Park access.

4. Resume your conversation.

4.04 Exclusive Hold. This feature allows you to place a call on hold for the purpose of holding the call and originating or receiving another call on a second SATURN EPABX line. The held call can be picked up only from your JR-DYAD, even though the line may appear at other telephones.

a. To place a call on hold:

1. First, ask the other party to wait.

2. Depress the [HOLD EXCL] feature button.

- • Line pickup lamp flutters.

NOTES: The line pickup lamp remains lighted at all other appearances of the line.

After depressing the HOLD EXCL button to hold a line, the same button can be used to hold another line without losing the previously held call. As many lines can be held as there are lines on your JR-DYAD.

You are not allowed to hold an attendant. Additionally, if a party has bridged on a line, that line cannot be held.

3. You may originate or receive another call on a second line, if provided.

b. To return to the held call:

1. Pick up the handset and depress the fluttering line pickup button associated with the held call.

- • Line pickup lamp lights steadily.
- • You are reconnected to the held call.

2. Resume your conversation.

SECTION 5.00   CALL TRANSFER FEATURES

5.01 Call Transfer to Attendant. This feature allows you to transfer a call in progress to the attendant.

   a. To transfer a call to the attendant:

      1. First, ask the other party to wait.

      2. Depress the [XFER "0"] feature button.

- The party is placed on hold.
- Ringback tone is heard and the attendant is alerted.
- XFER "0" lamp winks.

NOTE: If you desire to transfer the call before the attendant answers, hang up. The held party will hear ringback tone until the attendant answers.

      3. When the attendant answers, announce the call.

- Ringback tone is removed.

      4. Hang up.

- The call is transferred to the attendant.
- XFER "0" lamp extinguishes.

SECTION 6.00   CONFERENCE FEATURES

6.01 Bridge Call. This feature allows you to enter into an existing conversation on a busy line or direct trunk.

a. To enter an existing conversation:

1. Select and depress the pickup button associated with the busy line or direct trunk.

2. Pick up the handset.

   • Conference tone is heard by the other parties, after which you are connected in a three-way conversation.

NOTE: If the Call Privacy feature is active on the busy line or direct trunk, or a three-way connection has already been established, bridging is denied and busy tone is heard.

6.02 Meet-Me Conference. This feature allows you to arrange a conference of up to seven extensions or four extensions and three outside lines. Outside parties are connected to the conference by the attendant.

a. To establish a Meet-Me Conference:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the party you want in the conference.

   • Ringback tone is heard.

4. When the called party answers, inform the party to dial the Meet-Me Conference access code at a prearranged time. If the called party is from outside the SATURN System, inform the party to dial the SATURN attendant console and have the attendant transfer the call to the conference by dialing the Meet-Me Conference access code.

NOTE: More than one Meet-Me Conference bridge may be assigned in the SATURN EPABX. The last digit of the access code represents the selected conference bridge.

5. Hang up.

6. Repeat the above steps for up to seven conferees.

NOTES: The attendant only may enter the conference as the eighth conferee.

   The maximum number of outside parties allowed in the conference at any one time is three (variable and assigned by data base management).

b. To enter the conference:

1. Select and depress the appropriate line pickup button.

• Line pickup button lamp lights steadily.

2. Pick up the handset.

• Dial tone is heard.

3. Dial the preannounced Meet-Me Conference feature access code or depress the [MEET ME] feature button followed by the conference bridge code.

   • Conference tone is heard; all conferees hear the conference tone as you enter the conference.

   • MEET-ME lamp lights steadily.

NOTES: Busy tone is heard if the conference is full. Intercept tone is heard if the conference bridge is not assigned.

   When more than one outside (trunk) call is added, transmission quality may be degraded.

6.03 Station Controlled Conference. This feature allows you to establish a conference of up to seven parties. As the Conference Master, you can add members to the conference, remove members from the conference, leave the conference to consult with a conferee privately, call the attendant, or release from the conference to allow another conference member to take over conference mastership.

The maximum number of parties allowed in the conference is seven; however, the attendant can be added to the conference as an eighth party. The maximum number of outside parties allowed in the conference at any one time is three (variable and assigned by data base management). When more than one outside (trunk) call is added, transmission quality may be degraded.

a. To establish a conference:

1. Select and depress the appropriate line pickup button.

   • Line pickup lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the Station Controlled Conference access code.

   • Recall dial tone is heard.

NOTE: Busy tone is heard if a conference circuit is not available.

4. Dial the number of the party you want to add to the conference.

   • Ringback tone is heard.

NOTE: If the called party does not answer, is busy, or does not wish to be included in the conference, you must hang up. Your phone then rings and, upon answer, you are connected back into the conference. You

may proceed adding parties to the conference by depressing the Xfer Conf button to leave the conference and following the above procedure beginning at step 4.

5. When the called party answers, inform the party of the conference.

   • Ringback tone is removed.

6. Depress the ☐Xfer Conf☐ button to add the party to the conference.

   • Conference tone is heard; all conferees hear the tone as you and the other party enter the conference.

NOTES: If you attempt to add more than seven inside parties or add more than the allowed number of outside parties into the conference, reorder tone is heard for approximately 1½ seconds, after which you are reconnected to the "would be" conferee. To return to the conference, depress the Xfer Conf button.

Any party can leave the conference by hanging up.

7. To add each additional party to the conference, depress the ☐Xfer Conf☐ button to leave the conference and follow the above procedure beginning at step 4.

b. To remove any conferee (extension only) from the conference and consult with the conferee privately:

   1. Depress the ☐Xfer Conf☐ button to leave the conference.

      • Recall dial tone is heard.

   2. Dial the conference member remove code.

   3. Dial the extension number of the conferee to be removed.

      • You and the conferee are connected in a private talk state.

NOTE: As the conference master, you have the option of adding the party back to the conference or removing the conferee from the conference totally. To add the conferee back into the conference, depress the Xfer Conf button; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings and, upon answer, you are connected back into the conference.

c. To remove the last member added to the conference and consult with the conferee privately:

   1. Depress the ☐Xfer Conf☐ button to leave the conference.

      • Recall dial tone is heard.

   2. Dial the last member added access code.

   3. You and the conferee are connected in a private talk state.

NOTE: As the conference master, you have the option of adding the party back to the conference or removing the conferee from the conference totally. To add the conferee back into the conference, depress the Xfer Conf button; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings and, upon answer, you are connected back into the conference.

d. To transfer the position of conference mastership to another conferee (SATURN EPABX extension only):

   1. Inform the desired conferee that you are releasing from the conference, and that conference mastership can be gained by hookswitch flashing (depressing the Xfer Conf button, if available) or momentarily depressing the hookswitch after you hang up.

   2. Hang up.

NOTE: The first conferee to hookflash now becomes the conference master.

When all parties in the conference hang up, the conference circuit is released.

SECTION 7.00   CALL FORWARDING FEATURES

7.01 Call Forwarding – All Calls. This feature allows you to have all calls terminating at your JR-DYAD forwarded to another extension or to the attendant.

Activation/deactivation of Call Forwarding – All Calls over the prime line:

a. To forward all incoming calls:

   1. Do not pick up the handset.

   2. Depress the [FWD ALL] feature button.

      • Dial tone is heard over the JR-DYAD speaker.

   3. Dial the extension number to which you want all your calls forwarded.

      • Confirmation tone is heard over the speaker.
      • FWD ALL lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of alerting tone is heard from your JR-DYAD.

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding - All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – All Calls: Depress the [FWD ALL] feature button.

      • FWD ALL lamp extinguishes.

Activation/deactivation of Call Forwarding – All Calls over any line appearing on the JR-DYAD (if allowed by class of service).

a. To forward all incoming calls:

   1. Select and depress the appropriate line pickup button.

      • Line pickup button lamp lights steadily.

   2. Pick up the handset.

      • Dial tone is heard.

   3. Depress the [FWD ALL] feature button or dial the Call Forwarding – All Calls activation code.

   4. Dial the extension number to which you want all your calls forwarded.

      • Confirmation tone is heard indicating that the Call Forwarding – All Calls feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

   5. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of alerting tone is heard from your JR-DYAD (prime line only).

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding - All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – All Calls:

   1. Select and depress the line pickup button from which Call Forwarding – All Calls was activated.

      • Line pickup button lamp lights steadily.

   2. Pick up the handset.

      • Dial tone is heard.

   3. Dial the call forwarding cancellation code.

      • Confirmation tone is heard indicating that the Call Forwarding – All Calls feature has been cancelled.

   4. Hang up.

7.02 Call Forwarding to Public Network. This feature allows you to have all calls terminating at your JR-DYAD forwarded to an outside destination number.

a. To forward all calls:

   1. Select and depress the appropriate line pickup button.

      • Line pickup button lamp lights steadily.

   2. Pick up the handset.

      • Dial tone is heard.

   3. Dial the Call Forwarding to Public Network activation code.

   4. Dial the trunk group access code (e.g. "9" for outside) and the outside number (e.g. 9948800).

      • After a short pause (approximately five seconds), confirmation tone is heard indicating that the Call Forwarding to Public Network feature is active.

NOTES: You may expedite receiving confirmation tone by depressing the # key immediately after dialing the last digit of the outside number.

If intercept tone or reorder tone is heard, your call forwarding request was not granted.

5. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of alerting tone is heard from your JR-DYAD.

You may continue to originate calls while Call Forwarding to Public Network is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing - Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding to Public Network:

1. Select and depress the line pickup button from which Call Forwarding to Public Network was activated.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating that the Call Forwarding to Public Network feature has been cancelled.

4. Hang up.

7.03 Call Forwarding – Busy Lines. This feature allows you to have all calls terminating at your JR-DYAD forwarded to another extension or to the attendant when your extension is busy. When your JR-DYAD is idle, incoming calls are completed as usual.

Activation/deactivation of Call Forwarding – Busy Lines over the prime line:

a. To forward incoming calls:

1. Do not pick up the handset.

2. Depress the | FWD BUSY | feature button.

   • Dial tone is heard over the speaker.

3. Dial the extension number to which you want your calls forwarded.

   • Confirmation tone is heard over the speaker.
   • FWD BUSY lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

When Call Forwarding – Busy Lines is in effect incoming calls will not wait (via Internal Call Queuing – Standby and Internal Call Queuing Callback) on your prime line. If the forwarded-to telephone is busy, forwarded calls will wait at the forwarded-to telephone.

b. To cancel Call Forwarding – Busy Lines: Depress the | FWD BUSY | feature button

   • FWD BUSY lamp extinguishes.

Activation/deactivation of Call Forwarding – Busy Lines over any line appearing on the JR-DYAD (if allowed by class of service):

a. To forward incoming calls:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Depress the | FWD BUSY | feature button or dial the Call Forwarding – Busy Lines activation code.

4. Dial the extension number to which you want your calls forwarded.

   • Confirmation tone is heard indicating that the Call Forwarding – Busy Lines feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

5. Hang up.

When Call Forwarding – Busy Lines is in effect, incoming calls will not wait (via Internal Call Queuing – Standby and Internal Call Queuing Callback) on the associated line. If the forwarded-to telephone is busy, forwarded calls will wait at the forwarded-to telephone.

b. To cancel Call Forwarding – Busy Lines:

1. Select and depress the line pickup button from which Call Forwarding – Busy Lines was activated.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating the Call Forwarding – Busy Lines feature has been cancelled.

4. Hang up.

7.04 Call Forwarding – No Answer. This feature allows you to have all calls terminating at your JR-DYAD that are not answered within a predetermined period of time (three rings, nominal), forwarded to another telephone or to the attendant. When your JR-DYAD is busy, call forwarding does not occur and the usual station hunting, call waiting, and automatic callback arrangements (if assigned) are applied.

Activation/deactivation of Call Forwarding – No Answer over the prime line.

a. To forward incoming unanswered calls:

1. Do not pick up the handset.

2. Depress the $\boxed{\begin{array}{c}\text{FWD}\\\text{NO ANS}\end{array}}$ feature button.

    • Dial tone is heard over the speaker.

3. Dial the extension number to which you want your calls forwarded.

    • Confirmation tone is heard over the speaker.
    • FWD NO ANS lamp lights steadily.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

You may continue to originate calls while the Call Forwarding – No Answer feature is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing - Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – No Answer: Depress the $\boxed{\begin{array}{c}\text{FWD}\\\text{NO ANS}\end{array}}$ feature button.

    • FWD NO ANS lamp extinguishes.

Activation/deactivation of Call Forwarding – No Answer over any line appearing on the JR-DYAD (if allowed by class of service).

a. To forward incoming unanswered calls over any line appearing on your JR-DYAD:

1. Select and depress the appropriate line pickup button.

    • Line pickup button lamp lights steadily.

2. Pick up the handset.

    • Dial tone is heard.

3. Depress the $\boxed{\begin{array}{c}\text{FWD}\\\text{NO ANS}\end{array}}$ feature button or dial the Call Forwarding – No Answer activation code.

4. Dial the extension number to which you want your unanswered calls forwarded.

    • Confirmation tone is heard indicating that the Call Forwarding – No Answer feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

5. Hang up.

You may continue to originate calls while Call Forwarding – No Answer is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – No Answer:

1. Select and depress the line pickup button from which Call Forwarding – No Answer was activated.

• Line pickup button lamp lights steadily.

2. Pick up the handset.

    • Dial tone is heard.

3. Dial the call forwarding cancellation code.

    • Confirmation tone is heard indicating that the Call Forwarding – No Answer feature has been cancelled.

4. Hang up.

7.05 Call Forwarding – Secretarial. This feature allows you to have all calls terminating at your JR-DYAD forwarded to another predetermined SATURN extension (assigned by data base management).

Activation/deactivation of Call Forwarding – Secretarial over the prime line:

a. To forward all incoming calls:

1. Do not pick up the handset.

2. Depress the $\boxed{\text{FWD TO}}$ feature button

    • FWD TO lamp lights steadily.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of alerting tone is heard from your JR-DYAD.

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – Secretarial is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

b. To cancel Call Forwarding – Secretarial: Depress the $\boxed{\text{FWD TO}}$ feature button.

    • FWD TO lamp extinguishes indicating that the Call Forwarding – Secretarial feature has been cancelled.

Activation/deactivation of Call Forwarding – Secretarial over any line appearing on the JR-DYAD (if allowed by class of service):

a. To forward all incoming calls:

1. Select and depress the appropriate line pickup button.

    • Line pickup button lamp lights steadily.

2. Pick up the handset.

    • Dial tone is heard.

3. Depress the $\boxed{\text{FWD TO}}$ feature button or dial the Call Forwarding – Secretarial activation code.

- Confirmation tone is heard indicating that the Call Forwarding – Secretarial feature is active.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

    5. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of alerting tone is heard from your JR-DYAD.

The party at the forwarded-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarded-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – Secretarial is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing - Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

    b. To cancel Call Forwarding – Secretarial:

      1. Select and depress the line pickup button from which Call Forwarding – Secretarial was activated.

- Line pickup button lamp lights steadily.

      2. Pick up the handset.

- Dial tone is heard.

      3. Dial the call forwarding cancellation code.

- Confirmation tone is heard indicating that the Call Forwarding – Secretarial feature has been cancelled.

      4. Hang up.

7.06 Call Forwarding – Return. This feature allows you to transfer a forwarded-call to the extension that activated call forwarding.

To return a forwarded-call:

a. First ask the connected party to wait.

b. Depress the $\boxed{\text{Xfer Conf}}$ feature button.

- Recall dial tone is heard.

c. Dial the Call Forwarding – Return access code.

- Ringback tone is heard.

NOTES: If busy tone is heard or the party does not answer, depress the Xfer Conf button to return to the held party.

        When an outside party requests to be transferred to an extension and the extension is busy, you may invoke the Internal Call Queuing – Standby feature. This feature allows you to camp-on to the busy extension and wait for the party to answer.

        If you desire to transfer the call before the called party answers (ringback tone must heard), hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an "outside" party and the called party does not answer within a preset time the call is automatically recalled to your JR-DYAD (three-burst alerting tone is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

d. When the party at the forwarding station answers, announce the transfer.

- Ringback tone is removed.

e. Hang up.

- The call is transferred to the called party.

7.07 Forced Call Forwarding. This feature allows you to forward a waiting or ringing call on your prime line extension to another preassigned SATURN extension. Waiting or ringing calls on other lines appearing at your JR-DYAD cannot be forwarded.

To forward a waiting or ringing call: Depress the $\boxed{\text{FWD FORCE}}$ feature button.

SECTION 8.00   CALL QUEUING FEATURES

8.01 Internal Call Queuing – Callback. This feature allows you, upon dialing a busy extension number, to enter into a queue, hang up, and be called back when the extension becomes available.

   a. To establish an automatic callback condition:

      1. You have dialed a busy extension and busy tone is heard.

      2. Do not hang up. Listen to busy tone until busy tone changes to a steady low tone (approximately 5 seconds). Steady low tone is confirmation that you have invoked callback queuing.

      3. Hang up.

You may originate or receive other calls while waiting for the callback; however, the callback sequence does not take place until both your extension and the previously dialed extension are idle at the same time.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second callback is initiated, the original callback is automatically cancelled.

      4. When both the called extension and your extension become idle:

        • Three-burst alerting tone is heard.

NOTE: If you do not answer the callback attempt within approximately 18 seconds, callback queuing is automatically cancelled.

      5. Pick up the handset.

        • Ringback tone is heard.
        • Called extension rings.

      6. When the called party answers, you may begin to talk.

   b. To cancel an automatic callback:

      1. Pick up the handset.

        • Dial tone is heard.

      2. Dial the automatic callback cancellation code.

        • Confirmation tone is heard, indicating the cancellation of the callback.

      3. Hang up.

8.02 Internal Call Queuing – Standby. This feature allows you, upon dialing a busy extension, to enter into a queue and wait for the called party to answer. While in the standby queue, you hear special ringback tone and the called party hears call waiting tone.

   a. To establish a standby queuing condition:

      1. You have dialed a busy extension and busy or special ringback tone is heard.

NOTE: On some telephones, Internal Call Queuing – Standby is activated on an automatic originating or automatic terminating basis. If your JR-DYAD is assigned the automatic originating option or the called party's telephone is assigned the automatic terminating option, ignore the remainder of this procedure. When special ringback tone is heard simply wait for the called party to answer.

      2. Do not hang up. Listen to busy tone until it changes to a steady low tone (approximately 5 seconds).

NOTE: Steady low tone is confirmation that callback queuing can be invoked, if desired, by hanging up. Refer to the feature, "Internal Call Queuing Callback."

      3. Again, do not hang up. Wait until steady low tone changes to special ringback tone (approximately 5 seconds more). This is confirmation that you have been placed in the standby queuing mode.

        • The called party hears call waiting tone.

      4. Wait until the called party answers the waiting call.

NOTE: You may convert from standby queuing to callback queuing, any time, by hanging up. Refer to the feature, "Internal Call Queuing – Callback."

      5. When the called party answers, you may begin to talk.

8.03 Outgoing Call Queuing – Callback. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue, hang up, and be called back when a trunk becomes available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

   a. To activate Outgoing Call Queuing – Callback:

      1. You have dialed a trunk group access code (e.g., "9", "82", "83", etc.) and encountered busy tone.

      2. Do not hang up. Listen to busy tone until you hear steady low tone (approximately 5 seconds). Steady low tone is confirmation that you have invoked callback queuing.

      3. Hang up.

You can originate or receive calls while callback queuing is active. When a trunk becomes available and your JR-DYAD is idle, a callback is attempted.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second automatic callback is initiated, the original callback is automatically cancelled.

      4. When a trunk becomes available:

        • Three-burst alerting tone is heard.

NOTE: If you do not answer the callback attempt within approximately 18 seconds, callback queuing is automatically cancelled.

5. Pick up the handset.

  • Dial tone is heard.

6. Complete dialing the desired number (do not redial the trunk group access code).

b. To cancel an automatic callback:

  1. Pick up the handset.

  • Dial tone is heard.

  2. Dial the automatic callback cancellation code.

  • Confirmation tone is heard, indicating the cancellation of the callback.

  3. Hang up.

8.04 Outgoing Call Queuing – Standby. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue and wait for a trunk to become available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

a. To activate Outgoing Call Queuing – Standby:

  1. You have dialed a trunk group access code (e.g., "9", "82", "83", etc.) and encountered busy tone.

  2. Do not hang up. Listen to busy tone until you hear steady low tone (approximately 5 seconds).

NOTE: Steady low tone is confirmation that callback queuing can be invoked, if desired, by hanging up. Refer to the feature, "Outgoing Call Queuing Callback."

  3. Again, do not hang up. Wait until steady low tone changes to silence, or music if provided (approximately 5 seconds more). This is confirmation that you have been placed in the standby queuing mode.

  4. Continue to listen to silence (or music) until a trunk becomes available.

  • Dial tone is heard when a trunk becomes available.

NOTE: You may convert from standby queuing to callback queuing, any time, by hanging up. Refer to the feature, "Outgoing Call Queuing – Callback."

  5. Upon hearing dial tone, complete dialing the desired number (do not redial the trunk group access code).

SECTION 9.00 CALL PICKUP FEATURES

9.01 Call Pickup – Directed. This feature allows you to answer an incoming call that is ringing at another telephone.

a. To answer a call ringing at another telephone:

    1. Select and depress the appropriate line pickup button.

       • Line pickup button lights steadily.

    2. Pick up the handset.

       • Dial tone is heard.

3. Depress the | PICKUP DIR | feature button or dial the Call Pickup – Directed feature access code.

4. Dial the extension number of the telephone that is ringing.

    • Ringing ceases at the other telephone and you are automatically connected to the incoming call.

5. You may begin to talk.

SECTION 10.00 DIRECT ACCESS FEATURES

10.01 Direct Station Selection. The Direct Station Selection (DSS) feature allows you to place a call to a party at a predesignated SATURN extension by depressing a dedicated feature button instead of dialing the party's extension number.

a. To place a DSS call:

1. Determine if the extension to be called is idle (a lighted DSS lamp indicates the extension is busy and a dark lamp indicates the extension is idle).

2. Select and depress a line pickup button.

    *   Line pickup lamp lights steadily.

3. Pick up the handset.

    *   Dial tone is heard.

4. Depress the appropriate DSS feature button.

    *   Ringback tone is heard.
    *   The DSS lamp flashes.

5. When the called party answers, you may begin to talk.

10.02 Direct Trunk Group Selection. This feature allows you to access an idle trunk in a designated trunk group by depressing a Direct Trunk Group Selection pickup button. The busy/idle status of the trunk group is indicated by the lamp associated with the pickup button. No incoming calls can terminate on this pickup button.

a. To establish an outside call:

1. Determine if a trunk is available in the trunk group associated with the type of outside call to be dialed (e.g., Central Office, Florida WATS, National WATS, etc.). The busy/idle status of the trunk group is as follows:

    (a) Direct Trunk Group Selection lamp dark – At least one trunk is idle in the trunk group.

    (b) Direct Trunk Group Selection lamp lighted – All trunks in the trunk group are busy.

2. If a trunk is available, depress the associated Direct Trunk Group Selection pickup button.

    *   The associated Direct Trunk Group Selection lamp momentarily lights steadily and remains lighted if all trunks in the trunk group are busy.

NOTE: If other station instruments are provided with the same Direct Trunk Group Selection button, the associated lamp on their telephone remains dark unless that was the last idle trunk in the trunk group.

3. Pick up the handset.

    *   Dial tone is heard.

4. Dial the desired number.

10.03 Direct Trunk Selection. This feature allows you to originate or receive calls over a specific trunk by depressing a pickup button on your JR-DYAD. The busy/idle status of the trunk is indicated by the lamp associated with the pickup button.

a. To establish an outside call:

1. Determine if the trunk is busy or idle. The busy/idle status of the desired trunk is as follows:

    (a) Direct Trunk Selection lamp dark – Trunk is idle.

    (b) Direct Trunk Selection lamp lighted – Trunk is busy.

2. If the trunk is idle, depress the associated Direct Trunk Selection pickup button.

    *   Direct Trunk Selection lamp lights steadily.

NOTE: If other station instruments are provided with the same Direct Trunk Selection button, the associated lamp on their telephone remains dark unless that was the last idle trunk in the trunk group.

3. Pick up the handset.

    *   Dial tone is heard.

4. Dial the desired outside number.

b. To answer an incoming call:

1. The Direct Trunk Selection lamp flashes and your JR-DYAD provides call alerting tone.

2. Depress the associated Direct Trunk Selection pickup button.

    *   The Direct Trunk Selection lamp lights steadily.

3. Pick up the handset.

4. You may begin to talk.

10.04 Station-Defined Direct Dial. This feature allows you to depress a dedicated feature button and have the SATURN System automatically dial the telephone number (inside or outside number) assigned to that button. One or more of these feature buttons may be assigned to your JR-DYAD. Each button is assigned to a telephone number in SATURN EPABX memory.

On some JR-DYADs, the destination number may be changed by using the Speed Calling – Individual feature. At these stations, the destination number is indexed to one of the speed calling codes (0-9). To change the destination number associated with the speed calling code, refer to the operating instructions of the Speed Calling – Individual feature.

a. To initiate a call to the stored number:

1. Select and depress the appropriate line pickup button.

- The associated line pickup lamp lights steadily.

2. Pick up the handset.

   - Dial tone is heard.

3. Depress the [DIAL] feature button.

   - Ringback tone is heard.

4. When the called party answers, you may start talking.

SECTION 11.00   INTERCOM FEATURES

11.01 Automatic Intercom. This feature allows you to place an intercom call to another predetermined JR-DYAD or DYAD. This feature overrides the Do Not Disturb feature and Call Forwarding features, if active at the called JR-DYAD.

a. To place an Automatic Intercom call:

   1. Depress the ☐ ICOM ☐ pickup button.

      • The ICOM lamp lights steadily.

   2. Pick up the handset.

      • Ringback tone is heard.

   3. When the called party answers, you may begin to talk.

b. To answer an Automatic Intercom call:

   1. Your ICOM lamp flashes and you receive three-burst alerting tone.

   2. Depress the ☐ ICOM ☐ pickup button.

      • The ICOM lamp lights steadily.

   3. Pick up the handset.

      • Three-burst alerting tone ceases.
      • You are connected to the calling party.

   4. You may begin to talk.

11.02 Executive Intercom. This feature allows you to place a call to another JR-DYAD within a prearranged executive in-tercom group. This feature overrides the Do Not Disturb feature and Call Forwarding features, if active at the called JR-DYAD.

a. To place an Executive Intercom call:

   1. Depress the ☐ ICOM DIAL ☐ pickup button.

      • The ICOM DIAL lamp lights steadily.

   2. Pick up the handset.

      • Dial tone is heard.

   3. Dial the single-digit code that corresponds to the desired party.

      • Ringback tone is heard.

   4. When the called party answers, you may begin to talk.

b. To answer an Executive Intercom call:

   1. Your ICOM DIAL lamp flashes and you receive three-burst alerting tone.

   2. Depress the ☐ ICOM DIAL ☐ pickup button.

      • The ICOM lamp lights steadily.

   3. Pick up the handset.

      • Three-burst alerting tone ceases.
      • You are connected to the calling party.

   4. You may begin to talk.

SECTION 12.00 PRIVACY FEATURES

12.01 Executive Override. This feature allows you, upon encountering busy tone, to enter into the existing conversation for the intended purpose of announcing a high priority or emergency call. Before the override occurs, a warning tone is heard by the two conversing parties, alerting them of the impending override.

   a. To override a busy call using the Executive Override feature button:

      1. While listening to busy tone, depress the | OVER RIDE | feature button.

         • Executive Override tone is heard, followed by the connection to the existing conversation.
         • OVER RIDE lamp lights steadily.

      2. You may begin to talk.

NOTE: The Busy Override injection tone is heard repeatedly every 8 to 20 seconds after overriding a call in progress.

   b. To override a busy call using the Executive Override feature access code:

      1. While listening to busy tone, or special ringback tone, depress the | Xfer Conf | feature button.

         • Recall dial tone is heard.

      2. Dial the Executive Override feature access code.

         • Executive Override tone is heard, followed by the connection to the existing conversation.

NOTE: Reorder tone is heard if the connection is denied (e.g, the telephone is assigned Data Line Security or Executive Override Security.

      3. You may begin to talk.

NOTE: The Busy Override injection tone is heard repeatedly every 8 to 20 seconds after overriding a call in progress.

12.02 Executive Override – Automatic. This feature allows you to camp-on to a busy extension and automatically break into the existing conversation if the called party does not answer your waiting call within a predetermined period of time.

   a. To activate Executive Override – Automatic:

      1. While listening to busy tone or special ringback tone, wait for the called party to answer.

      2. If the called party does not answer your waiting call within a predetermined time, the override occurs automatically.

         • Executive Override tone is heard followed by the connection to the existing conversation.

3. You may begin to talk.

NOTE: The Busy Override injection tone is heard repeatedly every 8 to 20 seconds after overriding a call in progress.

12.03 Do Not Disturb. This feature allows you to make your JR-DYAD busy to all incoming calls whenever you desire not to be disturbed.

Activation of Do Not Disturb by using the DND feature button will "busy out" your prime line extension only. For all non-prime lines appearing on your JR-DYAD, incoming calls will cause the lamp of the associated line pickup button to flash; however, alerting tone will be inhibited.

Activation of Do Not Disturb can be performed on any line appearing at your JR-DYAD (including your prime line) by dialing the Do Not Disturb feature activation code, if allowed by the line's class of service.

To activate Do Not Disturb using the DND feature button:

   a. To make your JR-DYAD busy to incoming calls:

      1. Depress the | DND | feature button. (The button may be depressed while you're busy on a call or when the JR-DYAD is idle.)

         • DND lamp lights steadily indicating that the Do Not Disturb feature is activated.

      2. Hang up, if off-hook.

You can originate calls while Do Not Disturb is in effect; however, other calls cannot wait on the associated line. Intercom calls are not affected by activation of the feature. Messages may also wait at your JR-DYAD.

Each time you pick up the handset, recall dial tone is heard as a reminder that your JR-DYAD has Do Not Disturb activated.

   b. To reestablish normal operation of your JR-DYAD:

      1. Depress the | DND | feature button. (The button may be depressed while you're busy on a call or when the JR-DYAD is idle.)

         • DND lamp extinguishes indicating that the Do Not Disturb feature is deactivated.

      2. Hang up, if off-hook.

To activate Do Not Disturb using the Do Not Disturb feature access code:

   a. To make your JR-DYAD busy to incoming calls:

      1. Select and depress the appropriate line pickup button.

         • Line pickup button lamp lights steadily.

2. Pick up the handset.

- Dial tone is heard.

3. Dial the Do Not Disturb feature activation code.

  - Confirmation tone is heard.
  - Your JR-DYAD is now made busy to incoming calls on the prime line only. Audible tone alerting will be inhibited on all other lines appearing on your JR-DYAD.

4. Hang up.

You can originate calls while Do Not Disturb is in effect; however, other calls cannot wait on the associated line. Intercom calls are not affected by activation of the feature. Messages may also wait at your JR-DYAD.

Each time you pick up the handset, recall dial tone is heard as a reminder that your JR-DYAD has Do Not Disturb activated.

  b. To reestablish normal operation of your JR-DYAD:

  1. Pick up the handset.

    - Recall dial tone is heard indicating Do Not Disturb is in effect.

  2. Dial the Do Not Disturb cancellation code.

    - Confirmation tone is heard indicating cancellation of the Do Not Disturb feature.

  3. Hang up.

12.04 Call Privacy. Activation of the Call Privacy feature on a specific line prevents all other parties from bridging on that line. This feature may be assigned to your JR-DYAD on an automatic activating and manual activating basis. If your JR-DYAD is assigned the automatic activating option, each time you receive or place a call, Call Privacy is automatically activated.

For JR-DYADs assigned the automatic activation option:

  a. To deactivate Call Privacy:

  While in an established conversation, depress the $\boxed{\text{PRIV}}$ feature button.

    - PRIV lamp extinguishes indicating Call Privacy is deactivated. (The PRIV lamp remains extinguished

until the call is disconnected.)

A third party can now bridge on the line by depressing the associated line pickup button.

Call Privacy may be reactivated by depressing the $\boxed{\text{PRIV}}$ feature button.

For JR-DYADs assigned the manual activation option:

  a. To activate Call Privacy:

  Depress the $\boxed{\text{PRIV}}$ feature button. (The button can be depressed while you're busy on a call or when the JR-DYAD is idle.)

    - PRIV lamp lights steadily, indicating Call Privacy is active.

NOTE: Any party attempting to bridge on the line receives busy tone. If a party has already bridged on the line, the bridged party is disconnected from the call and busy tone is heard.

  b. To deactivate Call Privacy:

  Depress the $\boxed{\text{PRIV}}$ feature button. (The button can be depressed while you're busy on a call or when the JR-DYAD is idle.)

    - PRIV lamp extinguishes, indicating Call Privacy is deactivated.

12.05 Station Ringer Cutoff. This feature allows you to disable the audible alerting device in your JR-DYAD. When disabled, the only indication that you receive of an alerting call is the pickup button's flashing lamp.

  a. To disable the audible alert tone:

  Depress the $\boxed{\substack{\text{RINGER} \\ \text{OFF}}}$ feature button, at any time.

    - RINGER OFF lamp lights steadily.

  b. To enable the audible alert tone:

  Depress the $\boxed{\substack{\text{RINGER} \\ \text{OFF}}}$ feature button, at any time.

    - RINGER OFF lamp extinguishes.

SECTION 13.00   SPEED CALLING FEATURES

13.01 Saved Number Redial. This feature allows you to store, into system memory, a telephone number that you have just dialed by depressing a feature button and have this number automatically redialed at a later time by depressing the same feature button. Only one number can be stored at a time from your JR-DYAD.

  a. To store a number:

Upon dialing a do-not-answer (ringback tone is heard) or busy (busy tone is heard) number, or while established in conversation with a called party, depress the [SAVE NO] feature button to store the just-dialed number.

- SAVE NO lamp lights steadily.
- After you hang up, the SAVE NO lamp extinguishes; however, the number is stored in memory.

NOTE: The number is saved regardless of whether the called party answers or is busy.

  b. To initiate a call to the party associated with the stored number:

    1. Select and depress the appropriate line pickup button.

- The associated line pickup lamp lights steadily.

    2. Pick up the handset.

- Dial tone is heard.

    3. Depress the [SAVE NO] feature button.

- SAVE NO lamp lights steadily during system dialing, then extinguishes.
- Ringback tone is heard.

    4. When the called party answers, you may begin to talk.

13.02 Speed Calling – Individual. This feature allows you to establish a personal speed call list of up to 10 frequently-called telephone numbers. Each number (up to a maximum of 18 digits and internal or external to the SATURN System) is assigned a one-digit code (0 to 9) and programmed into SATURN memory from your telephone.

  a. To store or change speed calling numbers:

    1. Pick up the handset.

- Dial tone is heard.

    2. Dial the Speed Calling store/change code.

    3. Dial the Speed Call code (0 to 9) for the number to be stored or changed.

    4. Dial the desired telephone number corresponding to the speed calling code. Be sure to enter the complete number including any prefix digits (e.g., 9-1-800-342-8300).

- Confirmation tone is heard.

NOTES: After dialing the telephone number, you can expedite receiving confirmation tone by depressing the # key.

The destination may be a number that requires supplemental dialing.

    5. Hang up.

  b. To place a Speed Call:

    1. Select and depress the appropriate line pickup button.

- The associated line pickup lamp lights steadily.

    2. Pick up the handset.

- Dial tone is heard.

    3. Depress the [SPEED IND] feature button or dial the Speed Calling – Individual feature access code.

- SPEED IND lamp lights steadily.

    4. Dial the one-digit speed calling code corresponding to the desired telephone destination number.

- SPEED IND lamp extinguishes.

    5. When the called party answers, you may begin to talk.

13.03 Speed Calling – Group. This feature allows you to place speed calls to frequently-called destinations. The destination numbers (normally outside telephone numbers) are stored in SATURN EPABX memory, along with a two-digit code associated with each number. These codes are normally listed in your company's telephone directory.

  a. To place a speed call:

    1. Select and depress the appropriate line pickup button.

- The associated line pickup lamp lights steadily.

    2. Pick up the handset.

- Dial tone is heard.

    3. Depress the [SPEED GRP] feature button or dial the Speed Calling – Group feature access code.

- SPEED GRP lamp lights steadily.

NOTE: In SATURN Systems using only one speed calling group, the SPEED SYSTEM feature button is used.

    4. Dial the two-digit code corresponding to the desired telephone number.

- SPEED GRP lamp extinguishes after system dialing.
- Ringback tone is heard.

  5. When the called party answers, you may begin to talk.

SECTION 14.00 ADDITIONAL FEATURES

14.01 Least Cost Routing. The Least Cost Routing (LCR) feature is used in some SATURN EPABX Systems to route outgoing (trunk) calls over the least costly route available at the time of call placement.

a. To place an outside call:

1. Select and depress the appropriate line pickup button.

   • Line pickup button lamp lights steadily.

2. Pick up the handset.

   • Dial tone is heard.

3. Dial the LCR access code. (Optional for some systems.)

   • Dial tone is heard.

4. Dial the outside destination number.

   • Confirmation tone (three bursts of tone) is heard, indicating that the dialed number has been accepted and a route has been found.
   • The SATURN System then dials the destination number. Ringback tone is heard if the destination number is idle. Busy tone is heard if the destination number is busy.

NOTES: If route advance tone (one short burst of tone) is heard immediately after dialing the destination number, wait until you hear confirmation tone. Route advance tone indicates that the SATURN System has accepted the dialed number and is searching for an idle route. Additional route advance tones may be heard as the SATURN System searches for alternate routes to your destination.

If expensive facility tone (one long burst of tone) is heard, the SATURN System has found a more expensive route. If you desire not to place the call via a more expensive route, hang up.

If a route is not found within a preset period of time, the SATURN System provides a steady burst of low tone (if Callback Queuing is assigned) to indicate that Callback Queuing has been invoked. Callback Queuing allows you to hang up and be called back (three bursts of alerting tone is heard) when a route becomes available.

To answer the callback, pick up the handset, listen for confirmation tone followed by ringback tone. When the called party answers, you may begin to talk.

If you do not answer the callback attempt within approximately 18 seconds, the callback is temporarily cancelled. Additional callbacks (maximum of nine) will be attempted by the system every five minutes.

5. When the called party answers, you may begin to talk.

b. To cancel callback queuing:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the automatic callback cancellation code.

   • Confirmation tone is heard indicating the cancellation of the callback.

3. Hang up.

14.02 SMDR Account Codes. Account codes are used with Station Message Detail Recording (SMDR) or preselected incoming and outgoing trunk calls. Two types of account codes are used: standard (or default) account codes and special account codes. Default account codes are assigned to stations and trunks and are automatically activated when you originate or receive a call over one of these groups. Special account codes must be entered from your telephone to complete an otherwise restricted outgoing call.

a. After dialing a trunk access code (e.g., "9" for outside) or an LCR access code, if you hear recall dial tone, enter a valid account code.

   • Dial tone is heard.

NOTE: The account code must be entered within a preset period of time or else the trunk is released and reorder tone is heard.

b. Complete the call by dialing the desired destination number. (Do not redial the trunk.)

14.03 I-Use Indication. For JR-DYADs provided with multiple lines, this feature is useful in determining which line the user is presently using when other lines and features are in use.

To activate, depress the [I-USE] feature button.

   • All button lamps momentarily go dark for approximately 1½ seconds with the exception of the lamp corresponding to the line which you are using.

14.04 Call Tracing. This feature allows you to have a connected call's data recorded on the SMDR printer. The SMDR printer prints out the calling party's extension number (if an internal call) or the incoming trunk and trunk group number (if an external call), the called number, the date and time of the call, and a special character on the SMDR report that the call was traced.

a. To trace a call:

1. While connected to a call, depress the [Xfer Conf] button.
   • Recall dial tone is heard.
   • The call is placed on Consultation Hold.

2. Dial the Call Tracing feature access code.

- Confirmation tone is heard indicating the call's data has been recorded.
- You are automatically reconnected to the call.

NOTE: Reorder tone is heard if your phone is not allowed to activate this feature.

3. Hang up or continue talking to the other party.

14.05 Message Waiting. This feature allows you to send a message waiting indication to a party at another extension. This feature also provides a means for you to respond to a received message or cancel a sent message.

a. To activate Message Waiting after dialing a do-not-answer or busy extension:

1. While listening to ringback tone or busy tone, depress the [MSG SET] feature button or depress the [Xfer Conf] button and dial the message set activation code.

- MSG SET lamp lights momentarily, then extinguishes.
- Confirmation tone is heard.
- Message waiting indication is provided at the called telephone.

NOTES: If the called telephone is unable to accept any more messages (maximum of four), busy tone is heard.

If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

2. Hang up.

b. To activate Message Waiting without first attempting to call the other party:

1. Select and depress the appropriate line pickup button.

- Line pickup lamp lights steadily.

2. Pick up the handset.

- Dial tone is heard.

3. Depress the [MSG SET] feature button or dial the message waiting activation code.

- MSG SET lamp lights steadily.

4. Dial the extension number of the party to whom you wish to leave a message waiting indication.

- Confirmation tone is heard.

NOTES: If the called telephone is unable to accept any more messages (maximum of four), busy tone is heard.

If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

5. Hang up.

- MSG SET lamp extinguishes.

c. To respond to a message waiting at your JR-DYAD:

1. The MSG CALL BK lamp flashes.

2. Select and depress the prime line pickup button.

- Line pickup lamp lights steadily.

3. Pick up the handset.

- Dial tone is heard.

4. Depress the [MSG CALL BK] feature button or dial the Message Waiting – Automatic Callback access code.

- The SATURN System automatically dials the extension number of the party that sent the message.
- Ringback tone is heard.

NOTE: If busy tone is heard, the extension is busy; try initiating the callback at a later time.

d. To cancel a message you sent to another telephone:

1. Select and depress the appropriate line pickup button.

- Line pickup button lamp lights steadily.

2. Pick up the handset.

- Dial tone is heard.

3. Dial the Message Waiting – Sent cancellation code, or depress the [MSG CANCEL] feature button.

- MSG CANCEL lamp lights steadily.

4. Dial the extension number to which the message was sent.

- MSG CANCEL lamp extinguishes.
- Confirmation tone is heard.

NOTE: Reorder tone is heard instead of confirmation tone if an invalid access code is dialed or the message was already cancelled at the called telephone.

5. Hang up.

e. To cancel a message that is waiting at your JR-DYAD:

1. Depress the [MSG CANCEL] feature button or dial the Message Waiting – Received cancellation code.

- MSG CALL BK lamp extinguishes if no other messages exist.

14.06 Stop Hunt. This feature allows a sequential hunt group to be temporarily reduced in size. This feature also allows a UCD member to be temporarily removed from a UCD hunt group.

a. For sequential hunt groups.

1. To shorten the sequential hunt group:

a) Dial the Stop Hunt activation code from the extension in the hunt group at which all succeeding extensions are to be excluded from the hunting list. For example: if the hunt sequence includes extensions 234-235-236-237-238-239 and you want to exclude extensions 238 and 239, dial the Stop Hunt access code from extension 237.

- Confirmation tone is heard indicating the successful activation of the Stop Hunt feature.

b) Hang up.

2. To return the hunt group to full size:

a) Dial the Stop Hunt Cancellation code from the extension that activated Stop Hunt.

- Confirmation tone is heard indicating the successful cancellation of the Stop Hunt feature.

b) Hang up.

b. For UCD hunt groups.

1. To remove a member from a UCD hunt group:

a) Dial the Stop Hunt activation code from the extension to be removed from the UCD hunt group.

- Confirmation tone is heard indicating the successful activation of the Stop Hunt feature.

b) Hang up.

2. To add a member back to a UCD hunt group:

a) Dial the Stop Hunt Cancellation code from the extension that was previously removed from the hunt group.

- Confirmation tone is heard indicating the successful cancellation of the Stop Hunt feature.

b) Hang up.

14.07 Mobile Authorization Codes. This feature allows you to place a call from a telephone that otherwise would be restricted by its class of service. An authorization code, which is assigned to a class of service with its own restrictions, must be dialed.

a. To override a call restriction:

1. Select and depress the appropriate line pickup button.

- Line pickup lamp lights steadily.

2. Pick up the handset.

- Dial tone is heard.

3. Dial the mobile authorization access code.

4. Dial an authorization code.

- Recall dial tone is heard indicating that the class of service assigned to the dialed authorization code is now in effect.

NOTE: Intercept tone is heard if an invalid authorization code is dialed.

5. Place the call previously restricted.

NOTE: If you are still restricted from placing the call, the class of service assigned to the dialed authorization code may not allow it.

After you have completed the call and hang up, the class of service defined by the authorization code is removed and the telephone's original class of service is in effect.

14.08 Universal Night Answer – Zoned. This feature allows you to answer incoming calls ringing the night bell(s) when the SATURN EPABX System is in the night service mode.

a. To answer an incoming call:

1. You hear the night bell(s) ringing.

2. Select and depress the appropriate line pickup button.

- Line pickup lamp lights steadily.

3. Pick up the handset.

- Dial tone is heard.

4. Depress the [UNA] feature button or dial the appropriate Universal Night Answer access code.

- A talking connection is established between you and the incoming party.

NOTES: If reorder tone is heard, the night call already has been answered. If intercept tone is heard, you are not allowed to answer incoming night calls from your JR-DYAD.

In some SATURN Systems, multiple night answering zones are provided. In these systems, depress the associated UNA ZONE feature button or dial the associated Universal Night Answering – Zoned access code (1 to 4).

5. You may begin to talk.

14.09 Voice Paging Access – Zoned and Area. This feature allows you to page another party over the loudspeaker system.

a. To page a party:

1. Select and depress the appropriate line pickup button.

- Line pickup lamp lights steadily.

2. Pick up the handset.

- Dial tone is heard.

3. Depress the [PAGE] feature button or dial the associated Voice Paging access code.

NOTE: In some SATURN Systems, multiple Voice Paging zones are provided. In these systems, depress the associated PAGE ZONE feature button or dial the associated Universal Night Answer - Zoned access code (1 to 4).

Table 14.00 Feature Access Codes and Button Labels

FEATURE	ACCESS CODE	BUTTON LABEL
HOLD FEATURES		
Consultation Hold	none	Xfer Conf
Call Hold	————	PARK PRIV
Call Hold – Flip-Flop (Broker)	————	SPLIT
Call Park	————	none
Manual Hold	none	Hold
Exclusive Hold	none	HOLD EXCEL
CALL TRANSFER FEATURES		
Call Transfer...	none	Xfer Conf
Call Transfer to Attendant	none	XFER "0"
CONFERENCE FEATURES		
Add-On Conference	none	Xfer Conf
Bridge Call..	none	(Note 1)
Meet-Me Conference	————	MEET ME
Station Controlled Conference		
To access conference	————	none
To remove any conferee..............................	————	none
To remove last conferee.............................	————	none
CALL FORWARDING FEATURES		
Call Forwarding – All Calls		
To activate	————	FWD ALL
To cancel	————	FWD ALL
Call Forwarding to Public Network		
To activate	————	none
To cancel	————	none
Call Forwarding – Busy Lines		
To activate	————	FWD BUSY
To cancel	————	FWD BUSY
Call Forwarding – No Answer		
To activate	————	FWD NO ANS
To cancel	————	FWD NO ANS
Call Forwarding – Secretarial		
To activate	————	FWD TO
To cancel	————	FWD TO
Call Forwarding – Return	————	none
Forced Call Forwarding	none	FWD FORCE

Note 1: Activate by depressing the associated busy line pickup button.

Table 14.00   Feature Access Codes and Button Labels (Continued)

FEATURE	ACCESS CODE	BUTTON LABEL
CALL QUEUING FEATURES		
Internal Call Queuing – Callback		
To cancel callback	_____	none
Internal Call Queuing – Standby	none	none
Outgoing Call Queuing – Callback		
To cancel callback	_____	none
Outgoing Call Queuing – Standby	none	none
CALL PICKUP FEATURES		
Call Pickup – Directed......................................	_____	PICKUP DIR
Call Pickup – Group	_____	Group Pickup
DIRECT ACCESS FEATURES		
Direct Station Selection	_____	(Note 2)
Direct Trunk Group Selection................................	_____	(Note 2)
Direct Trunk Selection	_____	(Note 2)
Direct Destination Selection................................	none	DIAL ____
INTERCOM FEATURES		
Automatic Intercom	none	ICOM ____
Executive Intercom	none	ICOM DIAL ____
PRIVACY FEATURES		
Executive Override..	_____	OVER RIDE
Executive Override – Automatic	none	none
Do Not Disturb		
To activate	_____	DND
To cancel	_____	DND
Call Privacy	none	PRIV
Station Ringer Cutoff	none	RINGER OFF
SPEED CALLING FEATURES		
Last Number Redial	none	Redial
Saved Number Redial	none	SAVE NO.
Speed Dialing		
To store or change..................................	none	Store
To place a Call......................................	none	Speed Dial

Note 2: Customer-defined button label.

Table 14.00   Feature Access Codes and Button Labels (Continued)

FEATURE	ACCESS CODE	BUTTON LABEL
SPEED CALLING FEATURES (Continued)		
Speed Calling – Individual		
To store or change	_____	none
To place a call	_____	SPEED IND
Speed Calling – Group		
Group 1	_____	SPEED GRP 1
Group 2	_____	SPEED GRP 2
Group 3	_____	SPEED GRP 3
Group 4	_____	SPEED GRP 4
SPECIAL CALLING FEATURES		
On-Hook Dialing	none	On Hook Dial
ADDITIONAL FEATURES		
Least Cost Routing		
To access	_____	none
To cancel callback	_____	none
I-Use Indication	none	I-USE
SMDR Account Codes	(Note 3)	none
Call Tracing	_____	none
Message Waiting		
To activate	_____	MSG SET
To respond	_____	MSG CALL BK
To cancel sent message	_____	none
To cancel received message	_____	MSG CANCEL
Mobile Authorization Codes	_____	none
Stop Hunt		
To activate	_____	none
To cancel	_____	none
Universal Night Answer		
All zones	_____	UNA
Zone 1	_____	UNA ZONE 1
Zone 2	_____	UNA ZONE 2
Zone 3	_____	UNA ZONE 3
Zone 4	_____	UNA ZONE 4
Voice Paging Access		
Zone 1	_____	PAGE ZONE 1
Zone 2	_____	PAGE ZONE 2
Zone 3	_____	PAGE ZONE 3
Zone 4	_____	PAGE ZONE 4
Zone Combination	_____	PAGE
On-Hook Dialing Release,		
on/off-hook for headset use	none	Hang Up

Note 3: Special account code is dialed.

SATURN® EPABX

OC1E

STANDARD STATION
USER INSTRUCTIONS

CONTENTS

LIST OF FIGURES

LIST OF TABLES

SECTION 1.00 INTRODUCTION

1.01 General. This document provides step-by-step instructions for accessing SATURN Electronic Private Automatic Branch Exchange (EPABX) features from industry standard telephones: rotary dial telephones and Dual-Tone Multifrequency (DTMF) telephones (refer to Figure 1.00).

Most of the instructions provided in this document are of features that can be accessed by dialing an access code. Access codes can range from 0 to 9999. The leading digit of an access code may also be a "*" or "#." Refer to Table 9.00 for a list of the feature access codes.

An abbreviated Feature Instruction Guide is provided in the back of this document (refer to Table 9.01). The guide can be removed and used as a quick reference for activating the SATURN EPABX features.

1.02 Inside Calling. To place a call to another extension, pick up the telephone handset, listen for dial tone, and dial the desired extension number. Dial tone must be heard before dialing can begin.

If attendant assistance is required, dial "0" for attendants in general or dial the appropriate extension number for the desired attendant function.

1.03 Outside Calling. To place an outside call, pick up the handset, listen for dial tone, dial the appropriate trunk group or LCR access code (e.g., "9"), listen for dial tone again, and dial the desired directory number. Don't forget to include the toll prefix (e.g., "1") and/or area code (e.g., "305"), if required.

If outside calls are restricted from your telephone, attendant assistance can be obtained by dialing "0" for attendants in general or the appropriate extension number for the desired attendant function.

1.04 Outside Calling During a Power Failure. In the event of a commercial power failure in which normal telephone service is interrupted, users with failure transfer telephones may originate outside calls. To place an outside call during a power failure, pick up the handset, depress the power failure button (if provided), listen for dial tone, and dial the outside number.

1.05 Discriminating Ringing. Several types of distinctive ringing patterns are provided so that you can distinguish between the different types of incoming calls. The ringing patterns are:

a. One-burst ringing (normal ringing) – Identifies an incoming call from another SATURN EPABX telephone.

b. Two-burst ringing – Identifies an incoming "outside" call including attendant extended calls.

c. Three-burst ringing – Identifies calls initiated by the following:

1. Call Hold automatic recall
2. Call Transfer Security recall
3. Internal Call Queuing – Callback
4. Outgoing Call Queuing – Callback
5. Station Controlled Conference recall to conference master

1.06 Call Progress Tones. The following call progress tones are used to inform you of the status of a call:

a. Busy Tone – Normal tone heard when a called party's telephone is busy.

b. Busy Override Injection Tone – Single bursts of tone heard 8 to 20 seconds apart AFTER an attendant or executive overrider has intruded on the call in progress. This tone continues for the entire time the attendant or executive overrider is present on your conversation.

c. Busy Override Tone – Three short bursts of tone heard two seconds apart BEFORE an overriding attendant intrudes on a call in progress.

d. Call Waiting Tone – One burst of tone heard when a SATURN EPABX telephone call is waiting to be answered or two bursts of tone heard when an outside trunk call is waiting to be answered on your telephone. This tone is repeated after 10 seconds if the waiting party is still present.

e. Conference Tone – One burst of tone heard when a party is being added to a conference to which you are connected.

f. Confirmation Tone – Three rapid bursts of tone indicating the action taken by you has been accepted (e.g., activation of the Internal Call Queuing – Standby feature).

g. Dial Tone – Normal tone heard indicating that dialing can begin.

h. Executive Override Tone – One three-second burst of tone heard BEFORE an executive overrider intrudes on a call in progress.

i. Expensive Facility Tone – One second burst of high pitch tone heard when the SATURN System selects a more expensive route for call routing via the Least Cost Routing (LCR) feature.

j. Intercept Tone – A continuous alternating low and high pitch tone indicating an invalid or unauthorized feature code or extension number was dialed.

k. Low Tone – Steady tone heard after receiving busy tone indicating successful activation of such features as Outgoing Call Queuing – Callback and Internal Call Queuing – Callback.

l. Recall Dial Tone – Three rapid bursts of tone followed by dial tone indicating the action taken by you has been accepted and you can now dial additional digits (e.g., for transferring a call via the Call Transfer feature).

m. Reorder Tone – Fast busy tone indicates a network blocking condition or the activation of a feature was not granted.

n. Ringback Tone – Normal tone heard when a called party's telephone is ringing.

o. Route Advance Tone – One short burst of tone heard each time the SATURN System searches for an idle route via the LCR feature.

p. Special Ringback Tone – A tone that sounds similar to normal ringback tone except for the distinctive low signal at the end of each tone cycle. Special ringback tone indicates you are in a waiting state for a busy telephone and is heard during activation of the following features: Internal Call Queuing – Standby, Outgoing Call Queuing – Standby, and Executive Override – Automatic.

Rotary Dial Telephone
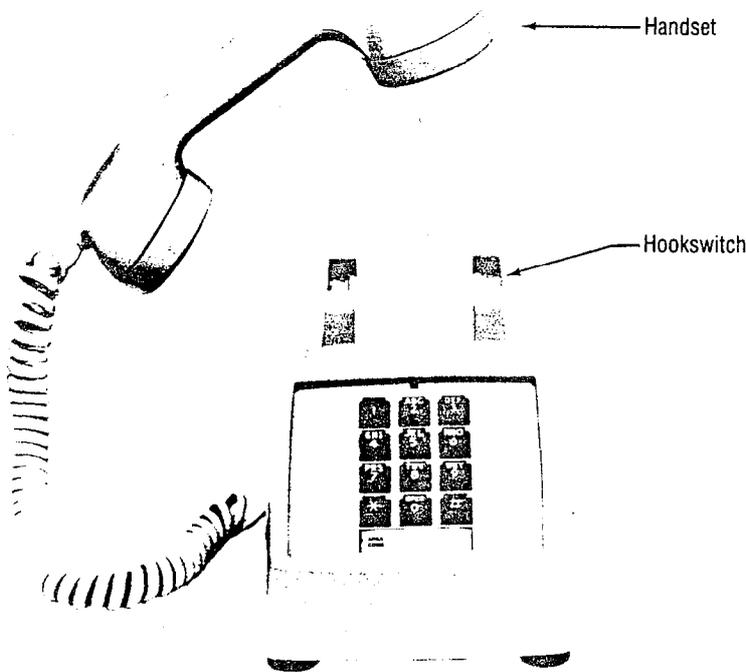
Pushbutton Tone Signaling Telephone

Figure 1.00   Illustration of Industry Standard Telephones

SECTION 2.00   CALL FORWARDING FEATURES

2.01 Call Forwarding – All Calls. This feature allows you to have all calls terminating at your extension, forwarded to another extension or to the attendant.

  a. To Forward All Incoming Calls:

    1. Pick up the handset.

       • Dial tone is heard.

    2. Dial the Call Forwarding – All Calls activation code.

    3. Dial the extension number to which you want all your calls forwarded.

       • Confirmation tone is heard indicating Call Forwarding – All Calls is activated.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

    4. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your telephone.

The party at the forwarding-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarding-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

If a call is forwarded to a member of a hunt group that is busy, the system hunts for the first idle member in that hunt group. If no idle member is found, the forwarding station user can activate the Camp-On, Call Waiting, or Automatic Callback features. A station within a hunt group that has this feature in effect is skipped during hunting. If the station is called direct (not part of a hunt sequence) the call is forwarded as previously described.

You may continue to originate calls while Call Forwarding – All Calls is in effect. Automatic callbacks from the activation of features such as Internal Call Queuing – Callback and Outgoing Call Queuing – Callback, and station recalls are not forwarded.

  b. To Cancel Call Forwarding – All Calls:

    1. Pickup the handset.

       • Dial tone is heard.

    2. Dial the call forwarding cancellation code.

       • Confirmation tone is heard indicating Call Forwarding – All Calls is deactivated.

    3. Hang up.

2.02 Call Forwarding – Busy Lines. This feature allows you to have all calls terminating at your extension, forwarded to another extension or to the attendant when your extension is busy. When your extension is idle, incoming calls are completed as usual.

  a. To Activate Call Forwarding – Busy Lines:

    1. Pick up the handset.

       • Dial tone is heard.

    2. Dial the Call Forwarding – Busy Lines activation code.

    3. Dial the extension number to which you want the calls forwarded.

       • Confirmation tone is heard indicating Call Forwarding – Busy Lines is activated.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

    4. Hang up.

When the Call Forwarding – Busy Lines feature is in effect, incoming calls will not wait (via activation of the Internal Call Queuing – Standby and Interal Call Queueing – Callback features) on the associated line. If the forwarded-to telephone is busy, forwarded calls will wait at the forwarded-to telephone.

If a call is forwarded to a member of a hunt group that is busy, the system hunts for the first idle member in that hunt group. If no idle member is found, the forwarding station user can activate the Camp-On, Call Waiting, or Automatic Callback features. A station within a hunt group that has this feature in effect is skipped during hunting. If the station is called direct (not part of a hunt sequence) the call is forwarded as previously described.

  b. To Cancel Call Forwarding – Busy Lines:

    1. Pick up the handset.

       • Dial tone is heard.

    2. Dial the call forwarding cancellation code.

       • Confirmation tone is heard indicating Call Forwarding – Busy Lines is deactivated.

    3. Hang up.

2.03 Call Forwarding – No Answer. This feature allows you to have all calls terminating at your telephone that are not answered within a predetermined period of time (three rings, nominal), forwarded to another telephone or to the attendant. When your telephone is busy, call forwarding does not occur and the usual station hunting, call waiting, and automatic callback arrangements (if assigned) are applied.

  a. To Activate Call Forwarding – No Answer:

  1. Pick up the handset.

       • Dial tone is heard.

  2. Dial the Call Forwarding – No Answer activation code.

  3. Dial the extension number to which you want to forward all your unanswered calls.

       • Confirmation tone is heard indicating Call Forwarding – No Answer is activated.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

  4. Hang up.

If a call is forwarded to a member of a circular or terminal hunt group that is busy, the system hunts for the first idle member in that hunt group. If no idle member is found and the Call Forwarding – No Answer feature is in effect, the forwarding station continues to ring for another no answer interval. At the end of the time interval, the forwarding process is attempted again. If the Call Forwarding – All Calls or Call Forwarding – Busy Lines feature is in effect, the forwarding station user can activate the Camp-On, Call Waiting, or Automatic Callback features. A station within the circular hunt group that has this feature in effect is skipped during hunting. If the station is called direct (not part of a hunt sequence) the call is forwarded as previously described.

You may continue to originate calls while Call Forwarding – No Answer is in effect. Automatic callbacks from the activation of features such as Outgoing Call Queuing – Callback and Internal Call Queuing – Callback, and station recalls are not forwarded.

b. To Cancel Call Forwarding – No Answer:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating Call Forwarding – No Answer is deactivated.

3. Hang up.

2.04 Call Forwarding to Public Network. This feature allows you to have all calls terminating at your extension, forwarded to an outside telephone number.

a. To Forward All Incoming Calls:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the Call Forwarding to Public Network activation code.

3. Dial the trunk group access code (e.g., "9" for outside) and the outside number (e.g., 9948800).

   • After a short pause (approximately five seconds), confirmation tone is heard indicating Call Forwarding to Public Network is activated.

NOTES: If you're using a DTMF telephone, you may expedite receiving confirmation tone by depressing the # key immediately after dialing the last digit of the outside number.

If intercept tone or reorder tone is heard, your call forwarding request was not granted.

4. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your telephone.

You may continue to originate calls while call forwarding is in effect. Automatic callbacks from the activation of features such as Outgoing Call Queuing – Callback and Internal Call Queuing – Callback, and station recalls are not forwarded.

b. To Cancel Call Forwarding to Public Network:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating Call Forwarding to Public Network is deactivated.

3. Hang up.

2.05 Call Forwarding – Secretarial. This feature allows you to have all calls terminating at your extension, forwarded to a predetermined extension (assigned by data base management).

a. To Forward All Incoming Calls to the Predetermined Extension:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the Call Forwarding – Secretarial activation code.

   • Confirmation tone is heard indicating activation of the Call Forwarding – Secretarial feature.

NOTE: If intercept tone or reorder tone is heard, your call forwarding request was not granted.

3. Hang up.

As a reminder that call forwarding is in effect, each time a call is forwarded, one short burst of ringing is heard from your telephone.

The party at the forwarding-to extension is allowed to call your extension without being forwarded. Further, the party at the forwarding-to extension may transfer a call back to your extension or leave a message waiting indication (if message waiting capability is provided).

You may continue to originate calls while Call Forwarding – Secretarial is in effect. Automatic callbacks from the activation of features such as Internal Call Queueing – Callback and Outgoing Call Queueing – Callback, and station recalls are not forwarded.

b. To Cancel Forwarding of Your Calls:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the call forwarding cancellation code.

   • Confirmation tone is heard indicating the forwarding of your calls has been cancelled.

3. Hang up.

2.06 Call Forwarding – Return. This feature allows you to transfer a forwarded-call to the extension that activated call forwarding.

a. To Return a Forwarded-Call:

1. First, ask the connected party to wait.

2. Momentarily depress the hookswitch.

- Recall dial tone is heard.

3. Dial the Call Forwarding – Return access code.

- Ringback tone is heard.

NOTES: If busy tone is heard or the party does not answer, momentarily depress the hookswitch to return to the held party.

When an outside party requests to be transferred to an extension and the extension is busy, you may invoke the Internal Call Queueing – Standby feature. This feature allows you to camp-on to the busy extension and wait for the party to answer.

If you desire to transfer the call before the called party answers (ringback tone must be heard), hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an "outside" party and the called party does not answer within a preset time (25 seconds, nominal), the call is automatically recalled to your telephone (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

4. When the party at the forwarding station answers, announce the transfer.

- Ringback tone is removed.

5. Hang up.

- The call is transferred to the called party.

SECTION 3.00 CALL PICKUP FEATURES

3.01 Call Pickup – Directed. This feature allows you to answer an incoming call that is ringing at another telephone.

  a. To Answer a Call Ringing at Another Telephone:

    1. Pick up the handset.

      • Dial tone is heard.

    2. Dial the Call Pickup – Directed feature access code.

    3. Dial the extension number where the call is ringing.

      • Ringing ceases at the other telephone and you are automatically connected to the incoming call.

    4. You may begin to talk.

3.02 Call Pickup – Group. This feature allows you to answer an incoming call that is ringing at another telephone within your pickup group. Your pickup group consists of a group of extensions for which any ringing telephone may be answered by any member in the pickup group.

  a. To Answer a Call Ringing at Another Telephone:

  1. Pick up the handset.

      • Dial tone is heard.

  2. Dial the Call Pickup – Group feature access code.

      • Ringing ceases at the other telephone and you are connected to the incoming call.

  3. You may begin to talk.

SECTION 4.00 CALL QUEUING FEATURES

4.01 Internal Call Queuing – Callback. This feature allows you, upon dialing a busy extension number, to enter into a queue, hang up, and be called back when the extension becomes available.

    a. To Activate Internal Call Queuing – Callback:

        1. You have dialed a busy extension and busy tone is heard.

        2. Do not hang up. Listen to busy tone until busy tone changes to a steady low tone (approximately five seconds). Steady low tone is confirmation that you may invoke callback queuing.

        3. Hang up.

You may originate or receive other calls while waiting for the callback however, the callback sequence does not take place until both your extension and the previously dialed extension are idle at the same time.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second callback is initiated, the original callback is automatically cancelled.

        4. When both the called extension and your extension become idle,

          • Three-burst ringing is heard.

NOTE: If you do not answer the callback attempt within approximately 18 seconds, callback queuing is automatically cancelled.

        5. Pick up the handset.

          • Ringback tone is heard.
          • Called extension rings.

        6. When the called party answers, you may begin to talk.

    b. To Cancel an Automatic Callback:

        1. Pick up the handset.

          • Dial tone is heard.

        2. Dial the automatic callback cancellation code.

          • Confirmation tone is heard indicating the cancellation of the callback.

        3. Hang up.

4.02 Internal Call Queuing – Standby. This feature allows you, upon dialing a busy extension, to enter into a queue and wait for the called party to answer. While in the standby queue, you hear a special ringback tone and the called party hears a call waiting tone.

    a. To Activate Internal Call Queuing – Standby:

        1. You have dialed a busy extension and busy tone is heard.

NOTE: On some telephones, Internal Call Queuing – Stand-

by is activated on an automatic originating or automatic terminating basis. If your telephone is assigned the automatic originating option or the called party's telephone is assigned the automatic terminating option, ignore the remainder of this procedure; when special ringback tone is heard simply wait for the called party to answer.

        2. Do not hang up. Listen to busy tone until it changes to a steady low tone (approximately five seconds).

NOTE: Steady low tone is confirmation that callback queuing may be invoked, if desired, by hanging up. Refer to the feature, "Internal Call Queuing – Callback."

        3. Again do not hang up. Wait until steady low tone changes to a special ringback tone (approximately five seconds). This indicates standby queuing has been invoked.

          • The called party hears the call waiting tone.

        4. Wait until the called party answers the waiting call.

NOTE: You may convert from standby queuing to callback queuing, any time, by hanging up.

        5. When the called party answers, you may begin to talk.

4.03 Outgoing Call Queuing – Callback. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue, hang up, and be called back when a trunk becomes available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

    a. To Activate Outgoing Call Queuing – Callback:

        1. You have dialed a trunk group access code (e.g., 9, 82, 83, etc.) and encountered busy tone.

        2. Do not hang up. Listen to busy tone until you hear a steady low tone (approximately five seconds). Steady low tone is confirmation that you may invoke callback queuing.

        3. Hang up.

You can originate or receive calls while callback queuing is active. When a trunk becomes available and your telephone is idle, a callback is attempted.

Only one callback request (Internal or Outgoing Call Queuing – Callback) is allowed at any one time. If a second automatic callback is initiated, the original callback is cancelled.

        4. When a trunk becomes available,

          • Three-burst ringing is heard.

NOTE: If you do not answer the callback attempt within approximately 18 seconds, callback queuing is automatically cancelled.

        5. Pick up the handset.

          • Dial tone is heard.

6. Complete dialing the desired number (do not dial the trunk group access code).

b. To Cancel an Automatic Callback:

1. Pick up the handset.

   • Dial tone is heard.

2. Dial the automatic callback cancellation code.

   • Confirmation tone is heard indicating the cancellation of the callback.

3. Hang up.

4.04 Outgoing Call Queuing – Standby. This feature allows you, upon dialing a busy outgoing trunk group, to enter into a queue and wait for a trunk to become available.

This feature applies to direct trunk group access only. For Least Cost Routing (LCR) access, refer to the feature, "Least Cost Routing."

a. To Activate Outgoing Call Queuing – Standby:

1. You have dialed a trunk group access code (e.g., 9, 82, 83, etc.) and encountered busy tone.

2. Do not hang up. Listen to busy tone until you hear a steady low tone (approximately five seconds). Steady low tone is confirmation that you have been placed in the callback queuing mode.

NOTE: Steady low tone is confirmation that callback queuing may be invoked, if desired, by hanging up. Refer to the feature, "Outgoing Call Queuing – Callback."

3. Again do not hang up. Listen to steady low tone (approximately five seconds) until you hear silence (or music, if provided). This is confirmation that you have been placed in the standby queuing mode.

4. Continue to listen to silence (or music, if provided) until a trunk becomes available.

   • Dial tone is heard when a trunk becomes available.

NOTE: You may convert from standby queuing to callback queuing, anytime, by hanging up.

5. Upon hearing dial tone, complete dialing the desired number (do not redial the trunk group access code).

SECTION 5.00 CONFERENCE FEATURES

5.01 Add-On Conference. This feature allows you to add a third party (inside or outside) to your conversation.

 a. To Add a Third Party:

  1. First, ask the other party to wait.

  2. Momentarily depress the hookswitch.

   • Recall dial tone is heard.
   • The party is placed on hold.

  3. Dial the desired number of the third party.

   • Ringback tone is heard.

NOTE: If busy tone is heard or the party does not answer, momentarily depress the hookswitch to return to the held call.

  4. When the called party answers, inform the party of the conference.

  5. Momentarily depress the hookswitch again.

   • A three-party conference is established.

NOTES: The user that originated the conference may release the third party by momentarily depressing the hookswitch.

   When more than one outside (trunk) call is added, transmission quality may be degraded.
  6. You may begin to talk.

5.02 Meet-Me Conference. This feature allows you to arrange a conference of up to seven extensions or four extensions and three outside lines. Outside parties are connected to the conference by the attendant.

 a. To Establish a Meet-Me Conference:

  1. Pick up the handset.

   • Dial tone is heard.

  2. Dial the party you want in the conference.

   • Ringback tone is heard.

  3. When the called party answers, inform the party to dial the Meet-Me Conference access code at a prearranged time. If the called party is from "outside" the SATURN System, inform the party to dial the SATURN attendant console and have the attendant to transfer the call to the conference by dialing the Meet-Me Conference access code.

NOTE: More than one Meet-Me Conference bridge may be assigned in the SATURN EPABX. The last digit of the Meet-Me Conference access code represents the selected conference bridge.

  4. Hang up.

  5. Repeat the above steps for up to seven conferees.

NOTES: The attendant only may enter the conference as an eighth conferee.

   The maximum number of outside parties allowed

in the conference at any one time is three (variable and assigned by data base management).

 b. To Enter the Conference:

  1. Pick up the handset.

   • Dial tone is heard.

  2. Dial the preannounced Meet-Me Conference feature access code.

   • Conference tone is heard; all conferees hear the conference tone as you enter the conference.

NOTES: Busy tone is heard if the conference is full.

   When more than one outside (trunk) call is added, transmission quality may be degraded.

  3. You may begin to talk.

5.03 Station Controlled Conference. This feature allows you to establish a conference of up to seven parties. As the Conference Master you can add members to the conference, remove members from the conference, leave the conference to consult with a conferee privately, call the attendant, or release from the conference and allow another conference member to take over conference mastership.

The maximum number of parties allowed in the conference is seven; however, the attendant can be added to the conference as an eighth party. The maximum number of outside parties allowed in the conference at any one time is three (variable and assigned by data base management). When more than one outside (trunk) call is added, transmission quality may be degraded.

 a. To Establish a Conference:

  1. Pick up the handset.

   • Dial tone is heard.

  2. Dial the Station Controlled Conference access code.

   • Recall dial tone is heard.

NOTE: Busy tone is heard if a conference circuit is not available.

  3. Dial the number of the party you want to add to the conference.

   • Ringback tone is heard.

NOTE: If the called party does not answer, is busy, or does not wish to be included in the conference, you must hang up. Your phone then rings (three-burst ringing) and, upon answer, you are connected back into the conference. You may proceed adding parties to the conference by momentarily depressing the hookswitch to leave the conference and following the above procedure beginning at Step 3.

  4. When the called party answers, inform the party of the conference.

    ● Ringback tone is removed.

5. Momentarily depress the hookswitch to add the party to the conference.

    ● Conference tone is heard; all conferees hear the conference tone as you and the other party enter the conference.

NOTES: If you attempt to add more than seven inside parties or add more than the allowed number of outside parties into the conference, reorder tone is heard for approximately 1½ seconds, after which you are reconnected to the "would be" conferee. To return the conference, momentarily depress the hookswitch.

Any party can leave the conference by hanging up.

6. To add each additional party to the conference, momentarily depress the hookswitch and follow the above procedure beginning at Step 3.

b. To Remove Any Conferee (Extension Only) From the Conference and Consult With the Conferee Privately:

1. Momentarily depress the hookswitch to leave the conference.

    ● Recall dial tone is heard.

2. Dial the Conference Member Remove code.

3. Dial the extension number of the conferee to be removed.

    ● You and the conferee are connected in a private talk state.

NOTE: As the Conference Master, you have the option of adding the party back to the conference or removing the conferree from the conference totally. To add the conferee back into the conference, momentarily depress the hookswitch; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings (three-burst ringing) and, upon answer, you are connected back into the conference.

c. To Remove the Last Member Added to the Conference and Consult With the Conferee Privately:

1. Momentarily depress the hookswitch to leave the conference.

    ● Recall dial tone is heard.

2. Dial the Last Member Added access code.

3. You and the conferee are connected in a private talk state.

NOTE: As the Conference Master, you have the option of adding the party back to the conference or removing the conferee from the conference totally. To add the conferee back into the conference, momentarily depress the hookswitch; you and the conferee reenter the conference. To remove the conferee from the conference, hang up. Your phone then rings (three-burst ringing) and, upon answer, you are connected back into the conference.

d. To Transfer the Position of Conference Mastership to Another Conferee (SATURN EPABX extension only):

1. Inform the desired conferee that you are releasing from the conference and that conference mastership can be gained by hookswitch flashing after you hang up.

2. Hang up.

NOTE: The first conferee to hookflash now becomes the Conference Master.

When all parties in the conference hang up, the conference is released.

SECTION 6.00   HOLD FEATURES

6.01 Consultation Hold. This feature allows you to place a call (inside or outside) on hold and originate another call on the same extension line.

   a. To Place a Party on Hold and Originate Another Call:

     1. First, ask the other party to wait.

     2. Momentarily depress the hookswitch.

- Recall dial tone is heard.
- The party is placed on hold.

NOTE: The hookswitch must be depressed and held for a short period, normally one-half to one second, then released. If the hookswitch is held for more than one second, it is the equivalent of hanging up.

     3. Dial the number of the desired party.

- Ringback tone is heard.

NOTE: If busy tone is heard or the called party does not answer, momentarily depress the hookswitch to return to the held call.

     4. When the called party answers, you may begin to talk.

   b. To Return to the Held Party:

     1. Wait until the consulted party hangs up.

- You are automatically reconnected to the previously held party.

     2. Resume your conversation.

6.02 Call Hold. This feature allows you to place any call (inside or outside) on hold and hang up without losing the call. After holding the call, you may originate or receive other calls on the same extension line and return to the held call or alternate between the two calls (holding one call while speaking to the other).

   a. To Place a Party on Hold:

     1. First, ask the other party to wait.

     2. Momentarily depress the hookswitch.

- Recall dial tone is heard.

     3. Dial the Call Hold access code.

- Confirmation tone is heard.
- The party is placed on "call hold."

     4. Hang up.

NOTE: If the held party is from "outside" the SATURN EPABX, you must return to the held party within a preset period of time or the call is recalled to your telephone (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

   b. To Return to a Held Call or Alternate Between Two Calls:

     1. Pick up the handset or momentarily depress the hookswitch (if connected to another call).

- Dial tone/recall dial tone is heard.

     2. Dial the Call Hold access code.

- You are reconnected to the previously held party and the other party, if any, is placed on hold.

     3. Resume your conversation.

6.03 Call Hold – Flip-Flop (Broker). This feature allows you, upon hearing a call waiting tone, to place the call in progress (inside or outside call) on hold and establish a connection to the waiting call. When no call is waiting, this feature allows you to place a call in progress on hold and originate another call on the same extension line. In either case, you can return to the held call or alternate between the two calls (holding one call while speaking to the other).

   a. To Place a Party on Hold and Answer a Waiting Call:

     1. First, ask the other party to wait.

     2. Momentarily depress the hookswitch.

- Recall dial tone is heard.

     3. Dial the Call Hold – Flip-Flop feature access code.

- You are connected to the waiting party and the other party is placed on hold.

     4. You may begin to talk.

   b. To Place a Party on Hold and Originate Another Call:

     1. First, ask the other party to wait.

     2. Momentarily depress the hookswitch.

- Recall dial tone is heard.

     3. Dial the Call Hold – Flip-Flop feature access code.

- Dial tone is heard.
- The party is placed on hold.

     4. Dial the phone number of the desired party.

- Ringback tone is heard.

NOTE: If the called party does not answer your call or the line is busy, momentarily depress the hookswitch to return to the held party.

     5. When the called party answers, you may begin to talk.

   c. To Return to a Held Party:

     1. Wait until the other party hangs up.

- You are automatically connected to the previously held party.

     2. Resume your conversation.

d. To Alternate Between Two Calls:

1. Momentarily depress the hookswitch.

   • You are reconnected to the previously held party and the other party is placed on hold.

NOTE: If you hang up while a call is on hold, the call is automatically recalled to your telephone (three-burst ringing is heard). To answer/return to the held call, pickup the handset.

2. Resume your conversation.

6.04 Call Park. This feature allows you to place a call (inside or outside) on "system hold" (referred to as parked) and return to the parked party from the same or another SATURN EPABX telephone. The call is placed in one of ten selected park locations. A unique access code is assigned to each park location.

a. To Park an Established Call:

1. First, ask the other party to wait.

2. Momentarily depress the hookswitch.

   • Recall dial tone is heard.

3. Dial the Call Park feature access code.

4. Dial the Call Park location code (0 to 9).

   • Confirmation tone is heard.
   • The call is parked at the dialed location.

NOTE: If the dialed call park location is not available, busy tone is heard. If this situation occurs, momentarily depress the hookswitch to return to the held party and repeat the process using a different location code.

5. Hang up. You are free to originate or receive other calls.

NOTE: If you park an outside call and you do not return to the party within a preset period of time, the call is automatically recalled to your telephone, if idle, otherwise to the attendant.

b. To Return to the Parked Call:

1. Pick up the handset at any non-restricted telephone.

   • Dial tone is heard.

2. Dial the Call Park feature access code.

3. Dial the Call Park location code which was used to park the call.

   • You are connected to the parked call.

NOTE: If reorder tone is heard, the held party has disconnected. If intercept tone is heard, the telephone is restricted from Call Park access.

4. Resume your conversation.

SECTION 7.00 PRIVACY FEATURES

7.01 Executive Override. This feature allows you, upon encountering busy tone, to enter into the existing conversation for the intended purpose of announcing a high priority or emergency call. Before the override occurs a warning tone is heard by the two conversing parties alerting them of the impending override.

   a. To Override a Busy Call:

      1. While listening to busy tone, momentarily depress the hookswitch.

        • Recall dial tone is heard.

      2. Dial the Executive Override feature access code.

        • Executive Override tone is heard followed by the connection to the existing conversation.

NOTE: Reorder tone is heard if the connection is denied (e.g., the telephone is assigned the Data Line Security or Executive Override Security feature).

      3. You may begin to talk.

NOTE: The Busy Override Injection tone is heard 8 to 20 seconds apart after overriding the call in progress.

7.02 Executive Override – Automatic. This feature allows you to camp-on to a busy extension and automatically break into the existing conversation if the called party does not answer your waiting call within a predetermined period of time. Break-in does not occur if the called telephone is assigned the Data Line Security or Executive Override Security feature.

   a. To Activate Executive Override – Automatic:

      1. You have dialed an extension number and special ringback tone is heard.

        • Special ringback tone indicates the extension line is busy and a call waiting tone is applied to the called party.

NOTE: If your telephone is also provided with the Internal Call Queuing – Standby feature and a busy extension is dialed, busy tone is heard instead of special ringback tone. You must wait until busy tone changes to low tone (approximately five seconds) and low tone changes to special ringback tone (approximately five seconds) before the called party's line is camped-on (call waiting tone is applied).

2. Wait until the called party answers the waiting call.

3. If the called party does not answer your waiting call within a predetermined time,

      • Executive Override tone is heard followed by a "break-in" to the existing conversation.

4. You may begin to talk.

NOTE: Busy Override Injection tone is heard 8 to 20 seconds apart after overriding the call in progress.

7.03 Do Not Disturb. This feature allows you to make your telephone busy to all incoming calls whenever you desire not to be disturbed.

   a. To Make Your Telephone Busy to all Incoming Calls:

      1. Pick up the handset.

        • Dial tone is heard.

      2. Dial the Do Not Disturb feature activation code.

        • Confirmation tone is heard.
        • Your telephone is now made busy to all incoming calls.

      3. Hang up.

You can originate calls while Do Not Disturb is in effect; however, other calls cannot wait at your telephone (e.g., individuals invoking the Internal Call Queuing – Standby feature). Message Waiting is not affected by activation of the Do Not Disturb feature.

Each time you pick up the handset recall dial tone is heard as a reminder that your telephone is in the busy mode.

   b. To Re-establish Normal Operation to Your Telephone:

      1. Pick up the handset.

        • Recall dial tone is heard indicating Do Not Disturb is in effect.

      2. Dial the Do Not Disturb cancellation code.

        • Confirmation tone is heard indicating cancellation of the Do Not Disturb feature.

      3. Hang up.

SECTION 8.00 SPEED CALLING FEATURES

8.01 Last Number Redial. This feature allows you to dial an access code and have the last phone number dialed from your telephone automatically redialed by the SATURN System. This feature is normally used after dialing a busy number or when the called party does not answer.

a. To Originate a Call to the Last Number Dialed From Your Telephone:

1. Pick up the handset.

    *   Dial tone is heard.

2. Dial the Last Number Redial feature access code.

    *   The SATURN System automatically dials the last number dialed from your telephone.
    *   Ringback or busy tone is heard depending on the on-/off-hook condition of destination station or availability of trunks.

NOTE: The SATURN System will redial only the last valid destination phone number. Unassigned extension numbers, partial dialed numbers, and feature access codes are not dialed.

3. When the called party answers, you may begin to talk.

8.02 Speed Calling – Group. This feature allows you to place speed calls to frequently called destinations. The destination numbers (normally outside telephone numbers) are stored in SATURN EPABX memory, along with a two-digit code associated with each number. These codes are normally listed in your company's telephone directory.

a. To Place a Speed Call:

1. Pick up the handset.

    *   Dial tone is heard.

2. Dial the Speed Calling – Group (1 to 4) feature access code.

3. Dial the two-digit code corresponding to the desired telephone number.

    *   Ringback or busy tone is heard depending on the on-/off-hook condition of destination station or availability of trunks.

NOTE: If dial tone is heard instead of ringback tone, sup-

plementary dialing is required to reach the desired destination.

4. When the called party answers, you may begin to talk.

8.03 Speed Calling – Individual. This feature allows you to establish a personal speed call list of up to 10 frequently called telephone numbers. Each number (internal or external to the SATURN System) is assigned a one-digit code (0 to 9) and programmed into SATURN memory from your telephone.

a. To Store or Change Speed Calling Codes:

1. Pick up the handset.

    *   Dial tone is heard.

2. Dial the Speed Calling – store/change code.

3. Dial the Speed Call code (0 to 9).

4. Dial the desired telephone number corresponding to the Speed Calling code. Be sure to enter the complete number including any prefix digits (e.g., **9-1-800**-342-8300).

    *   Confirmation tone is heard.

NOTES: For DTMF telephones, after dialing the telephone number, you can expedite receiving confirmation tone by depressing the # key.

The destination may be a number that requires supplementary dialing.

5. Hang up.

b. To Place a Speed Call:

1. Pick up the handset.

    *   Dial tone is heard.

2. Dial the Speed Calling – Individual feature access code.

3. Dial the one-digit speed calling code corresponding to the desired telephone destination number.

    *   Ringback or busy tone is heard depending on the on-/off-hook condition of destination station or availability of trunks.

4. When the called party answers, you may begin to talk.

SECTION 9.00   ADDITIONAL FEATURES

9.01 Call Transfer. This feature allows you to transfer a call to another destination (inside or outside party).

   a. To Transfer a Call:

   1. First, ask the other party to wait.

   2. Momentarily depress the hookswitch.

   - Recall dial tone is heard.

   3. Dial the desired destination number.

   - Ringback tone is heard.

NOTES: If busy tone is heard or the other party does not answer, momentarily depress the hookswitch to return to the held party.

When an outside party requests to be transferred to an extension and the extension is busy, you may invoke the Internal Call Queuing – Standby feature. This feature allows you to camp-on to the busy extension and wait for the party to answer.

If you desire to transfer the call before the called party answers, hang up the handset. The held party hears ringback tone and waits for the called party to answer. If the party being transferred is an outside party and the called party does not answer within a preset time, the call is automatically recalled to your telephone (three-burst ringing is heard), if idle, otherwise to the attendant. To answer/return to the held call, pick up the handset.

   4. When the called party answers, announce the transfer and hang up.

   - The call is transferred to the called party.

9.02 Call Tracing. This feature allows you to have a connected call's data recorded on the Station Message Detail Recording (SMDR) printer. The SMDR printer prints out the calling party's extension number (if an internal call) or the incoming trunk and trunk group number (if an external call), the called number, the date and time of the call, as well as a special character on the SMDR report that the call was traced.

   a. To Trace a Call:

   1. While connected to a call, momentarily depress the hookswitch.

   - Recall dial tone is heard.
   - The call is placed on Consultation Hold.

   2. Dial the Call Tracing feature access code.

   - Confirmation tone is heard indicating the call's data has been recorded.
   - You are automatically reconnected to the call.

NOTE: Reorder is heard if your telephone is not allowed to activate this feature.

   3. Hang up or continue talking to the other party.

9.03 Least Cost Routing. The Least Cost Routing (LCR) feature is used in some SATURN EPABX Systems to route outgoing (trunk) calls over the least costly route available at the time of call placement.

   a. To Place an Outside Call:

   1. Pick up the handset.

   - Dial tone is heard.

   2. Dial the LCR access code if system is so equipped, otherwise dial the trunk access code.

   - Dial tone is heard.

   3. Dial the outside destination number.

   - Confirmation tone (three-bursts of tone) is heard indicating the dialed number has been accepted and a route has been found.
   - The SATURN System then dials the destination number. Ringback tone is heard if the destination number is idle. Busy tone is heard if the destination number is busy.

NOTES: If Route Advance Tone (one short burst of tone) is heard immediately after dialing the destination number, wait until you hear confirmation tone. Route Advance tone indicates that the SATURN System has accepted the dialed number and is searching for an idle route. Additional Route Advance Tones may be heard as the SATURN System searches for alternate routes to your destination.

If Expensive Facility Tone (one burst of tone) is heard immediately after hearing confirmation tone, the SATURN System has found a more expensive route. If you desire not to place the call over a more expensive route, hang up.

If a route is not found within a preset period of time, the SATURN System provides a steady burst of low tone (if Callback Queuing is assigned) to indicate that Callback Queuing can be invoked, if desired. Callback Queuing allows you to hang up and be called back (three-burst ringing is heard) when a route becomes available. To answer the callback, pick up the handset, listen for confirmation tone followed by ringback tone. When the called party answers, you may begin to talk. If you do not answer the callback attempt within approximately 18 seconds, the callback is temporarily cancelled. Additional callbacks (maximum of nine) will be attempted every five minutes.

   4. When the called party answers, you may begin to talk.

   b. To Cancel Callback Queuing:

   1. Pick up the handset.

   - Dial tone is heard.

   2. Dial the automatic callback cancellation code.

   - Confirmation tone is heard indicating the cancellation of the callback.

3. Hang up.

9.04 Message Waiting. This feature allows you to send a message waiting indication to a party at another extension. This feature also provides a means for you to respond to the message or cancel the message.

a. To Activate Message Waiting After Dialing a Do-Not-Answer or Busy Extension:

  1. While listening to ringback tone or busy tone, momentarily depress the hookswitch.

     • Recall dial tone is heard.

  2. Dial the Message Waiting activation code.

     • Confirmation tone is heard.
     • The message waiting lamp flashes at the called telephone.

NOTE: If the called telephone is unable to accept any more messages, busy tone is heard. If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

  3. Hang up.

b. To Activate Message Waiting Without First Attempting to Call the Other Party:

  1. Pick up the handset.

     • Dial tone is heard.

  2. Dial the Message Waiting activation code.

  3. Dial the extension number of the party you wish to leave a message waiting indication.

     • Confirmation tone is heard.

NOTE: If the called telephone is unable to accept any more messages, busy tone is heard. If the called telephone does not have the capability to receive message waiting indications, reorder tone is heard.

  4. Hang up.

c. To Respond to a Message at Your Telephone:

  1. The message waiting lamp flashes at your telephone.

  2. Pick up the handset.

     • Dial tone is heard.

  3. Dial the Message Waiting – Automatic Callback access code.

     • The SATURN System automatically dials the extension number of the party that sent the message.
     • Ringback tone is heard.

NOTE: If busy tone is heard, the extension is busy; try initiating the callback at a later time.

  4. When the party answers, identify yourself and ask for the message.

     • At the completion of the automatic callback, the

message is automatically cancelled (lamp extinguishes).

d. To Cancel a Message That is Waiting at Your Telephone:

  1. Pick up the handset.

     • Dial tone is heard.

  2. Dial the Message Waiting – Received cancellation code.

     • Confirmation tone is heard.
     • The message waiting lamp extinguishes if no other message exists.

  3. Hang up.

e. To Cancel a Message You Sent to Another Telephone:

  1. Pick up the handset.

     • Dial tone is heard.

  2. Dial the Message Waiting – Sent cancellation code.

  3. Dial the extension number to which the message was sent.

     • Confirmation tone is heard indicating that the message is cancelled.

NOTE: Reorder tone is heard instead of confirmation tone if an invalid access code is dialed or the message was already cancelled at the called telephone.

  4. Hang up.

9.05 Mobile Authorization Codes. This feature allows you to place a call from a telephone that otherwise would be restricted by its Class-of-Service. An authorization code which is assigned to a Class-of-Service with its own call restrictions must be dialed.

a. To Override a Call Restriction:

  1. Pick up the handset.

     • Dial tone is heard.

  2. Dial the mobile authorization access code.

  3. Dial an authorization code.

     • Recall dial tone is heard indicating that the Class-of-Service assigned to the dialed authorization code is now in effect.

NOTE: Intercept tone is heard if an invalid authorization code is dialed.

  4. Place the call previously restricted.

NOTE: If you are still restricted from placing the call, the Class-of-Service assigned to the dialed authorization code may not allow it.

After you have completed the call and hung up, the Class-of-Service defined by the authorization code is removed and the telephone's original Class-of-Service returns active.

9.06 SMDR Account Codes. Account codes are used with SMDR on preselected incoming and outgoing trunk calls. Two types of account codes are used: standard (or default) account codes and special account codes. Default account codes are assigned to stations and trunks and are automatically activated when you originate or receive a call over one of these groups. Special account codes must be entered from your telephone to complete an otherwise restricted outgoing call.

   a. To Enter a Special Account Code:

      1. After dialing a trunk access code (e.g., "9" for outside) or an LCR access code, if you hear recall dial tone, enter a valid account code.

         • Dial tone is heard.

NOTE: The account code must be entered within a preset period of time or else the trunk is released and reorder tone is heard.

      2. Complete the call by dialing the desired destination number (do not redial the trunk access code).

9.07 Stop Hunt. This feature allows a sequential hunt group to be temporarily reduced in size.

   a. To Shorten the Sequential Hunt Group:

      1. Dial the Stop Hunt activation code from the extension at which all succeeding extensions are to be excluded from the hunting list. For example, if the hunt sequence includes extensions 234-235-236-237-238-239 and you want to exclude extensions 238 and 239, dial the Stop Hunt access code from extension 237.

         • Confirmation tone is heard indicating the successful activation of the Stop Hunt feature.

      2. Hang up.

   b. To Return the Hunt Group to Full Size:

      1. Dial the Stop Hunt cancellation code from the extension that activated Stop Hunt.

         • Confirmation tone is heard indicating successful cancellation of the Stop Hunt feature.

      2. Hang up.

9.08 Universal Night Answer – Zoned. This feature allows you to answer incoming calls ringing the night bell(s) when the SATURN EPABX System is in the night service mode.

   a. To Answer an Incoming Call:

      1. You hear the night bell(s) ringing.

      2. Pick up the handset.

         • Dial tone is heard.

      3. Dial the appropriate Universal Night Answer zone access code.

         • A talking connection is established between you and the incoming party.

NOTE: If reorder tone is heard, the night call already has been answered. If intercept tone is heard, you are not allowed to answer incoming night calls from your telephone.

      4. You may begin to talk.

9.09 Voice Paging Access – Zoned and Area. This feature allows you to page another party over the loudspeaker system.

   a. To Page a Party:

      1. Pick up the handset.

         • Dial tone is heard.

      2. Dial the appropriate Voice Paging zone, area (combination of zones), or all zones access code.

         • Confirmation tone is heard indicating connection to the loudspeaker system.

      3. Speak slowly and distinctly into the handset.

      4. Hang up.

Table 9.00 Feature Access Codes

FEATURE	CODE	FEATURE	CODE
CALL FORWARDING FEATURES		**SPEED CALLING FEATURES**	
Call Forwarding – All Calls		Last Number Redial	_____
To Activate	_____		
To Cancel	_____	Speed Calling – Individual	
		To Store Or Change	_____
Call Forwarding – Busy Lines		To Place A Call	_____
To Activate	_____		
To Cancel	_____	Speed Calling – Group	_____
		Group 1	_____
Call Forwarding – No Answer		Group 2	_____
To Activate	_____	Group 3	_____
To Cancel	_____	Group 4	_____
Call Forwarding – Secretarial		**ADDITIONAL FEATURES**	
To Activate	_____		
To Cancel	_____	Call Tracing	_____
Call Forwarding to Public Network		Least Cost Routing	
To Activate	_____	To Access	_____
To Cancel	_____	To Cancel Callback	_____
Call Forwarding – Return	_____	Message Waiting	
CALL PICKUP FEATURES		To Activate	_____
		To Respond	_____
Call Pickup – Directed	_____	To Cancel Sent Message	_____
		To Cancel Received Message	_____
Call Pickup – Group	_____		
CALL QUEUEING FEATURES		Stop Hunt	
		To Activate	_____
Internal Call Queuing – Callback		To Cancel	_____
To Cancel Callback	_____		
		Universal Night Answer	
Outgoing Call Queuing – Callback		All Zones	_____
To Cancel Callback	_____	Zone 1	_____
CONFERENCE FEATURES		Zone 2	_____
		Zone 3	_____
Meet-Me Conference	_____	Zone 4	_____
Station Controlled Conference		Voice Paging Access	
To Access Conference	_____	Zone 1	_____
To Remove Any Conferee	_____	Zone 2	_____
To Remove Last Conferee	_____	Zone 3	_____
		Zone 4	_____
HOLD FEATURES		Zones 1 and 2	_____
		Zones 1 and 3	_____
Call Hold	_____	Zones 1 and 4	_____
		Zones 2 and 3	_____
Call Hold – Flip-Flop (Broker)	_____	Zones 2 and 4	_____
		Zones 3 and 4	_____
Call Park	_____	Zones 1, 2, and 3	_____
PRIVACY FEATURES		Zones 1, 2, and 4	_____
		Zones 1, 3, and 4	_____
Executive Override	_____	Zones 2, 3, and 4	_____
		Zones 1, 2, 3, and 4	_____
Do Not Disturb			
To Activate	_____		
To Cancel			

Table 9.01 Feature Instruction Guide

FEATURE	PROCEDURE
CALL FORWARDING – FEATURES	
Call Forwarding – All Calls – To Forward all incoming calls:	Pick up handset (dial tone) – Dial Call Forwarding All Calls activation code – Dial forwarded-to extension number (confirmation tone) – Hang up.
– To cancel forwarding:	Pick up handset (dial tone) – Dial Call Forwarding cancellation code (confirmation tone) – Hang up.
Call Forwarding – Busy Lines – To forward incoming calls when your telephone is busy:	Pick up handset (dial tone) – Dial Call Forwarding Busy Lines activation code – Dial forwarded-to extension number (confirmation tone) – Hang up.
– To cancel forwarding:	Pick up handset (dial tone) – Dial Call Forwarding cancellation code (confirmation tone) – Hang up.
Call Forwarding – No Answer – To forward incoming calls not answered at your telephone:	Pick up handset (dial tone) – Dial Call Forwarding No Answer activation code – Dial forwarded-to extension number (confirmation tone) – Hang up.
– To cancel forwarding:	Pick up handset (dial tone) – Dial Call Forwarding cancellation code (confirmation tone) – Hang up.
Call Forwarding to Public Network – To forward all incoming calls to an outside number:	Pick up handset (dial tone) – Dial Call Forwarding to Public Network activation code – Dial outside destination number (confirmation tone) – Hang up.
– To cancel forwarding:	Pick up handset (dial tone) – Dial Call Forwarding cancellation code (confirmation tone) – hang up.
Call Forwarding – Secretarial – To forward all incoming calls to the preassigned extension:	Pick up handset (dial tone) – Dial Call Forwarding Secretarial activation code (confirmation tone) – Hang up.
– To cancel forwarding:	Pick up handset (dial tone) – Dial Call Forwarding cancellation code (confirmation tone) – Hang up.
Call Forwarding – Return – To transfer a call back to the forwarding-telephone:	Momentarily depress hookswitch (recall dial tone) – Dial Call Forwarding Return access code (ringback tone) – When party answers, announce the transfer – Hang up.
CALL PICKUP FEATURES	
Call Pickup – Directed – To pick up a call:	Pick up handset (dial tone) – Dial Call Pickup Directed access code – Dial extension number where call is ringing – You may begin to talk.
Call Pickup – Group – To pick up a call in your pickup group:	Pick up handset (dial tone) – Dial Call Pickup Group access code – You may begin to talk.
CALL QUEUING FEATURES	
Internal Call Queuing – Callback – To establish an automatic callback:	Busy tone is heard after dialing busy extension – Do not hang up (busy tone changes to low tone) – Hang up – When three-burst ringing is heard, pick up handset (ringback tone) – When called party answers, you may begin to talk.
– To cancel an automatic callback:	Pick up handset (dial tone) – Dial automatic callback cancellation code (confirmation tone) – Hang up.
Internal Call Queuing – Standby – To establish a standby queuing condition:	Busy tone is heard after dialing busy extension – Do not hang up (busy tone changes to low tone) – Do not hang up (low tone changes to special ringback tone) – When called party answers, you may begin to talk.

Table 9.01 Feature Instruction Guide (Continued)

FEATURE	PROCEDURE
CALL QUEUING FEATURES (Con't.)	
Outgoing Call Queuing – Callback	
– To establish an automatic callback condition:	Busy tone is heard after dialing trunk access code – Do not hang up (busy tone changes to low tone) – Hang up – When three-burst ringing is heard, pick up handset (dial tone) – Complete dialing number.
– To cancel an automatic callback:	Pick up handset (dial tone) – Dial automatic callback cancellation code (confirmation tone) – Hang up.
Outgoing Call Queuing – Standby	
– To establish a standby queuing condition:	Busy tone is heard after dialing trunk access code – Do not hang up (busy tone changes to low tone) – Do not hang up (low tone changes to silence or music, if provided) – When dial tone is heard, complete dialing the number.
CONFERENCE FEATURES	
Add-On Conference	
– To add a third party:	Momentarily depress hookswitch (recall dial tone) – Dial telephone number of third party (ringback tone) – When party answers, inform party of conference – Momentarily depress hookswitch again to add party to conference – You may begin to talk.
Meet-Me Conference	
– To enter the conference:	Pick up handset (dial tone) – Dial Meet-Me Conference access code and bridge code (conference tone) – You may begin to talk.
Station Controlled Conference	
– To access a conference circuit:	Pick up handset (dial tone) – Dial Station Controlled Conference access code (recall dial tone)
– To add parties to the conference:	Momentarily depress hookswitch to leave conference (recall dial tone) – Dial telephone number of desired party (ringback tone) – When party answers, inform party of conference – Momentarily depress hookswitch to add party to conference (conference tone) – Repeat procedure to add other parties to conference.
– To remove any conferee from the conference and consult with the conferee privately:	Momentarily depress hookswitch to leave conference (recall dial tone) – Dial Conference Member Remove code – Dial extension number of conferee to be removed – You may begin to talk.
– To remove the last member added to the conference and consult with the conferee privately:	Momentarily depress hookswitch to leave conference (recall dial tone) – Dial Last Member Added access code – You may begin to talk.
– To transfer conference mastership:	Inform desired conferee that you are releasing from the conferee and that conference mastership can be gained by hookswitch flashing after you hang up.
HOLD FEATURES	
Consultation Hold	
– To hold a call and originate another call:	Momentarily depress hookswitch (recall dial tone) – Dial destination number (ringback tone) – When party answers, you may begin to talk.
– To return to the held call:	Wait until consulted party hangs up and you are automatically connected to party.
Call Hold	
– To hold a call:	Momentarily depress hookswitch (recall dial tone) – Dial Call Hold access code (confirmation tone) – Hang up.
– To return to the held call or alternate between two calls:	Pick up handset or momentarily depress hookswitch, if connected to another call (dial tone/recall dial tone) – Dial Call Hold access code (automatic reconnection to held party and other party, if any, is placed on hold) – Resume your conversation.

Table 9.01   Feature Instruction Guide (Continued)

FEATURE	PROCEDURE
HOLD FEATURES (Con't.)	
Call Hold – Flip-Flop (Broker) – To hold a call and answer a waiting call:	Momentarily depress hookswitch (recall dial tone) – Dial the Call Hold Flip-Flop access code – You may begin to talk.
– To hold a call and originate another call:	Momentarily depress hookswitch (recall dial tone) – Dial the Call Hold Flip-Flop access code (dial tone) – Dial number of party (ringback tone) – When party answers, you may begin to talk.
– To return to a held call:	Wait until other party hangs up (automatic reconnection to party) – Resume your conversation.
– To alternate between two calls:	Momentarily depress hookswitch (automatic reconnection to other party) – Resume your conversation.
Call Park – To park (hold) a call:	Momentarily depress hookswitch (recall dial tone) – Dial Call Park access code – Dial Code Park location code (confirmation tone) – Hang up.
– To return to the parked call:	Pick up handset (dial tone) – Dial Call Park access code – Dial Call Park location code – Resume your conversation.
PRIVACY FEATURES	
Executive Override – To override a busy call:	While listening to busy tone, momentarily depress hookswitch (recall dial tone) – Dial Executive Override access code (executive override tone) – You may begin to talk.
Executive Override – Automatic – To activate:	Special ringback tone is heard after dialing an extension – Wait until called party answers waiting call – If called party does not answer your call within a preset period of time (executive override tone) – You may begin to talk.
Do Not Disturb – To make your telephone busy to incoming calls:	Pick up handset (dial tone) – Dial Do Not Disturb activation code (confirmation tone) – Hang up.
– To re-establish normal operation to your telephone:	Pick up handset (recall dial tone) – Dial Do Not Disturb cancellation code (confirmation tone) – Hang up.
SPEED CALLING FEATURES	
Last Number Redial – To originate a call to the last number dialed from your telephone:	Pick up handset (dial tone) – Dial Last Number Redial access code (ringback tone) – When called party answers, you may begin to talk.
Speed Calling – Group – To place a speed call:	Pick up handset (dial tone) – Dial Speed Calling Group access code – Dial code corresponding to desired telephone number (ringback tone) – When called party answers, you may begin to talk.
Speed Calling – Individual – To store or change speed calling codes:	Pick up handset (dial tone) – Dial Speed Calling Store/Change access code – Dial a speed call code (0 to 9) – Dial desired telephone number (confirmation tone) – Hang up.
– To place a speed call:	Pick up handset (dial tone) – Dial Speed Calling Individual access code – Dial code corresponding to desired telephone number (ringback tone) – When called party answers, you may begin to talk.

Table 9.01   Feature Instruction Guide (Continued)

FEATURE	PROCEDURE
ADDITIONAL FEATURES	
Call Transfer – To transfer a call:	Momentarily depress hookswitch (recall dial tone) – Dial destination number (ring-back tone) – When party answers, announce the transfer – Hang up.
Call Tracing – To trace a call:	Momentarily depress hookswitch (recall dial tone) – Dial Call Trace access code (confirmation tone, reconnection to call) – Hang up or continue to talk.
Least Cost Routing – To place an outside call:	Pick up handset (dial tone) – Dial LCR access code (dial tone) – Dial destination number (confirmation tone then ringback tone) – When party answers, you may begin to talk.
– To cancel callback queuing:	Pick up handset (dial tone) – Dial automatic callback cancellation code (confirmation tone) – Hang up.
Message Waiting – To activate message waiting after dialing a do-not-answer or busy extension:	Momentarily depress hookswitch (recall dial tone) – Dial Message Waiting activation code (confirmation tone) – Hang up.
– To activate message waiting without first attempting to call the other party:	Pick up handset (dial tone) – Dial Message Waiting activation code – Dial extension number of party (confirmation tone) – Hang up.
– To respond to a message at your telephone:	Pick up handset (dial tone) – Dial Message Waiting Automatic Callback access code (ringback tone) – When party answers, identify yourself and ask for the message.
– To cancel a message that is waiting at your telephone:	Pick up handset (dial tone) – Dial Message Waiting Received cancellation code (confirmation tone) – Hang up.
– To cancel a message you sent to another telephone:	Pick up handset (dial tone) – Dial Message Waiting Sent cancellation code (confirmation tone) – Hang up.
Mobile Authorization Codes – To override a call restriction or feature:	Pick up handset (dial tone) – Dial Mobile Authorization access code – Dial an Authorization Code (recall dial tone) – Place the call or activate the feature previously restricted.
SMDR Account Codes – To enter an account code:	After dialing a trunk access code and recall dial tone is heard, dial a valid account code (dial tone) – Complete dialing destination number.
Stop Hunt – To shorten the hunt group:	Dial the Stop Hunt activation code from extension at which all succeeding extensions are to be excluded from the hunt list (confirmation tone) – Hang up.
– To return, the hunt group to full size:	Dial the Stop Hunt cancellation code from extension at which Stop Hunt was activated (confirmation tone) – Hang up.
Universal Night Answer – Zoned – To answer an incoming call:	You hear the night bells – Pick up handset (dial tone) – Dial appropriate zone access code – You may begin to talk.
Voice Paging Access – **Zoned and Area** – To page a party:	Pick up handset (dial tone) – Dial appropriate zone or zone combination access code (confirmation tone) – Speak slowly and distinctly into handset – Hang up.

SATURN® EPABX

OC1E

ATTENDANT CONSOLE DESCRIPTION AND OPERATING INSTRUCTIONS

* **TRUNK ACTIVITY AUDIT REPORT** *

TRUNK GROUP NUMBER 3

TRK NUM	INC ATTEMPT	INC CCS	INC HT/A	OUT ATTEMPT	OUT CCS	OUT HT/A	FAIL ATTEMPT	GLARE ATTEMPT
0	66	91.1	138	0	1.9	****	0	0
1	50	65.6	131	0	1.0	****	0	0
2	30	41.0	136	0	0.6	60	0	0
3	12	27.3	227	0	0.7	70	0	0
4	4	2.0	50	0	0.0	0	0	0

* **DATA RESOURCE USAGE (IN CCS)** *

MODM PL 1 USAGE	6	MODM PL 2 USAGE	1
MODM PL 1 QUEUE	0	MODM PL 2 QUEUE	0

* **DATA EVENT PEG COUNTERS** *

DATA CALL BUSY	0	DATA CALL ATTEMPT	19
DATA CALL COMPLETE	97	DATA CALL FAILURE	2
MODM PL 1 ATTEMPTS	4	MODM PL 2 ATTEMPTS	2
MODM PL 1 BUSY	1	MODM PL 2 BUSY	0
MODM PL 1 Q STANDBY	1	MODM PL 2 Q STANDBY	0

* **DATA TRUNK GROUP REPORT** *

	INC DATA CALLS			OUT DATA CALLS			DATA STANDBY QUEUING			
TG	PEGS	USAGE	HT/A	PEGS	USAGE	HT/A	PEGS	USAGE	HT/A	ATB
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0

REPORT COMPLETE

NOTES: The above sample report indicates the traffic data was accumulated from 08:00 to 12:00 hours on November 15, 1984.

HT/A is the total usage in seconds divided by the total number of pegs. When " **** " is printed, one or more trunk calls were established when the traffic metering session began but no trunk calls were originated during the traffic metering period.

%OCC (Percent of Occupancy) – The percent of time in use of the trunks in a particular trunk group during the traffic metering period.

Figure 7.00 Traffic Metering Report Sample (Continued)

CONTENTS

LIST OF FIGURES

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES

SECTION 1.00 INTRODUCTION

1.01 Purpose of Practice. This practice is designed as an aid in the operation of the SATURN Electronic Private Automatic Branch Exchange (EPABX) Attendant Console. The SATURN System is designed to support multiple-console operation. This practice contains a general description on the operation and physical characteristics of the console, as well as the use of all controls and indicators. Included are step-by-step operating instructions for all call processing and special function procedures. Table 1.00 lists the mnemonics, and their definitions, used in this practice.

1.02 Purpose of Equipment. The console is designed to improve speed of service and efficiency by combining call han-

dling flexibility and simplicity of operation. The console is used primarily to answer external system calls (i.e.; incoming trunk calls) and to extend them to the appropriate internal stations. The console may also be used to assist in placing outgoing calls and handling special functions such as paging and establishing conference calls.

1.03 Siemens SATURN Practices. A number of Siemens practices are available pertaining to the SATURN System. Use either SATURN II EPABX Practices Documentation Index, A30808-X5049-A190-±B987 or SATURN III EPABX Practices Documentation Index, A30808-X5050-A190-±B987 depending upon the applicable system used.

Table 1.00   Mnemonics Used In This Practice

MNEMONIC	DEFINITION
ACCT	Account
ACOF	Attendant Control Of Facility
ACOF-TG	Attendant Control Of Facility — Trunk Group
ANA	Assigned Night Answering
ANS	Answer
ATT	Attendant
ATT RLS	Attendant Release
AUD ON/OFF	Audible On/Off
BY-OV	Busy Override
CMU	Customer Memory Update˙
CO	Central Office
CONF	Conference
CW	Call Waiting
DEST	Destination
DID	Direct Inward Dialing
DISA	Direct Inward System Access
DIT	Dedicated Incoming Trunk
DPI	Digital Premium Instrument
EPABX	Electronic Private Automatic Branch Exchange
EXC	Exclude
INC	Incoming
IPM	Intervals Per Minute
LCR	Least Cost Routing
LDN	Listed Directory Number
LED	Light Emitting Diode
MAJ ALM	Major Alarm
MDF	Main Distribution Frame
MIN ALM	Minor Alarm
MSG CANCEL	Message Cancel
MSG SET	Message Set
NAK	Negative Acknowledgement
OPR	Operator
PC	Printed Circuit
RCL	Recall
RLS	Release
SCC	Specialized Common Carrier
SMDR	Station Message Detail Recording
SMX	Signal Multiplexer
SNAP	Special Night Answering Position
SOAP	Special Overflow Answering Position
SRC	Source
TRK GRP	Trunk Group
UNA	Universal Night Answering

SECTION 2.00 GENERAL DESCRIPTION

2.01 Operational Characteristics. The console, for local applications, can operate efficiently up to 2000 feet (610 meters) away from the system while deriving power directly from the system's power. For remote applications, the console can also operate efficiently up to 4000 feet (1219 meters) away from the system by deriving power from an optional AC-to-DC adapter externally located from the console housing. The cabling from the Main Distribution Frame (MDF) to the console location is accomplished by a single 2-pair (24AWG wire) cable.

2.02 Physical Characteristics. The console's circuitry is packaged in a modernly-styled plastic housing measuring 18.50 inches (46.99 centimeters) in length, 10.42 inches (26.47 centimeters) in width, and 5.15 inches (13.08 centimeters) in height. The console consists of three major assemblies which are briefly described below and shown in Figure 2.00.

a. Handset Assembly. The console comes equipped with a light-weight handset assembly containing the attendant's receiving and transmitting circuits. The handset is attached to a six-foot cord terminated with a dual switchboard plug which inserts into the connecting jacks. For convenience, one set of jacks is provided on the left and right side of the console housing. The two sets of jacks can also accept a headset assembly. When a headset assembly is required, the following types (or other electrically equivalent) are recommended:

1. Plantronics: STARSET — Hy Gain Model.
2. Roanwell: RS70 and RS71 Models.
3. Northern Electric: VENTURA I (equipped with adjustable gain) Model.

Normally only one handset/headset assembly is used with each console due to loss of transmission power; however, a second handset/headset assembly can be used for training or monitoring purposes, providing that it does not contain any transmitting circuitry.

b. Display Assembly. The upper portion of the console contains the display assembly which provides the necessary information on calls, as well as the ability to monitor system and console conditions. The display assembly is mounted on a single printed circuit (PC) module which is located behind a smoked-gray panel. This panel conceals the display indicators, except when illuminated, to permit indications to be more easily recognized. This assembly consists of one 40-character alphanumeric display unit and 30 Light-Emitting-Diode (LED) indicators.

c. Keyboard Assembly. The lower portion of the console contains the keyboard assembly which allows processing of calls and accessing of a number of special function features. The keyboard assembly is mounted on a single PC module, located behind the console's faceplate, and positioned in a slanting angle to reduce any glare which might be caused by high ambient lighting conditions. The keyboard assembly consists of one digital 12-button keypad and 34 non-locking function-type keys containing one internal red LED each. The audio tone speaker and volume control knob for the console's audible signal are also included in the keyboard assembly.
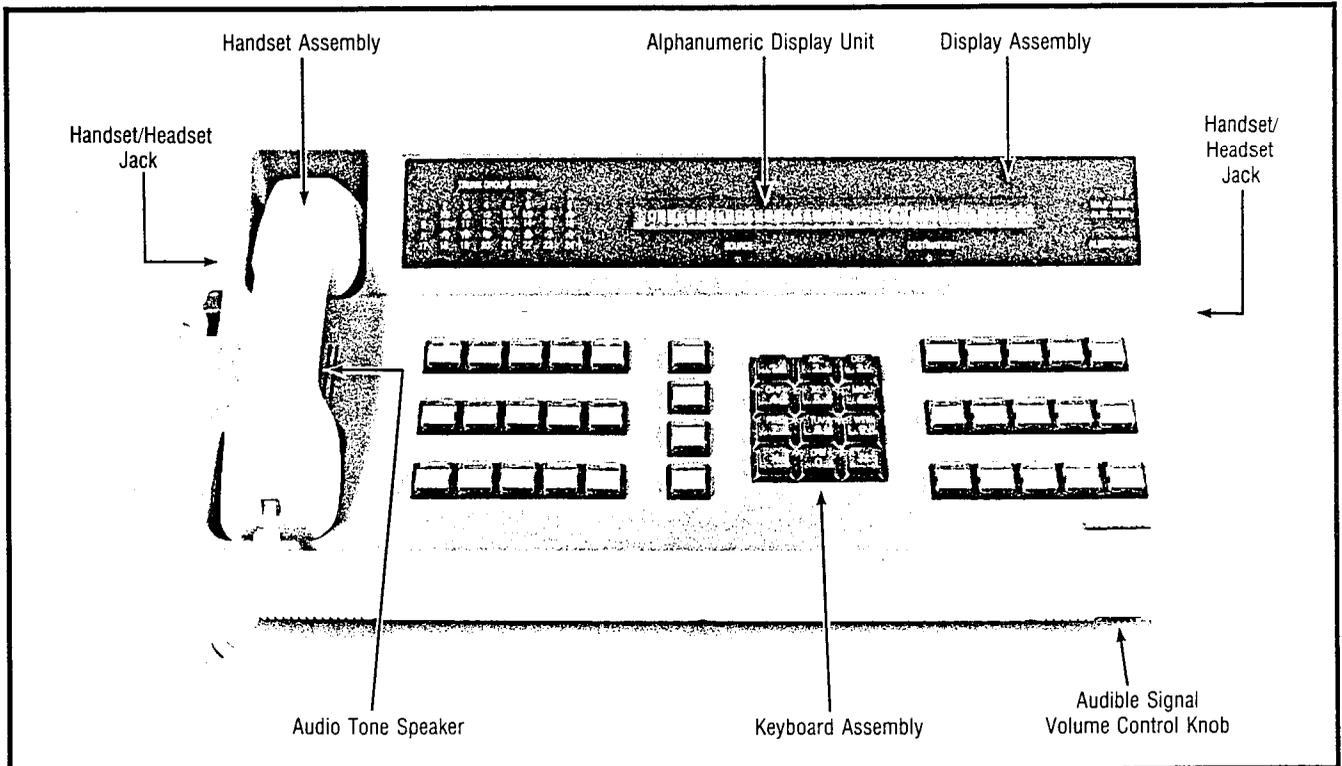
Figure 2.00   Basic Assembly of Attendant Console

SECTION 3.00 CONTROLS AND INDICATORS

3.01 General. Figure 3.00 shows a typical console layout of the standard factory-assigned controls and indicators. The illustrated controls and indicators are described in the following subparagraphs according to their categorization.

3.02 Console and System Indicators. The Console and System Indicators, shown in Figure 3.00, are used to monitor system and console conditions. The indicators are described below according to their classification.

a. TRUNK GROUP STATUS Indicators. Each attendant console is equipped with a total of 24 trunk busy LED indicators which provide visual indication on the status condition of trunks in a particular trunk group. These LED indicators represent trunk groups 1 through 24 in the system. Trunk groups 0 and 25 through 31 may not be assigned to the trunk group busy LED indicators; therefore, trunk groups that require a busy LED indicator on the console(s) should be assigned to trunk groups 1 through 24. The TRUNK GROUP STATUS indicators provide three illumination states to indicate the following conditions:

   1. LED extinguished — Indicates that the number of idle trunks remaining in that particular trunk group are greater than the customer-set threshold value.

   2. LED flashing (@ 60-IPM) — Indicates that the number of idle trunks remaining in that particular trunk group have reached or exceeded the customer-set threshold value.

   3. LED steadily lit — Indicates that all trunks in that particular trunk group are busy.

NOTE: The customer-set threshold value for each trunk group is entered as an absolute number of idle trunks remaining in the trunk group.)

b. MAJ ALM (Major Alarm) Indicator. The MAJ ALM indicator is a single red LED which, when steadily lit, provides visual indication that the SATURN System is in a non-operative state and the system's failure transfer relay subsystem, if equipped, is active. Immediate maintenance personnel attention is required when the MAJ ALM indicator is steadily lit. Note that certain major alarm conditions could prevent the MAJ ALM indicator from being steadily lit. Refer to the applicable SATURN II or III EPABX Maintenance and Troubleshooting practice for descriptions of the major alarm conditions. After the major alarm condition is cleared, the MAJ ALM indicator is extinguished and the power failure transfer feature returns to an idle state.

c. MIN ALM (Minor Alarm) Indicator. The MIN ALM indicator is a single LED which, when steadily lit, provides visual indication that a minor alarm condition(s) has occurred and/or is present in the system and may require maintenance personnel attention. Malfunctions causing minor alarm conditions can be shown in the Call Information Display by depressing the optional customer-assignable MIN ALM key.

d. ALERT Indicator. The ALERT indicator is a single LED which, when flashing, provides visual indication when the console has received a call on one of the Call Answer Keys.

e. CW (Call Waiting) Indicator. The CW indicator is a single LED which provides visual indication when calls are waiting for service by the attendant. The CW indicator provides three illumination states to indicate the following conditions:

   1. LED extinguished — Indicates no calls waiting for service.

   2. LED flashing (@ 60-IPM) — Indicates between one and less than the customer-set threshold value of calls waiting for service.

   3. LED steadily lit — Indicates that the customer-set threshold value of calls waiting for service has either been equaled or exceeded.

3.03 Call Information Display. The Call Information Display, shown in Figure 3.00, provides visual information on calls, as well as pertinent system conditions. This visual information is accomplished via a single 40-character alphanumeric display unit with two associated LED indicators, SOURCE and DESTINATION. The Call Information Display shows the following information:

   1. Call waiting condition, plus present date and time of day in standard or military time form. (Note: This call waiting display is shown when the console is in an idle state.)

   2. Call type (i.e.; INC, OPR, or RCL).

   3. Source (calling party) identity.

   4. Destination (attendant-dialed party) identity.

   5. Status condition of source and destination parties.

   6. Minor alarm conditions.

   7. Special feature functions.

   8. Standby Common Control Failure Display (SATURN III only)

The associated SOURCE and DESTINATION LED indicators, via various illumination combinations, indicate how the information being shown in the alphanumeric display unit has been partitioned for display purposes. These illumination combinations and their meanings are as follows:

   1. SOURCE-LED OFF and DESTINATION-LED OFF — Indicates all 40 characters display general system information.

   2. SOURCE-LED ON and DESTINATION-LED OFF — Indicates all 40 characters display source party information.

Console and System
Indicators

Call Information
Display

Dialing Keypad

Figure 3.00 Console and System Indicators, Call Information Display, and Dialing Keypad

3. SOURCE-LED OFF and DESTINATION-LED ON — Indicates all 40 characters display destination party information.

4. SOURCE-LED ON and DESTINATION-LED ON — Indicates that the 20 characters on the left side display source party information and the 20 characters on the right side display destination party information.

3.04 Audible Signal Volume Control Knob. The Audible Signal Volume Control Knob, shown in Figure 2.00, is used to control the level of loudness of the audible signal emitted from the audio tone speaker. The audio tone speaker is used to announce the presence of calls on the Call Answer Keys.

3.05 Dialing Keypad. The Dialing Keypad, shown in Figure 3.00, is a digital 12-button keypad containing the digits 0 through 9 and the symbols * and #. The Dialing Keypad is used to dial internal station numbers, outside telephone numbers, and customer-assigned feature access codes.

3.06 Call Answer Keys. The Call Answer Keys, shown in Figure 3.01, are four keys used to answer calls placed on the particular console by the system. These four keys are described below according to their classification.

a. INC (Incoming) Key. The INC key is used to answer the following types of incoming calls:

1. Incoming Central Office (CO) trunk call, automatic tie trunk call, or Direct Inward Dialing (DID) trunk call to Listed Directory Number (LDN) of the EPABX.

2. Dedicated Incoming Trunk (DIT) call or DID trunk call, forwarded to attendant.

3. DID trunk call to a vacant station or code intercept number.

The INC key contains one internal LED indicator that provides three illumination states to indicate the following conditions:

1. LED extinguished — Indicates no incoming-type calls to answer.

2. LED flashing (@ 60-IPM) — Indicates one or more incoming-type call(s) to answer.

3. LED steadily lit — Indicates the incoming-type call answered and presently connected.

b. OPR (Operator) Key. The OPR key is used to answer the following types of operator calls:

1. Station user dials 0.

2. Station user dials for a specific attendant.

3. Tie or Direct Inward System Access (DISA) trunk user dials 0.

4. DID, tie, or DISA trunk user dials for a specific attendant.

5. Call from a direct attendant signaling line (i.e.; hotline).

6. Call transferred from another console.

7. Internal station call forwarded to attendant.

8. Call transferred to attendant.

9. Call transferred to a specific attendant.

10. Call resulting from a special overflow answering position that is out-of-service.

11. Call from a station-controlled conference master.

The OPR key contains one internal LED indicator that provides three illumination states to indicate the following conditions:

1. LED extinguished — Indicates no operator-type calls to answer.

2. LED flashing (@ 60-IPM) — Indicates one or more operator-type call(s) to answer.

3. LED steadily lit — Indicates the operator-type call presently connected.

c. RCL (Recall) Key. The RCL key is used to answer the following types of recalls:

1. Timeout from an incoming trunk call previously camped-on by the attendant.

2. Unanswered incoming trunk call previously extended to a station.

3. Timeout from a call placed on hold by the attendant.

4. Recall from a call placed in a locked loop mode by the attendant.

5. Timeout from a call placed in call park mode by the attendant.

6. Timeout from a call placed in call park mode by a station user.

7. Intercepted call to facility under attendant control.

8. Recall from an incoming DID or DIT trunk call to a dialed station number class-marked as a data line.

9. Recall from a station resulting from a message waiting callback.

10. Recall from an attendant-controlled conference circuit.

11. Recall resulting from a line lockout intercept.

12. Recall from a DID or DIT trunk to a dialed out-of-service station number.
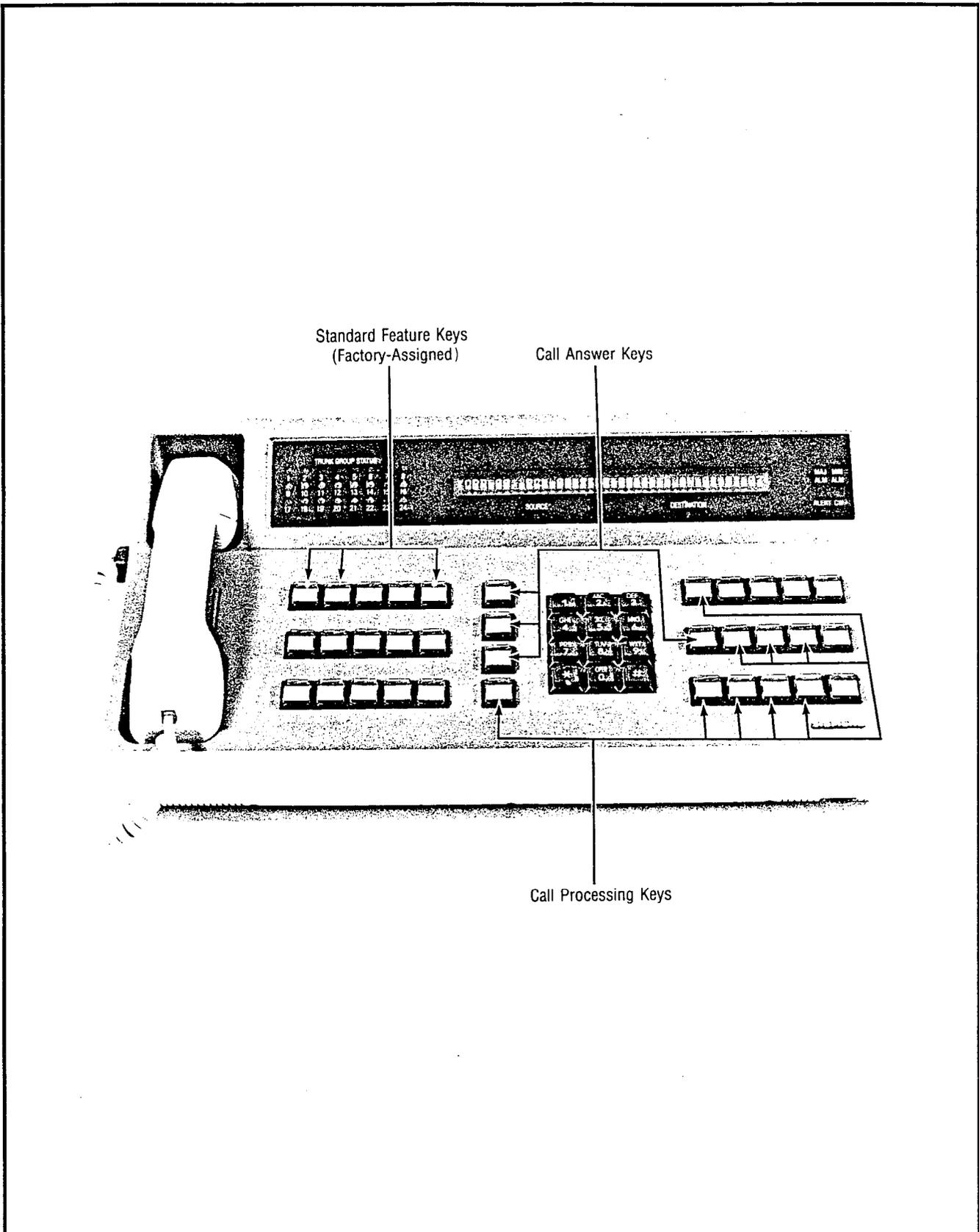
Figure 3.01 Call Answer, Call Processing, and Standard Feature Keys

13. Recall resulting from an attendant trunk queuing callback.

14. Recall resulting from an attendant LCR trunk queuing callback.

15. Intercepted call resulting from a station dial restriction or toll diversion.

16. Recall from an incoming trunk call placed in a locked loop mode by attendant for serial calling.

17. Timeout from an incoming trunk call placed on hold by a station user.

18. Recall resulting from an unsuccessful transfer attempt of an incoming trunk call by a station user.

19. Recall from a DID or DIT trunk to a vacant station or code intercept number which was routed to an out-of-service recording announcement facility.

The RCL key contains one internal LED indicator that provides three illumination states to indicate the following conditions:

1. LED extinguished — Indicates no recall-type calls to answer.

2. LED flashing (@ 60-IPM) — Indicates one or more recall-type call(s) to answer.

3. LED steadily lit — Indicates the recall-type call presently connected.

d. ANS (Answer) Key. The ANS key is used to answer the next call queued from either the incoming, operator, or recall call queues according to the Attendant Answering Priority feature. The ANS key contains one internal LED indicator that provides two illumination states to indicate the following conditions:

1. LED extinguished — Indicates no incoming-, operator-, or recall-type calls to answer.

2. LED flashing (@ 60-IPM) — Indicates one or more incoming-, operator-, or recall-type call(s) to answer.

3.07 Call Processing Keys. The Call Processing Keys, shown in Figure 3.01, are used to process calls, as well as to initiate features. These keys are described below according to their classification.

a. SRC (Source) Key. The SRC key contains one internal LED indicator that, when steadily lit, indicates when the connection is established between the attendant and the calling party. When the calling party is released from the console, the internal LED indicator is extinguished.

The SRC key may also be used to perform the following functions:

1. To select the source party for an attendant-initiated call or access code to a feature. Depressing the SRC key when the console is in an idle state

causes its internal LED to be steadily lit and allows initiation of a call or access to a feature. This function is released by depressing either the RLS key, or the ATT RLS key or a flashing Call Answer key after completion of call or feature access. When this function is released, the internal LED in the SRC key is extinguished. Note that source selection occurs automatically if dialing is begun from a console in an idle state without first depressing the SRC key.

2. To perform a splitting function on a connected source-attendant-destination call. Depressing the SRC key when both source and destination parties are being shown on the Call Information Display causes its internal LED to be steadily lit and performs a splitting function on the call. The attendant is then connected to the source party in a private conversation, while the destination party is split away from the call. This function is released by depressing, as required, one of the following keys (which extinguishes the internal LED in the SRC key):

a) ATT RLS key or a flashing Call Answer key — To cancel the splitting function, release the attendant from the call, and establish a source-destination connection.

b) RLS key — To release the source party from the call and establish an attendant destination connection.

c) BOTH key — To restore the original source-attendant-destination connection.

d) DEST key — To split-away the source party and estabilsh an attendant-destination connection.

3. To release the source party. The sequence of depressing the SRC key, followed by the RLS key, releases the source party from either a source-attendant-destination or source-attendant connection. In a source-attendant connection, the same release effect is obtained by depressing the ATT RLS key or a flashing Call Answer key.

b. DEST (Destination) Key. The DEST key contains one internal LED that, when steadily lit, indicates when the connection is established between the attendant and the attendant-dialed party. The Call Information Display provides the identity and status condition of the attendant-dialed party.When the attendant-dialed party is released from the console, the internal LED in the DEST key is extinguished.

The DEST key may also be used to perform the following functions:

1. To select the destination party for a call currently active on the console. Depressing the DEST key when a source party is being shown on the Call Information Display causes its internal LED to be steadily lit and allows the attendant to dial the desired destination party. This function is released by depressing either the RLS key, or the ATT RLS

key or any of the Call Answer keys. When this function is released, the internal LED in the DEST key is extinguished. Note that destination selection occurs automatically if dialing is begun without first depressing the DEST key and source party is being shown on the Call Information Display.

2. To perform a splitting function on a connected source-attendant-destination call. Depressing the DEST key when both source and destination parties are being shown on the Call Information Display causes its internal LED to be steadily lit and performs a splitting function on the call. The destination party is now engaged in a private conversation, while the source party is split away from the call. This function is released by depressing, as required, one of the following keys (which extinguishes the internal LED in the DEST key):

a) ATT RLS key or a flashing Call Answer key — To cancel the splitting function, release the attendant from the call, and establish a source-destination connection.

b) RLS key — To release the destination party from the call and establish a source-attendant connection.

c) BOTH key — To restore the original source-attendant-destination connection.

d) SRC key — To split-away the destination party and establish a source-attendant connection.

3. To release the destination party. The sequence of depressing the DEST key, followed by the RLS key, releases the destination party from either a source-attendant-destination or attendant-destination connection. In an attendant-destination connection, the same release effect is obtained by depressing the ATT RLS key or a flashing Call Answer key.

c. BOTH Key. The BOTH key is used to unsplit the source and destination parties during a split source-attendant-destination connection. Depressing the BOTH key when both source and destination parties are shown in the Call Information Display causes its internal LED to be steadily lit and a source-attendant-destination connection to be established. This function is released by depressing one of the following keys (which extinguishes the internal LED in the BOTH key):

a) ATT RLS key — To release the attendant from the call and establish a source-destination connection.

b) RLS key — To release both the source and destination parties from the call.

c) SRC or DEST key — To resplit the call as applicable.

d. RLS (Release) Key. The RLS key is used primarily to release either the source party or destination party, or both source and destination parties from the established connection. Depressing the RLS key when either

the SRC, DEST, or BOTH key is steadily lit disconnects the applicable party or parties from the attendant console connection.

The RLS key may also be used to perform the following functions:

1. To release a source-attendant or attendant-destination connection, depress the RLS key. This action releases the applicable party from the call. This same release effect is obtained by depressing the ATT RLS key or a flashing Call Answer key.

2. To restore the console to an idle state, after completion of an attendant-initiated call or feature access, depress the RLS key. This same effect is obtained by depressing the ATT RLS key or a flashing Call Answer key.

3. To cancel digits already dialed, depress the RLS key while dialing on the Dialing Keypad. This action cancels the digits already dialed.

Note that the RLS key contains one internal LED which is used for maintenance purposes only.

e. ATT RLS (Attendant Release) Key. The ATT RLS key is used primarily to release the attendant from a connected source-attendant-destination call. Depressing the ATT RLS key, when both source and destination-parties are shown on the Call Information Display, releases the attendant from the call and establishes a source-destination connection. In the event the connected source-attendant-destination call is undergoing a splitting function, depressing the ATT RLS key cancels the splitting function, releases the attendant from the call, and establishes a source-destination connection. In both cases, this same effect is obtained by depressing any flashing Call Answer key.

The ATT RLS key may also be used to perform the following functions:

1. To release a source-attendant or attendant-destination connection, depress the ATT RLS key. This action releases the applicable party from the call. This same release effect is obtained by depressing the RLS key or a flashing Call Answer key.

2. To restore the console to an idle state after completion of an attendant-initiated call or feature access, depress the ATT RLS key. This same effect is obtained by depressing the RLS key or a flashing Call Answer key.

Note that the ATT RLS key contains one internal LED which is used for maintenance purposes only.

f. FLASH Key. The FLASH Key is used to simulate a hookswitch flash to request operator assistance on outgoing calls via tie and toll connecting trunks.

g. LOOP Keys. The LOOP keys, numbered 1 through 4, are simulated loop circuits which act as private console hold locations for placing calls on hold. Depressing

a LOOP key places the party or parties shown on the Call Information Display in a holding state. This holding functions is released by depressing the appropriate LOOP key which reconnects the held party or parties. Each of the LOOP keys contains one internal LED that provides four illumination states which indicate the following conditions:

1. LED extinguished — Indicates that the particular LOOP key is idle.

2. LED winking (@ 125-IPM) — Indicates that the particular LOOP key is busy with a party or parties on hold.

3. LED flashing (@ 60-IPM) —

   a) When a single party is being held — indicates that the holding time has exceeded the customer-set value for such and automatic recall to the attendant has been initiated.

   b) When dual parties are being held (i.e., locked loop connection) — indicates that either a station user is manually recalling the attendant; or an incoming trunk call involved in a series call is automatically recalling the attendant.

4. LED steadily lit — Indicates that the attendant is now reconnected to a party or parties on that loop.

Single party calls held on attendant hold loops shall be available for direct pick-up by stations in a manner similar to a parked call.

To retrieve an attendant held call, the station user with the proper class-of-service goes off hook, keys the Attendant Call Hold Retrieve access code followed by the Attendant Call Hold location numbers where the held call exists. The Call Hold location numbers are shown in Table 3.00.

3.08 Standard Feature Keys. The Standard Feature keys, shown in Figure 3.01 are three keys containing the standard factory-assigned feature equipped with each console. These feature keys are described below according to their classification.

a. NIGHT Key. The NIGHT key is used to place the console in the "night service mode of operation" at the end of a business day. Depressing the NIGHT key causes its single internal LED to be steadily lit. All new and pending calls are automatically distributed to the UNA feature and ANA or SNAP position(s) as required or to another active console in the system.

Table 3.00 Held Call Hold Locations

ATT. #	LOOP #	NUMBER DIALED TO RETRIEVE HELD CALL
0	1	Access Code + 01
0	2	Access Code + 02
0	3	Access Code + 03
0	4	Access Code + 04
1	1	Access Code + 11
1	2	Access Code + 12
1	3	Access Code + 13
1	4	Access Code + 14
2	1	Access Code + 21
2	2	Access Code + 22
2	3	Access Code + 23
2	4	Access Code + 24
3	1	Access Code + 31
3	2	Access Code + 32
3	3	Access Code + 33
3	4	Access Code + 34
4	1	Access Code + 41
4	2	Access Code + 42
4	3	Access Code + 43
4	4	Access Code + 44
5	1	Access Code + 51
5	2	Access Code + 52
5	3	Access Code + 53
5	4	Access Code + 54
6	1	Access Code + 61
6	2	Access Code + 62
6	3	Access Code + 63
6	4	Access Code + 64
7	1	Access Code + 71
7	2	Access Code + 72
7	3	Access Code + 73
7	4	Access Code + 74

b. TIME (Display Time) Key. The TIME key is used to show the time-of-day (i.e., hours and minutes in standard 12-hour AM/PM or 24-hour time) on the Call Information Display. Although the Call Information Display provides the current date and time-of-day when the console is in an idle state or in between calls, depressing the TIME key when connected to a call prompts the time-of-day for three seconds. When the three seconds expire, the call data previously shown on the Call Information Display is redisplayed unchanged or updated as required.

Note that the TIME key contains one internal LED which is used for maintenance purposes only.

c. AUD ON/OFF (Audible On/Off) Key. The AUD ON/OFF key is used to activate or deactivate the audio tone speaker. This speaker emits the console's audible signal that announces the presence of calls on the Call Answer keys. Depressing the AUD ON/OFF key causes its single internal LED to be extinguished and deactivates the console's audible signal. To activate the audible signal, redepress the AUD ON/OFF key. This action causes the key's internal LED to be steadily lit.

3.09 Optional Feature Keys. The Optional Feature keys, shown in Figure 3.02, are a group of 18 vacant keys which may be assigned, via CMU procedures. These optional feature keys are described below according to their classification.

a. ACCT (Account) Key. The ACCT key relates to the Station Message Detail Recording (SMDR) account code feature. The ACCT key is used to either display the current standard (or default) account code or to enter a new account code for both incoming and outgoing calls. The account code is cost accounting or client billing code information in numerical digits variable in length, up to a maximum of 11 digits, as per customer option via CMU procedures.

A new account code is entered by depressing the ACCT key. This action causes the Call Information Display to show the current standard account code associated with the connected call that has an associated SMDR call record. The system is then ready to accept the new account code as dialed on the Dialing Keypad. When the required digits of the new account code are dialed, the current standard account code being displayed is blanked and the dialed digits are shown on the Call Information Display. Depressing any other console key (e.g., RLS, BOTH) applies the dialed new account code to the call. This action causes the appropriate Call Information Display data to be restored. If no digits are dialed, the current standard account code is retained and applied to the call after depressing any other console key. This action allows the attendant to display the current standard account code associated with a call without having to enter a special account code. If a mistake is made while dialing a new account code, redepress the ACCT key to cancel the dialed digits and allow redialing of the new account code. Also, if the ACCT key is depressed to display or enter an account code for a call that has no associated SMDR call record, Negative Acknowledgement (NAK) tone is heard. Note that if more than one special account code is dialed by either the attendant,

station/keyset user, or both, the last special account code dialed is applied to the call.

Note that the ACCT key contains one internal LED which is used for maintenance purposes only.

b. ACOF (Attendant Control of Facility) Key(s). The Optional Feature keys can be assigned to provide attendant control of certain facilities available through the system. Assignment of the ACOF key(s) is by individual console. By using the ACOF key(s), the following facilities may be restricted:

1. Paging access
2. Dial dictation access
3. Conference circuits
4. Code call access.

Depressing an ACOF key causes its single internal LED to be steadily lit and restricts access to that particular facility. When a station user dials the access code or a Digital Premium Instrument (DPI) user activates the feature button for the facility under attendant control, the call is routed to the console as a recall. Once the recall is answered, the Call Information Display shows the access code of the controlled facility and the source party (i.e., calling party) attempting to access that particular facility. At this point, the attendant can extend the controlled facility to the calling party by dialing the displayed access code. To release this function, redepress the applicable ACOF key. This action extinguishes its internal LED and allows station/keyset users to again access that particular facility.

c. ACOF-TG (Attendant Control of Facility — Trunk Group) Key(s). The ACOF-TG key(s) can be assigned to provide attendant control of trunk groups. Depressing the ACOF-TG key(s) causes its internal LED indicator to be steadily lit and restricts access to that particular trunk group. When a station user dials the access code of or seizes a trunk from the controlled trunk group, the call is routed to the console as a recall. Once the recall is answered, the Call Information Display shows the access code of the controlled trunk group and the source party (i.e., calling party) attempting to access the particular trunk group. At this point, the attendant can extend the controlled trunk group to the calling party by dialing the displayed access code digits. To release this function, redepress the applicable ACOF-TG key. This action extinguishes the LED and allows station users to gain access to the particular trunk group.

d. CONF (Conference) Key(s). The Attendant Conference feature allows the attendant to establish a conference connection between a combination of up to seven parties, six of which may be trunks, by using the CONF key. The attendant maintains control of this conference until it is released.

An LED is associated with each CONF key and provides four illumination states which indicate following conditions:

1. LED extinguished — Indicates the CONF key is idle and may be used to establish an attendant-controlled conference.

Customer Assigned
Optional Feature Keys
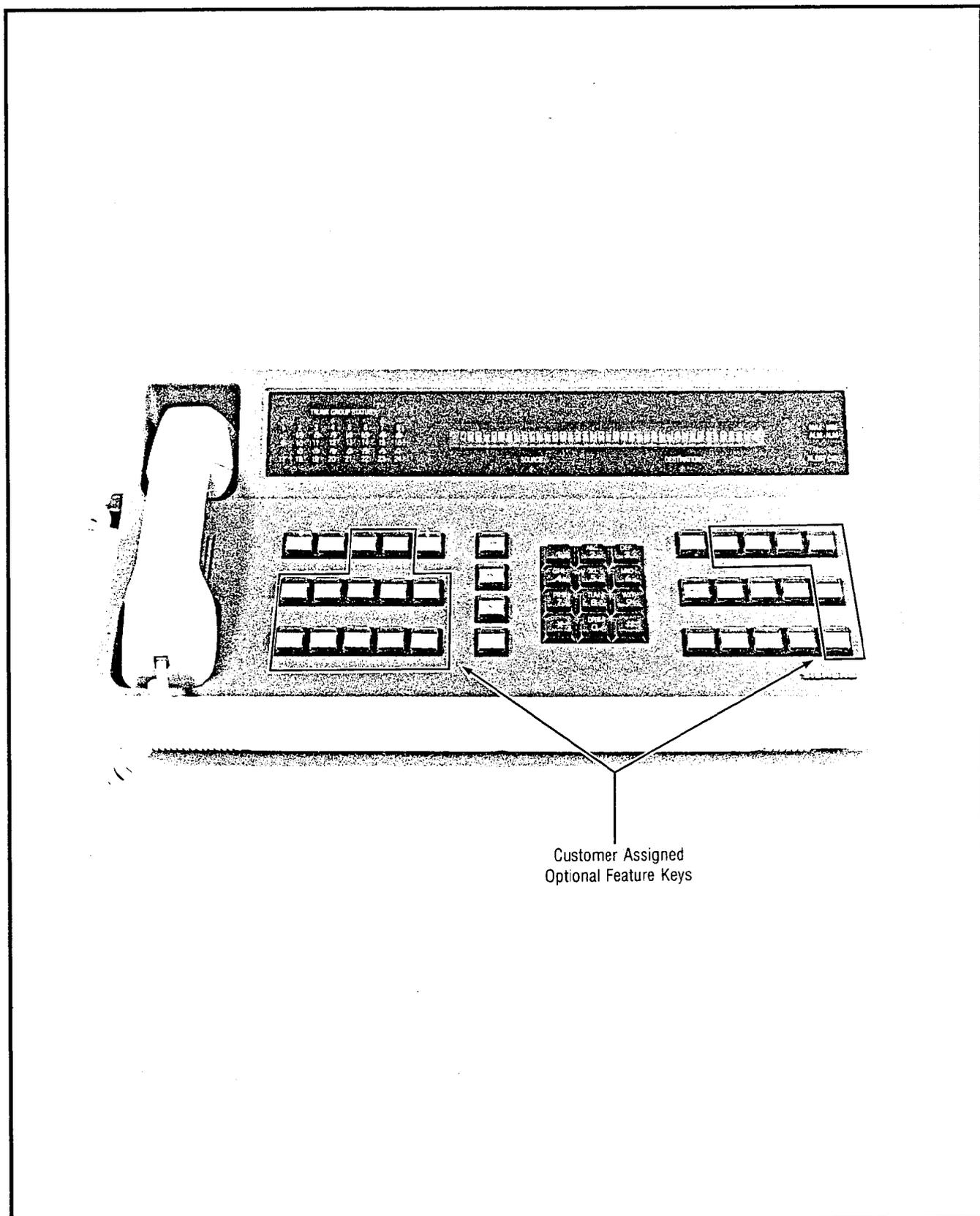
Figure 3.02   Optional Feature Keys

2. LED steadily lit — Indicates the CONF key is associated with an Attendant Controlled Conference to which the attendant is presently connected.

3. LED winking — Indicates the CONF key is associated with an Attendant Controlled conference that is controlled by this console but the attendant is not connected and actively involved with the conference at this time.

4. LED flashing — Indicates the attendant is being recalled by a conferee.

There are two cases when the attendant is requested to set up a conference: A station user dials the attendant and requests a conference circuit at a certain time; and a station or incoming trunk user immediately requests a conference circuit.

For the first situation, at the requested conference time, the attendant dials the desired number for the first conferee. Upon answer by the called party and after announcing the conference, the attendant depresses an idle CONF key to connect this party and the attendant to the conference circuit. The CONF key LED lights steadily indicating that the attendant is in the conference.

In the second situation, the attendant has an incoming station or trunk call on the console. The attendant dials the desired number for the second conferee. Upon answer by the called party and after announcing the conference, the attendant depresses the CONF key. At this time, both parties and the attendant are simultaneously connected to the conference circuit. The CONF LED lights steadily indicating that the attendant is in the conference.

The attendant can add parties to an existing conference by performing the following operations. The party added can either be an incoming station or trunk user. (The attendant can also depress the SRC key and dial a trunk or station call.) The party is added by depressing the CONF key associated with the desired conference. The CONF key's LED lights steadily to indicate that the attendant is in the conference. The Call Information Display provides a visual verification that a party has been added to a conference by prompting "ATT-CONF ENTERED".

If more parties are to be added, the attendant dials the next desired number and depresses the CONF key to add that party.

When no more parties are to be added, the attendant depresses the ATT RLS key to be removed from the conference circuit. The CONF key's LED winks and SRC key's LED is extinguished.

Only the attendant can reenter an existing conference by depressing the CONF key associated with the desired conference. This action may be done when no source or destination party exists, since a party(ies) also enters the conference as described earlier. The CONF key's LED lights steadily to indicate that the attendant is in the conference.

Each time the attendant and/or conferee is added to an attendant conference, conference tone is applied to the conference. If a conferee cannot be added because the conference is full or the maximum number of trunks have already been entered, the attendant receives timed NAK tone and is automatically reconnected to the disallowed party at the conclusion of the NAK tone.

Attendant Conference Recall Functions are listed below:

1. When a conferee hookswitch flashes, the associated CONF key LED flashes at the serving attendant console and that conferee is split from the conference, connected to audible ring tone, and placed in the specific recall queue for the serving attendant. When the attendant depresses the flashing CONF, RCL, or ANS key, a talking path is established between the station and attendant and the CONF key's LED lights steadily. The conference remains split from the connection while the attendant talks privately to the recalling conferee.

2. If the conferee requests to return to the conference, activation of the ANS, OPR, RCL, INC, or ATT RLS key by the attendant reconnects the split party to the associated conference and releases the attendant. The conference remains active on the associated CONF key and the CONF key's LED resumes winking.

3. If the conferee requests to be released from the conference, the attendant depresses the RLS key. The conference continues with the remaining conferees and the CONF key LED resumes winking provided at least one conferee remains in the conference. If no conferees remain, the conference is released and the CONF key's LED is extinguished.

4. If the attendant controlling the conference is not active (i.e. unstaffed, or out-of-service) and a recall is attempted, the station performing the hookflash takes control of the conference as in a station-controlled conference.

The attendant may also gain control of a station-controlled conference, changing it to an Attendant Conference by depressing an idle CONF key while connected to a station-controlled conference. The CONF key's LED is steadily lit.

The attendant may release an Attendant Conference and all its members by depressing the RLS key while connected to conference. The CONF key's LED is extinguished. The Attendant Conference is automatically released when all conferees disconnect. The CONF key's LED is then extinguished.

NOTE: An attendant conference may contain trunks that do not provide disconnect supervision, in which case the attendant is responsible for occasionally entering the conference and monitoring for activity. When no activity exists (i.e., the conference is completed) the attendant must manually release the conference by depressing the RLS key.

e. EXC INC (Exclusion Incoming) Key. The EXC INC key is used to exclude incoming trunk calls from being answered at a particular console. The EXC INC key is a push-on/push-off type key which contains one internal LED that, when steadily lit, indicates that the exclusion of incoming trunk calls feature is activated. When the EXC INC key is activated, the numerical call waiting display for incoming CO trunk calls is followed by the letter "X" (e.g., IN-03X).

f. EXC OPR (Exclusion Operator) Key. The EXC OPR key is used to exclude operator type calls from being answered at a particular console. the EXC OPR key is a push-on/push-off type key which contains one internal LED that, when steadily lit, indicates that the exclusion of operator type calls feature is activated. When the EXC OPR key is activated, the numerical call waiting display for operator type calls is followed by the letter "X" (e.g., OP-01X).

g. EXC RCL (Exclusion Recall) Key. The EXC RCL key is used to exclude recalls from being answered at a particular console. The EXC RCL key is a push-on/push-off type key which contains one internal LED that, when steadily lit, indicates that the exclusion of recalls feature is activated. When the EXC RCL key is activated, the numerical call waiting display for recalls is followed by the letter "X" (e.g., RC-01X).

h. FLASH Key. The FLASH key is used to simulate a hookswitch flash to request operator assistance on outgoing calls. This function is mainly used with tie trunks and toll connecting trunks.

Note that the FLASH key contains one internal LED which does not activate when the key is depressed.

i. MIN ALM (Minor Alarm) Key. The MIN ALM key is used to request data on malfunctions that cause minor alarm conditions in the system to be shown on the Call Information Display. The MIN ALM key contains one internal LED that provides two illumination states to indicate the following conditions:

1. LED extinguished — Indicates that minor alarm causes, if any, have been shown on the Call Information Display.

2. LED steadily lit — Indicates that an additional minor alarm cause still exists aside from the minor alarm cause being shown on the Call Information Display.

When a new minor alarm cause exists that has not been previously shown on the Call Information Display and the console is in an idle state (e.g., no active calls being shown on the Call Information Display), the MIN ALM key should be depressed. This action sequentially shows the minor alarm causes, on the Call Information Display, without repeating a cause that was previously displayed. Keep depressing the MIN ALM key until the last minor alarm cause is displayed. To restore the console to normal operation, depress the ATT RLS key or a flashing Call Answer key.

j. MSG CANCEL (Message Cancel) Key. The MSG CANCEL key allows the attendant to cancel the message

waiting indicator for a given station. To cancel the message waiting indication without calling the station, the attendant depressed the MSG CANCEL key when the console is in an idle state. The SRC internal LED is steadily lit. The Call Information Display prompts "CANCEL MSG TO?" and the attendant dials the station number for which the message waiting cancellation indication is to be cancelled. After the desired station number is dialed, confirmation tone is heard and the internal LED of the SRC key is extinguished to indicate message waiting cancellation has been accomplished. If the dialed station number is not assigned the message waiting feature, intercept tone is heard.

The attendant is allowed to exit from this function at any time by simply depressing either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key. After one of these keys is depressed the internal LED of the MSG CANCEL key is extinguished.

The attendant is also allowed to cancel a station's message waiting indication while connected to the station in either a ringing, busy, camp-on or talking state. The station must be connected to the console as the source party. While connected, the attendant cancels the station's message waiting indication by simply depressing the MSG CANCEL key. After the MSG CANCEL key is depressed confirmation tone is heard to indicate message waiting cancellation has been accomplished. If the MSG CANCEL key is depressed and the station is not assigned the message waiting feature, a timed NAK tone (i.e., reorder tone) is heard. After receipt of confirmation or NAK tones, the attendant is automatically reconnected to the source station party.

Note that the MSG CANCEL key contains one internal LED which is used for maintenance purposes only.

k. MSG SET (Message Set) Key. The MSG SET key allows the attendant to activate the message waiting indicator for a given station.

To activate the message waiting indicator without calling the station, the attendant depresses the MSG SET key when the console is in an idle state. The SRC key's internal LED is steadily lit. The Call Information Display prompts "MSG TO?" and the attendant dials the station number for which the message waiting indication is desired. After the desired station number is dialed, confirmation tone is heard and the internal LED of the SRC key is extinguished to indicate message waiting activation has been accomplished. If the dialed station number is not assigned the message waiting feature, intercept tone is heard.

The attendant is allowed to exit from this function at any time by simply depressing either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key.

The attendant is also allowed to activate a station's message waiting indicator while connected to the station in either a ringing, busy, camp-on or talking state. The station must be connected to the console as the source party. While connected, the attendant activates the station's message waiting indicator by simply depressing the MSG SET key. After the MSG SET key

is depressed confirmation tone is heard to indicate message waiting activation has been accomplished. If the MSG SET key is depressed and the station is not assigned the message waiting feature, a timed NAK tone is heard. After receipt of confirmation or NAK tone, the attendant is automatically reconnected to the source station party or idle state.

Note that the MSG SET key contains one internal LED which is used for maintenance purposes only.

l. OVERFLOW Key. The OVERFLOW key works in conjunction with the Automatic Timed Diversion of Incoming Calls feature and allows the attendant to depress the OVERFLOW key when there is an extreme amount of incoming calls. An OVERFLOW key depression diverts an excess of calls to the Special Overflow Answering Position (SOAP). The assignment of the overflow destination is performed via a CMU procedure on a per system basis and is independent of the night answering arrangements.

A customer set (via CMU procedure) threshold value is applied to the incoming call queue. When the number of incoming calls is equal to or greater than the threshold value, and the attendant has activated the attendant overflow feature by depressing the OVERFLOW key (causing its internal LED to be steadily lit), the overflow of calls is routed to the assigned overflow destination. The attendant releases this function by redepressing the OVERFLOW key. This action extinguishes its internal LED.

m. OVERRIDE Key. The OVERRIDE key allows the attendant to enter into an existing busy station-to-station or station-to-trunk connection. It is generally used to announce high priority or emergency calls.

Before the attendant enters the existing connection, busy override tone is applied to the talking parties. After this action occurs, the attendant is in a conference with both parties on the existing connection and busy override injection tone applied to the connection for as long as the attendant remains connected to the overridden parties. The OVERRIDE key's LED is steadily lit. The two attendant override situations are discussed below:

1. Attendant Override With Source Party Present. After break-in the characters "BY-OV" appear in the destination status field of the Call Information Display. This indicates that the busy override feature has been invoked.

    Splitting of the source party is maintained when an attendant uses the override feature to protect the privacy of the established connection. The attendant is not allowed to bridge a source party onto an existing connection.

    Having broken-into the existing connection, the attendant must wait for either one of the parties to go on hook before being permitted to connect the split source to the connection.

    If the keyed party on the broken-into-call goes on

hook, the broken-into-destination is released from the console and the attendant is automatically reconnected to the source party. At this point, the OVERRIDE key's LED is extinguished and the attendant may proceed to connect the two parties as in a normal call.

If the party connected to the dialed party on the broken-into-call goes on hook, busy override injection tone is removed from the connection, the OVERRIDE key's LED is extinguished, and the attendant remains connected to the overriden party (with the source party still split). At this point, the attendant is in control of the call in the same manner as any normal call, with both source and destination parties present.

If the attendant depresses the ATT RLS key before either of the parties in the broken-into-call go on hook, the source party is camped-on to the keyed station. Busy override injection tone is removed from the connection and the OVERRIDE key's LED is extinguished. If other camp on positions are already in use for the called station, the source party is placed at the top of the camp on queue. If all camp on positions were already in use, the camp on at the bottom of the queue is sent back to the attendant as a recall type call requiring further assistance.

If the attendant depresses the RLS key before either of the parties in the broken-into-call go on hook, busy override injection tone is removed from the connection, the OVERRIDE key's LED is extinguished, and the attendant is disconnected from the broken-into-call.

If the attendant depresses the SRC key, the attendant is split away from the broken-into-call and reconnected to the source party (i.e., the party seeking connection to one of the parties involved in the broken-into-call). The broken-into-call remains connected to the attendant console (i.e., as the destination party). However, since the broken-into-call is still busy overriden, busy override injection tone continues to indicate that the attendant, although split away, has not yet released the override condition and can reenter the connection by depressing the DEST key.

2. Attendant Override Without Source Party Present. Once the attendant overrides a connection without a split party present, the attendant assumes control of the call in the same manner as any normal call with source and destination parties present. The dialed party appears as the source and the other party appears as the destination.

    The OVERRIDE key's LED is steadily lit and busy override injection tone continues for as long as the attendant remains connected to both parties. If the attendant releases, splits either party, or if either party goes on hook, the LED is extinguished and the tone is removed.

    Only one attendant is permitted to override a given

connection at any one time. The attendant is permitted to break into any stable two party call, providing no feature restricting attendant override is active (e.g., Attendant Break-In Security or Data Privacy) on either party's station. The four-port conference circuit which is reserved for that attendant is utilized in this particular type of attendant override situation.

The attendant reserved port on the conference circuit already being used for the conference call is utilized in this particular type of attendant override situation.

The attendant is permitted to override an idle station in the "Do Not Disturb" mode providing no feature restricting attendant override is also active (e.g., Attendant Break-in Security or Data Privacy) on the station. Operation of attendant override in this case causes the overridden station to ring and the call to be completed as if the Do Not Disturb feature was not active.

Call transfer and consultation hold are actually transient sequences which terminate in either a three-way conference or a two party call. Consequently, break in during call transfer or consultation hold is denied until a stable two-party call or three-way conference call state is reached.

Call Forwarding does not alter the capabilities of attendant break-in. The only difference is that the attendant is connected to the forwarded-to station rather than the station originally keyed. This action is indicated by the attendant Call Information Display prior to invoking override as a call forwarding-busy "CF/BY" verification indication.

An attendant that attempts to override an existing conversation when the Attendant Break-In Security or Data Line Security feature is active, receives reorder tone, and the word DATA PRIVACY is shown on the Call Information Display.

n. PAGE Key(s). Up to four of the Optional Feature Keys can be assigned to gain direct access to the customer-provided paging facility without having to dial a particular paging access code. A particular PAGE key can be assigned to page a combination of zones in a four-zone paging arrangement. The attendant gains direct access to the paging facility by depressing the PAGE key of interest from an idle console. The Call Information Display prompts "PAGE ZONES XXXX" and confirmation tone is heard to indicate the page zone(s) has been accessed. If the paging facility is busy, the Call Information Display prompts "PAGE BUSY". The attendant completes the paging announcement and exits from this function by depressing either the RLS, or ATT RLS key or a flashing Call Answer Key.

If a source party is presently connected to the console and paging is desired, the attendant must first place the source party on hold (via a LOOP key), and continue with the above procedure. Once the paged party responds, the attendant can connect both parties together by first depressing the DEST key followed by the appropriate LOOP key (where the call is being held), and depressing either the ATT RLS key or a flashing Call Answer Key.

Note that the PAGE key contains one internal LED which is used for maintenance purposes only.

o. PARK Key. The PARK key allows the attendant to place a party in a park (hold) condition. The attendant parks a call by depressing the PARK key during destination selection. The parking code and park location are shown in the destination field on the Call Information Display. The party is placed in a parked condition when the ATT RLS, ANS, OPR, INC, or RCL key is depressed. If there are no idle park locations available, busy tone is returned to the attendant and the Call Information Display prompts "BUSY". The attendant may return to the source by depressing the RLS key.

To retrieve a parked call, the attendant keys the desired access code and park location for that particular call.

Note that the PARK key contains one internal LED indicator which is used for maintenance purposes only.

p. TRK GRP Key. The Trunk Group (TRK GRP) key provides the attendant with direct access to an idle outgoing trunk circuit in a given trunk group. The attendant depresses the TRK GRP key during either source or destination selection. When depressed, an idle trunk, within the trunk group assigned to that key, is selected and connected to the attendant in the same manner as if the attendant had dialed the trunk group access code. The Call Information Display indicates outgoing trunk group and trunk information, and CO dial tone is heard once the trunk circuit is accessed. If all outgoing trunks in the particular trunk group are busy, busy tone is heard and the Call Information Display indicates "BUSY".

Note that the TRK GRP key's internal LED is only used for maintenance purposes.

q. VOLUME Key. The VOLUME key provides a fixed gain of 6dB on the receive portion of the attendant console voice connections. This function is activated by depressing the VOLUME key while a trunk call is connected to the console. This fixed gain is provided for the duration of the existing call. The gain is automatically cancelled when the call is released from the console. The attendant may cancel the fixed gain before releasing the call be redepressing the VOLUME key. The VOLUME key contains one internal LED that is steadily lit when this fixed gain function is active, and extinguished when inactive.

3.10 Programmable Features. The SATURN software feature package allows the user to program the SATURN System with the following attendant related features.

a. Alert Attendant on Busy. When this option is enabled, via CMU procedure, attendants are given a single burst of tone indicating that an incoming trunk call is waiting and no idle console is available to process it.

b. Programmed Class of Call Exclusions. The SATURN System software is capable of distributing traffic to, or excluding traffic from designated attendant consoles based on the type of the call (i.e., incoming trunk calls, operator calls, or recalls). This distribution of traffic is accomplished via CMU procedures rather than specific keys on the console as previously discussed.

SECTION 4.00   OPERATING INSTRUCTIONS

4.01 General. The operating instructions for the attendant console are presented as a series of indications and actions contained in categorized diagrams. The LEDs associated with the various keys are represented by rectangular blocks as follows:

a. [XXX] Indicates the LED associated with the key is flashing.

b. [XXX] Indicates the LED associated with the key is winking.

c. [XXX] Indicates the LED associated with the key is steadily lit.

d. [XXX] Indicates the LED associated with the key is extinguished.

Table 4.00 lists the Supervisory Audible Tones heard by the attendant during call processing and special feature functions. It is important to note that whenever an invalid digit is dialed, intercept tone is heard and the Call Information Display prompts "VACANT NO". The RLS key should be depressed to clear this condition or whenever a mistake is made during dialing. If, during normal operation of the console, the Call Information Display prompts "PROCESSOR SWITCH", the standby processor has been activated due to a malfunction or a maintenance function, and some of the calls on the console might have been dropped. Note that such indication only occurs when the attendant is actually connected to a call in a duplex common control system.

4.02 Unstaffed Mode. When the dual switchboard plug of the handset/headset assembly is removed from the handset/headset jacks, the console is automatically placed in the "unstaffed mode of operation" after 10 seconds (typical) have elapsed. This 10-second delay, customer-changeable via Customer Memory Update (CMU) procedures, is provided to allow shift changes by attendants when each is provided with a separate handset/headset assembly or to avoid an accidental unstaffed condition on a console due to the attendant inadvertently removing the handset/headset dual switchboard plug from the handset/headset jacks. Once the console is placed in the "unstaffed mode of operation" the internal LED in the NIGHT key is steadily lit and the remaining display LEDs on the console are extinguished indicating that new and pending calls are being processed as follows:

1. All pending and new incoming trunk calls are automatically distributed to the UNA feature and the Assigned Night Answering (ANA) or Special Night Answering Position (SNAP) as required or to another active console in the system.

2. All pending operator-type calls receiving ringback tone are automatically connected to busy tone or transferred to another active console in the system. New operator-type calls are automatically connected to reorder tone or distributed to another active console in the system.

3. All pending trunk recalls receiving ringback tone and new automatic recalls are automatically trans-

ferred or distributed to the UNA feature and the ANA or SNAP position(s) as required, or to another active console in the system.

4. All calls held on console Loop keys are disconnected.

4.03 Answering and Processing Calls. The following indications occur when a call is present at the console:

a. If activated, an idle console's audible tone signal sounds at repeated intervals.

b. The ALERT indicator flashes.

c. The Calls Waiting (CW) indicator either flashes or is steadily lit depending on the number of calls waiting for service.

d. The ANS key's LED flashes along with the INC, OPR and/or RCL key's LED.

e. The Call Information Display indicates the number of call-types waiting for service (refer to diagram numbered with a 2 for display example).

Examples of typical call situations are listed in Table 4.01. The step-by-step sequences that occur during the typical call situations are shown in the accompanying diagrams.

4.04 Attendant-Initiated Calls. Examples of typical attendant-initiated call situations are listed in Table 4.02. The step-by-step sequences that occur during the typical attendant-initiated call situations are shown in the accompanying diagrams.

4.05 Attendant-Initiated Feature Functions. Examples of the available features which the attendant can initiate from the console are listed in Table 4.03. The step-by-step sequences that occur during the attendant-initiated feature functions are shown in the accompanying diagrams.

4.06 Call Types. To assist the attendant in becoming familiarized with the identity of the various call-types, Table 4.04 defines the call-type information displays available. Refer to the SATURN Installation Test Procedures practice for the console testing procedures.

Table 4.00 Supervisory Audible Tones

Dial Tone	Invalid Camp-On Tone
Reorder Tone	Conference Tone
Busy Tone	Quiet Tone
Audible Ring Tone	Busy Override Injection Tone
Recall Dial Tone	(also, Privacy Tone)
Special Audible Ring Tone	Route Advance Tone (for Least
Intercept Tone	Cost Routing — LCR)
Call Waiting Tone(s)	
Busy Override Tone (also	Warning Tone (also, Expensive
Attendant Override Tone)	Facility Tone LCR)
Executive Override Tone	Test Tone
Confirmation Tone	Negative Acknowledgement
Camp-On Tone (also, Low Tone	(NAK)Tone
or Uninterrupted Busy Tone)	

40-Character Alphanumeric Display Unit

#	Display
1	I N C F X a/n a/n a/n a/n n n / n n
2	I N C I N W A T S n n / n n
3	I N C L O C A L n n n n / n n
4	I N C T I E a/n a/n a/n a/n n n / n n
5	I N C a a a a W A T S n n / n n
6	I N C W A T S $\frac{1}{2}$ n n / n n
7	I N C V A C N O . n n / n n
8	I N C V I A C F W D n n / n n
9	O P R A T T A S S T n n n n / n n n n / n n
10	O P R A T T A S S T n n n n / n n n n / n n A
11	O P R D I A L - 0 n n n n / n n n n / n n
12	O P R H O T L I N E n n n n n n
13	O P R S O A P O O S n n / n n
14a	O P R S T A - C O N F n n n n n n

NOTES: a/n = Alphanumerical value
a = Alphabetical letter
n = Numerical digit
Ⓝ = Attendant-dialed numerical digit (i.e.; station, trunk and/or access code number)
nn/nn = Trunk group number (00 to 31) and trunk number (00 to 99)
nn nnnn = Station class-of-service (00 to 31) and station number (0000 to 9999)

NOTE: Screened areas denote typical displays since such incoming trunk identifications are customer-defined via CMI

Table 4.04   Call-Type Information Displays

	SRC LED	DEST LED	Display Definition
	on	off	Answered and connected to an incoming foreign exchange trunk (source) party.
	on	off	Answered and connected to an incoming inward-type WATS trunk (source) party.
	on	off	Answered and connected to an incoming local CO trunk (source) party.
	on	off	Answered and connected to an incoming automatic tie trunk (source) party.
	on	off	Answered and connected to an incoming WATS trunk (source) party.
	on	off	Answered and connected to an incoming band 1 or 2 WATS trunk (source) party.
	on	off	Answered and connected to an incoming DID trunk (source) party that was automatically rerouted to console since it extended to a vacant station or code intercept number.
	on	off	Answered and connected to an incoming DID or DIT trunk (source) party that was automatically rerouted to console since it extended to a station number which has the call forwarding feature activated to the attendant console.
	on	off	Answered and connected to an incoming trunk or station (source) party that was transferred to console by another console.
T n	on	off	Answered an incoming trunk or station (source) party that is being transferred to console by another console and presently connected to the indicated transferring attendant (destination) party.
	on	off	Answered and connected to an incoming tie or DISA trunk or station (source) party that extended (dialed) 0.
	on	off	Answered and connected to a station (source) party that is classmarked as a direct attendant signaling line.
	on	off	Answered and connected to an incoming trunk (source) party that was previously diverted from console (automatically by the system or manually via the OVERFLOW key in the console) to a special overflow answering position which is out-of-service.
	on	off ·	Answered and connected to a station-controlled conference master (source) party.

)cedures.

#	40-Character Alphanumeric Display Unit
14b	STA-CONF ENTERED
15	OPR TO ATT n nnn nn/nn
16	OPR TO ATT n nn nn/nn
17	OPR TRANSFER nn nn/nn
18	OPR TRANSFER nn nn/nn
19	OPR VIA CFWD nn nnnn
20	RCL ACOF-nnn nn nn/nn
21	RCL ATT-CONF nn nnnn
22	RCL ATT HOLD nn nn/nn
23	RCL ATT LOOP nn nn/nn
24	RCL CALL PRK nn nn/nn

NOTES:
- a/n = Alphanumerical value
- a = Alphabetical letter
- n = Numerical digit
- (n) = Attendant-dialed numerical digit (i.e.; station, trunk and/or access code numl
- nn/nn = Trunk group number (00 to 31) and trunk number (00 to 99)
- nn nnnn = Station class-of-service (00 to 31) and station number (0000 to 9999)

NOTE: Screened areas denote typical displays since such incoming trunk identifications are customer-defined

Table 4.04 Call-Type Information Displays
(Continued)

						SRC LED	DEST LED	Display Definition
ı		n	n	n	n	on	on	Connected to the previously answered station-controlled conference call itself (Note; This display only occurs if the station-controlled conference master adds attendant into the conference call after attenddant has answered original call).
						on	off	Answered and connected to an incoming trunk or station (source) party that was transferred by a station user to the indicated attendant.
ı		n	n	n	n	on	on	Answered an incoming trunk or station (source) party that is being transferred to the indicated attendant and presently connected to the indicated transferring station (destination) party.
						on	off	Answered and connected to an incoming trunk or station (source) party that was transferred to console by a station user.
ı		n	n	n	n	on	on	Answered an incoming trunk or station (source) party that is being transferred to console and presently connected to the indicated transferring station (destination) party.
						on	off	Answered and connected to a station (source) party that was automatically rerouted to console since it extended to a station number which has the call forwarding feature activated to the attendant console.
						on	off	Answered and connected to an incoming trunk or station (source) party that was automatically rerouted to console since it extended to a facility under attendant control.
						on	off	Answered and connected to a manually recalling station (source) party that is involved in an attendant-controlled conference call.
						on	off	Answered and connected to an automatic recalling trunk or station (source) party that was previously placed by the attendant in a hold mode (via a LOOP key in the console) and subsequently timed-out.
ı		n	n	n	n	on	on	Answered an incoming trunk or station (source) party and presently connected to the manually recalling station (destination) party. Both source and destination parties were previously placed by the attendant in a locked loop mode (via a LOOP key in the console).
						on	off	Answered and connected to an incoming trunk or station (source) party that was previously placed by the attendant in a park (hold) condition (via the call park access code or the PARK key in the console).

CMU procedures.

#	40-Character Alphanumeric Display Unit
25	RCL CALL PRK nn n n n n n
26	RCL CAMP-ON nn/nn
27	RCL DATA PRIV nn/nn
28	RCL MSG WAIT nn nnnn
29	RCL NO-ANSWER nn/nn
30	RCL OFF-HOOK nn nnnn
31	RCL OOS nn/nn
32	RCL Q'D TRUNK nn/nn

NOTES:
- a/n = Alphanumerical value
- a = Alphabetical letter
- n = Numerical digit
- ⓝ = Attendant-dialed numerical digit (i.e.; station, trunk and/or access code numbe
- nn/nn = Trunk group number (00 to 31) and trunk number (00 to 99)
- nn nnnn = Station class-of-service (00 to 31) and station number (0000 to 9999)

NOTE: Screened areas denote typical displays since such incoming trunk identifications are customer-defined v

**Table 4.04 Call-Type Information Displays
(Continued)**

					SRC LED	DEST LED	Display Definition
	n	n	n	n	on	on	Answered and connected to an incoming trunk or station (source) party that was previously placed by the indicated station (destination) party in a park (hold) condition which subsequently timed-out and automatically rerouted to console for service.
	n	n	n	n	on	on	Answered and connected to an incoming trunk (source) party that was previously and automatically placed by the attendant console in a camp-on (waiting) mode to the indicated busy station (destination) party which subsequently timed-out and automatically rerouted to console for service.
					on	off	Answered and connected to an incoming DID or DIT trunk (source) party that was automatically rerouted to console since it extended to a station number which is class-marked as a data line.
					on	off	Answered and connected to a station (source) party that is manually recalling the attendant which previously activated the message waiting feature (via the message waiting access code or MSG SET key in the console) for such indicated station number.
	n	n	n	n	on	on	Answered and connected to an incoming trunk (source) party that was previously extended to the indicated station (destination) party which did not answer after a predetermined number of rings and automatically rerouted to console for service.
					on	off	Answered and connected to a station (source) party that is class-marked with the supervised release feature. A station class-marked with such a feature and remains off-hook without dialing or connected to a busy number for more than a predetermined time, is automatically rerouted to console on an intercept treatment basis.
					on	off	Answered and connected to an incoming DID or DIT trunk (source) that was automatically rerouted to console since it extended to a station number which is out-of-service.
					on	off	Answered and connected to an outgoing trunk (source) that was previously busy when attendant attempted to access it to place an outgoing trunk call and consequently activated the outgoing call queuing feature to automatically callback the console when an outgoing trunk is idle.

MU procedures.

40-Character Alphanumeric Display Unit

#	Display
33	RCL Q'D TRUNK nn/nn ⓝⓝⓝⓝⓝⓝⓝⓝⓝⓝⓝⓝⓝ
34	RCL RESTRCTD nn nnnn ... nnnnnnnn
35	RCL SERIES nn/nn
36	RCL STA HOLD nn/nn ... nn
37	RCL TRANSFER nn/nn ... nn
38	RCL VAC NO. nn/nn

NOTES:
- a/n = Alphanumerical value
- a = Alphabetical letter
- n = Numerical digit
- ⓝ = Attendant-dialed numerical digit (i.e.; station, trunk and/or access code number)
- nn/nn = Trunk group number (00 to 31) and trunk number (00 to 99)
- nn nnnn = Station class-of-service (00 to 31) and station number (0000 to 9999)

Table 4.04 Call-Type Information Displays
(Continued)

			SRC LED	DEST LED	Display Definition
			on	off	Answered and connected to an outgoing trunk (source) that was previously busy when attendant attempted to access it to place an outgoing trunk call via the least cost route and consequently activated the outgoing call queuing feature to automatically callback the console and outpulse the indicated stored trunk number (previously dialed by the attendant) when an outgoing trunk is idle.
n	n	n	on	off	Answered and connected to a station (source) party that was automatically rerouted to console since it extended to the indicated trunk number which is restricted for usage by such station because of its marked class-of-service
			on	off	Answered and connected to an automatic recalling incoming trunk (source) party that was previously placed by the attendant in a locked loop mode (via a LOOP key in the console) along with a station (destination) party which has disconnected from the call. This display indicates to the attendant that the incoming trunk (source) party originally requested a serial call, whereby it allows the trunk party to make a series of calls through the attendant without the need to hang-up and call back into the EPABX.
n	n	n	on	on	Answered and connected to an incoming trunk (source) party that was previously placed by the indicated station (destination) party in a hold mode which subsequently timed-out and automatically rerouted to console for service.
n	n	n	on	on	Answered and connected to an incoming trunk (source) party that was previously extended to the indicated station (destination) party which attempted to transfer the incoming trunk party to another destination party but the transferring process failed and the trunk party was automatically rerouted to console for service.
			on	off	Answered and connected to an incoming DID or DIT trunk (source) party that extended to a vacant station or code intercept number and automatically rerouted to a vacant number recording announcement (via customer-provided equipment) which was not available, and consequently rerouted to console for service.

1A ANSWERING INCOMING-TYPE TRUNK CALLS VIA "INC" KEY:

| INC | ▶ | DEPRESS ▶ INC KEY | INC | SRC | ▶ | TALK TO TRUNK | ▶ |

| I | N | C | | X | X | X | X | X | X | X | X | | | n | n | / | n | n | | | | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊙

Refer to Table 4.04 for description of incoming-type trunk call information displays.

1B ANSWERING OPERATOR-TYPE CALLS VIA "OPR" KEY:

| OPR | ▶ | DEPRESS ▶ OPR KEY | OPR | SRC | ▶ | TALK TO SOURCE PARTY | ▶ |

| O | P | R | | X | X | X | X | X | X | X | X | | n | n | n | n | / | n | n | n | n | n | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O or O

Refer to Table 4.04 for description of operator-type call information displays.

1C ANSWERING RECALL-TYPE CALLS VIA "RCL" KEY:

RCL ▶ DEPRESS RCL KEY ▶ RCL SRC ▶ TALK TO SOURCE PARTY ▶

| R | C | L | | X | X | X | X | X | X | X | X | | n | n | n | / | n | n | n | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O or O

— Refer to Table 4.04 for description of recall-type call information displays.

1D ANSWERING EITHER INCOMING, OPERATOR OR RECALL-TYPE CALLS VIA "ANS" KEY:

INC

or

ANS ▶ DEPRESS ANS KEY ▶ OPR SRC ▶ TALK TO SOURCE PARTY ▶

or

RCL

| X | X | X | | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O or O

— Refer to Table 4.04 for description of incoming, operator and recall-type call information displays.

2 NO CONNECTION REQUESTED:

```
        ▶ DEPRESS  ▶  ┌─────┐
          RLS KEY       │ SRC │
                        └─────┘
     (a)            (b)              (c)                    (d)              (e)
┌──────────────────────────────────────────────────────────────────────────────┐
│ O  P  R  -  n  n │  R  C  L  -  n  n │  I  N  C  -  n  n │    N  O  V  1  0  4 : 4 5 │
└──────────────────────────────────────────────────────────────────────────────┘
              SOURCE                                    DESTINATION
                ⊜                                           ○
```
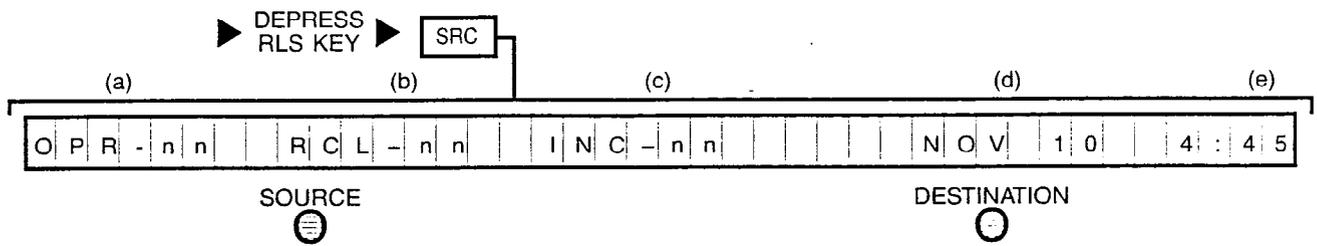
NOTE: This display is prompted whenever the console is in an idle state and provides the following information:

(a) Number of operator-type calls waiting for service.

(b) Number of recall-type calls waiting for service.

(c) Number of incoming-type trunk calls waiting for service.

(d) Current date.

(e) Time of day.

3A REQUESTS CONNECTION TO STATION (STATION IDLE):
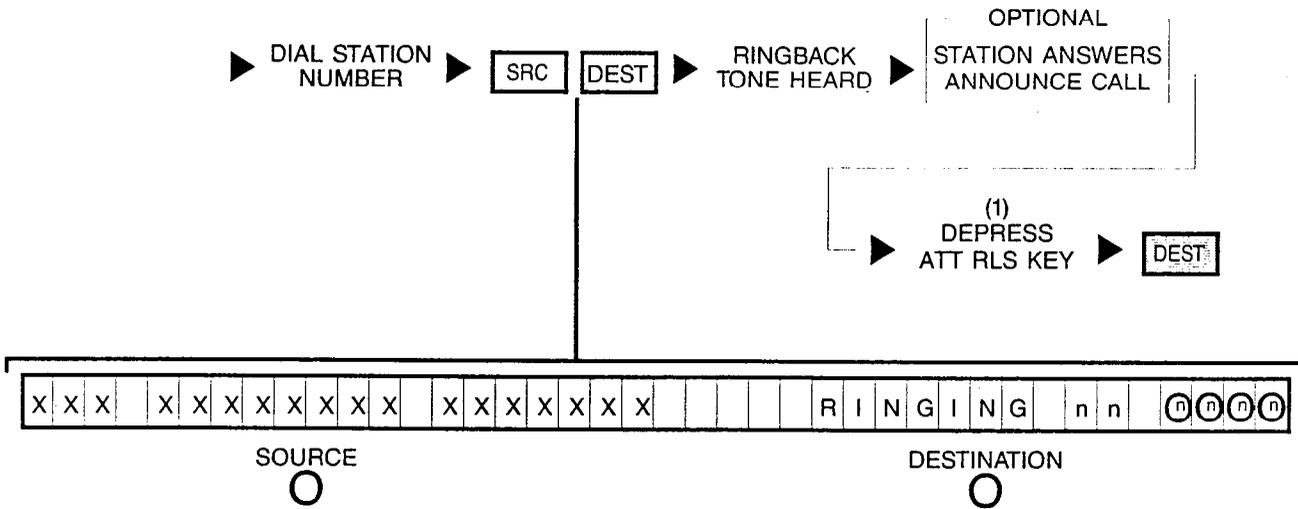
▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ RINGBACK TONE HEARD ▶

OPTIONAL
STATION ANSWERS ANNOUNCE CALL

(1)
▶ DEPRESS ATT RLS KEY ▶ [DEST]

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | | R | I | N | G | I | N | G | | n | n | | n | n | n | n |

SOURCE
O

DESTINATION
O

NOTE: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing

3B REQUESTS CONNECTION TO STATION (STATION WAS RINGING BUT CALL ANSWERED BY ANOTHER STATION):
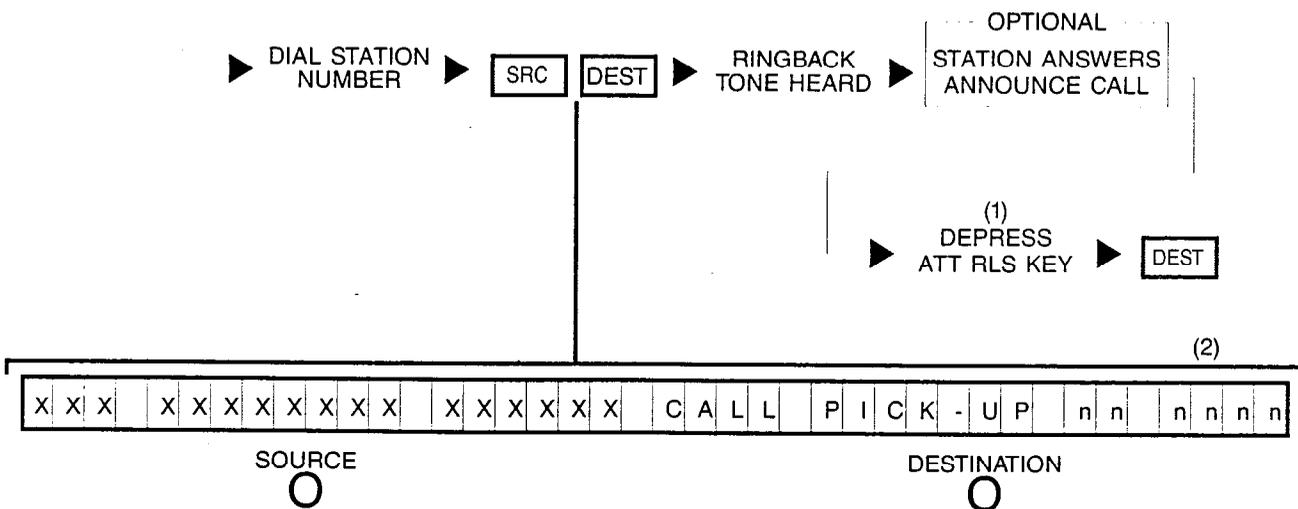
▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ RINGBACK TONE HEARD ▶

OPTIONAL
STATION ANSWERS ANNOUNCE CALL

(1)
▶ DEPRESS ATT RLS KEY ▶ [DEST]

(2)

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | | C | A | L | L | | P | I | C | K | - | U | P | | n | n | | n | n | n | n |

SOURCE
O

DESTINATION
O

NOTES: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(2) Dialed station number is displayed first, then the station number which picked up (answered) the call.

3C REQUESTS CONNECTION TO A UCD GROUP

DIAL UCD
► PILOT ► ☐ SRC ☐ DEST ►   RINGBACK   ► OPTIONAL
NUMBER   TONE HEARD   STATION ANSWERS
                                        ANNOUNCE CALL

(1)
► DEPRESS ► ☐ DEST
ATT RLS KEY

| X | X | X | | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | U | C | D | | R | I | N | G | I | N | G | | | | ⓝⓝⓝⓝ |

SOURCE   DESTINATION
O   O

NOTE: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in
            addition to connecting the next call for processing.

3D REQUESTS CONNECTION TO STATION (STATION BUSY BUT A "HUNT" GROUP MEMBER):

► DIAL STATION ► ☐ SRC ☐ DEST ► RINGBACK ► OPTIONAL
NUMBER   TONE HEARD   STATION ANSWERS
                                             ANNOUNCE CALL

(1)
► DEPRESS ► ☐ DEST
ATT RLS KEY

(2)

| X | X | X | | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | | H | U | N | T | | R | I | N | G | I | N | G | | n | n | | n | n | n | n |

SOURCE   DESTINATION
O   O

NOTES: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in
             addition to connecting the next call for processing.

        (2) Dialed station number is displayed first, then changes to the hunted-to station
             number.

3E1 REQUESTS CONNECTION TO STATION (STATION BUSY — NO CAMP-ON REQUESTED):

▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ BUSY TONE HEARD ▶ DEPRESS SRC KEY ▶ [DEST] [SRC]

▶ INFORM SOURCE PARTY ▶ DEPRESS RLS KEY ▶ [SRC]

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | | B | U | S | Y | | n | n | ⓝⓝⓝⓝ |

SOURCE
O

DESTINATION
O

⌈CONF⌉
|nn/nn| --- (Denotes destination connected party)
⌊nnnn⌋

NOTE: Busy override can be performed on this condition if not connected to a conference.

3E2 REQUESTS CONNECTION TO STATION (STATION BUSY — CAMP-ON REQUESTED):

▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ BUSY TONE HEARD ▶ DEPRESS SRC KEY ▶ [DEST] [SRC]

▶ INFORM SOURCE PARTY ▶ (1) DEPRESS ATT RLS KEY ▶ [SRC]

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | | B | U | S | Y | | n | n | ⓝⓝⓝⓝ |

SOURCE
O

DESTINATION
O

⌈CONF⌉
|nn/nn| --- (Denotes destination connected party)
⌊nnnn⌋

NOTES: (1) Depressing a flashing INC, OPR, RCL, or ANS key performs the same function in addition to connecting the next call for processing.

Up to two incoming trunk calls can be camped on to a single station; if attendant attempts to camp on a third incoming trunk call, invalid camp-on tone is heard.

Busy override can be performed on this condition if not connected to a conference.

3F REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO AN IDLE STATION):

▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ RINGBACK TONE HEARD ▶ OPTIONAL STATION ANSWERS ANNOUNCE CALL

(1) DEPRESS ATT RLS KEY ▶ [DEST]

(2)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X		C	F	W	D		R	I	N	G	I	N	G		n	n		n	n	n	n

SOURCE
O

DESTINATION
O

NOTES: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(2) Dialed station number is displayed first, then changes to the forwarded-to station number.

3G1 REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO A BUSY STATION — NO CAMP-ON REQUESTED):
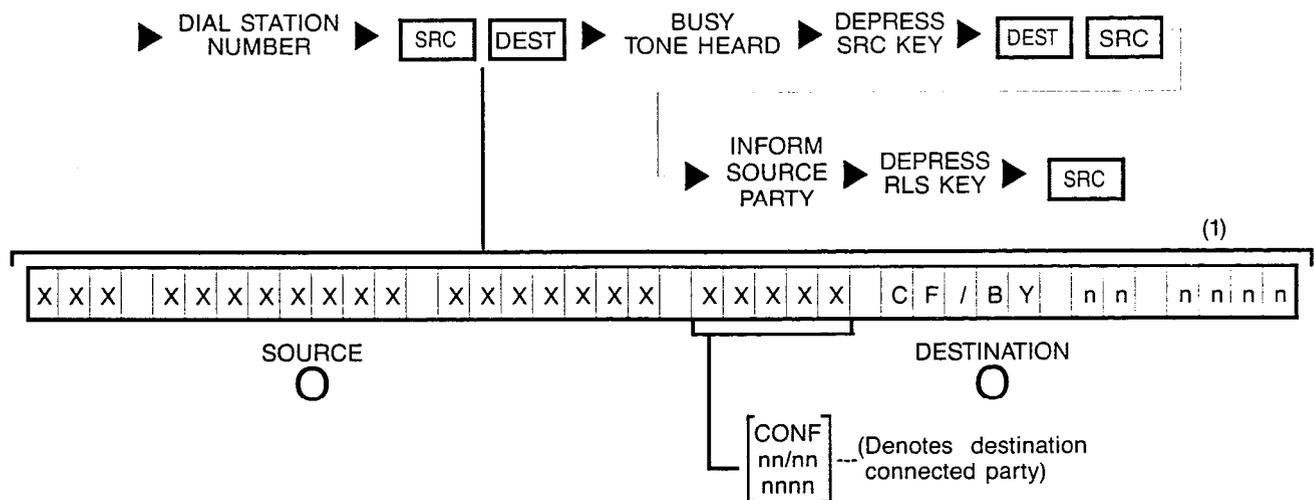
▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ BUSY TONE HEARD ▶ DEPRESS SRC KEY ▶ [DEST] [SRC]

▶ INFORM SOURCE PARTY ▶ DEPRESS RLS KEY ▶ [SRC]

(1)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X		C	F	/	B	Y		n	n		n	n	n	n

SOURCE
O

DESTINATION
O

$$\begin{bmatrix} CONF \\ nn/nn \\ nnnn \end{bmatrix}$$ --- (Denotes destination connected party)

NOTES: (1) Dialed station number is displayed first, then changes to the forwarded-to station number.

Busy override can be performed on this condition if not connected to a conference.

3G2 REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO A BUSY STATION — CAMP-ON REQUESTED):

▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ BUSY TONE HEARD ▶ DEPRESS SRC KEY ▶ [DEST] [SRC]

▶ INFORM SOURCE PARTY ▶ (2) DEPRESS ATT RLS KEY ▶ [DEST]

(1)

X X X	X X X X X X X	X X X X X X	X X X X	C F / B Y	n n	n n n n

SOURCE
O

DESTINATION
O

⌈ CONF ⌉
| nn/nn | --- (Denotes destination connected party)
⌊ nnnn ⌋

NOTES: (1) Dialed station number is displayed first, then changes to the forwarded-to station number.

(2) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

Busy override can be performed on this condition if not connected to a conference.

3H1 REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTSIDE TRUNK NUMBER IDLE):

▶ DIAL STATION NUMBER ▶ [SRC] [DEST] ▶ (1) CO RINGBACK TONE HEARD ▶ | OPTIONAL TRUNK ANSWERS ANNOUNCE CALL |

▶ (2) DEPRESS ATT RLS KEY ▶ [DEST]

(3)

X X X	X X X X X X X	X X X X X X	C F W D	T O	N T W K	n n / n n

SOURCE
O

DESTINATION
O
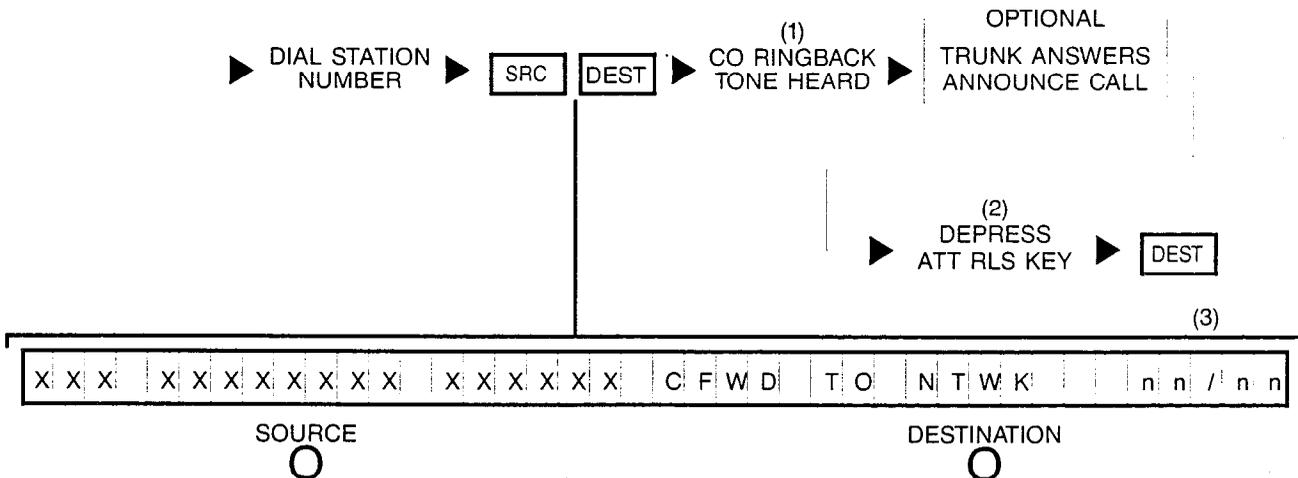
NOTES: (1) Two loop start trunks cannot be connected together; if this condition exists, reorder tone is heard and the calling trunk party is informed of this condition.

(2) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(3) Dialed station number is displayed first, then changes to the forwarded-to trunk group and trunk circuit numbers.

3H2 REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTSIDE TRUNK NUMBER BUSY):

```
                                  (1)
► DIAL STATION  ►  [SRC] [DEST] ►  CO BUSY  ►  DEPRESS  ►  [DEST] [SRC]
    NUMBER                          TONE HEARD   SRC KEY

                                            INFORM     DEPRESS
                                         ►  SOURCE  ►  RLS KEY  ►  [SRC]
                                            PARTY
```
                                                                          (2)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X		C	F	W	D		T	O		N	T	W	K				n	n	/	n	n
			SOURCE																								DESTINATION												

              SOURCE   DESTINATION
                O   O
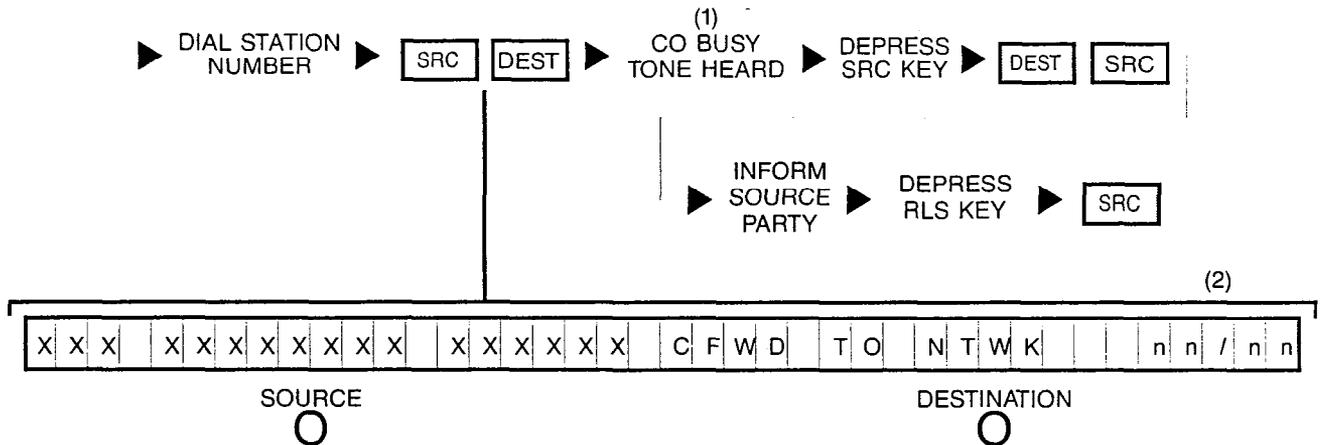
NOTES: (1) Two loop start trunks cannot be connected together; if this condition exists, reorder tone is heard and the calling trunk party is informed of this condition.

(2) Dialed station number is displayed first, then changes to the forwarded-to trunk group and trunk circuit numbers.

No busy override can be performed on this condition.

3I REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTGOING TRUNK GROUPS BUSY):

```
► DIAL STATION  ►  [SRC] [DEST] ►  BUSY      ►  DEPRESS  ►  [SRC] [DEST]
    NUMBER                          TONE HEARD   SRC KEY

                                            INFORM     DEPRESS
                                         ►  SOURCE  ►  RLS KEY  ►  [SRC]
                                            PARTY
```
                                                                          (1)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X		C	F	W	D		T	O		N	T	W	K				B	U	S	Y

              SOURCE   DESTINATION
                O   O
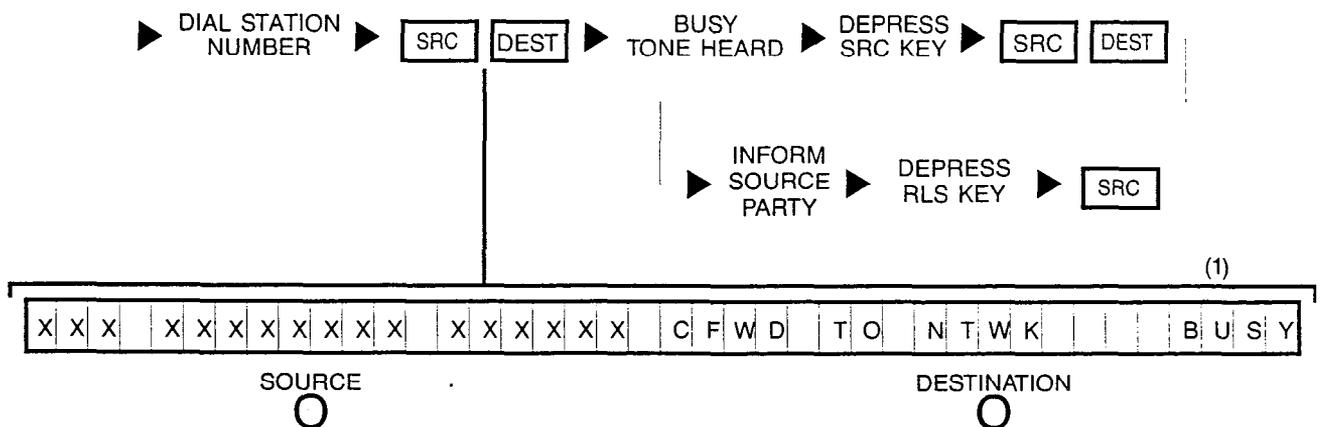
NOTES: (1) Dialed station number is displayed first, then changes to the forwarded-to trunk group and trunk circuit numbers.

No camp on is allowed under this condition.

3J REQUESTS CONNECTION TO STATION (STATION IN "CALL FORWARDING" MODE TO ATTENDANT):
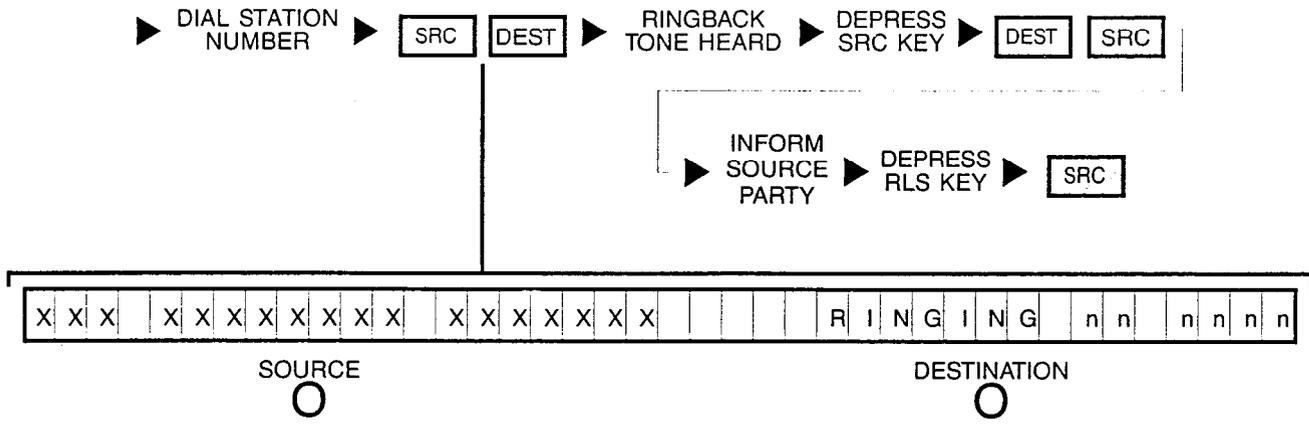
▶ DIAL STATION ▶ [SRC] [DEST] ▶ RINGBACK ▶ DEPRESS ▶ [DEST] [SRC]
   NUMBER   TONE HEARD   SRC KEY

                        ▶ INFORM ▶ DEPRESS ▶ [SRC]
                          SOURCE   RLS KEY
                          PARTY

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | | R | I | N | G | I | N | G | | n | n | | n | n | n | n |

SOURCE   DESTINATION
O   O

3K REQUESTS CONNECTION TO STATION (STATION IN A "DO NOT DISTURB" MODE):

▶ DIAL STATION ▶ [SRC] [DEST] ▶ BUSY ▶ DEPRESS ▶ [DEST] [SRC]
   NUMBER   TONE HEARD   SRC KEY

                        ▶ INFORM ▶ DEPRESS ▶ [SRC]
                          SOURCE   RLS KEY
                          PARTY

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | | D | O | N | T | | D | I | S | T | U | R | B | | | | n | n | n | n |

SOURCE   DESTINATION
O   O
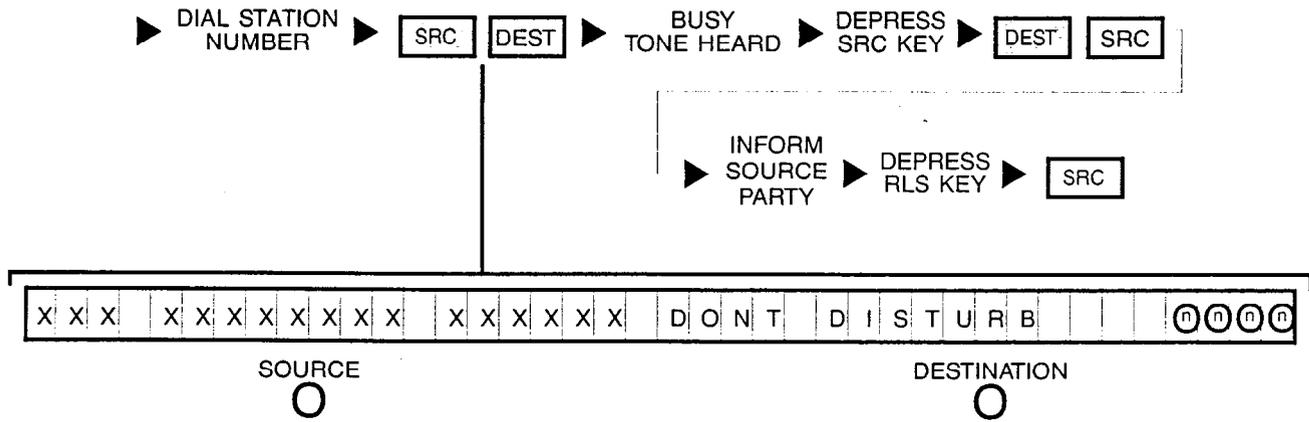
NOTE: Busy override can be performed on this condition (refer to Diagram Series No. 4).

3L REQUESTS CONNECTION TO STATION (STATION IS CLASS-MARKED AS A DATA LINE):

▶ DIAL STATION ▶ [SRC] [DEST] ▶ BUSY ▶ DEPRESS ▶ [DEST] [SRC]
NUMBER   TONE HEARD   SRC KEY

                                        INFORM
                                     ▶ SOURCE ▶ DEPRESS ▶ [SRC]
                                        PARTY   RLS KEY

| X X X | X X X X X X X X | X X X X X X | D A T A | P R I V A C Y | n n | ⓝⓝⓝⓝ |

SOURCE   DESTINATION
O   O
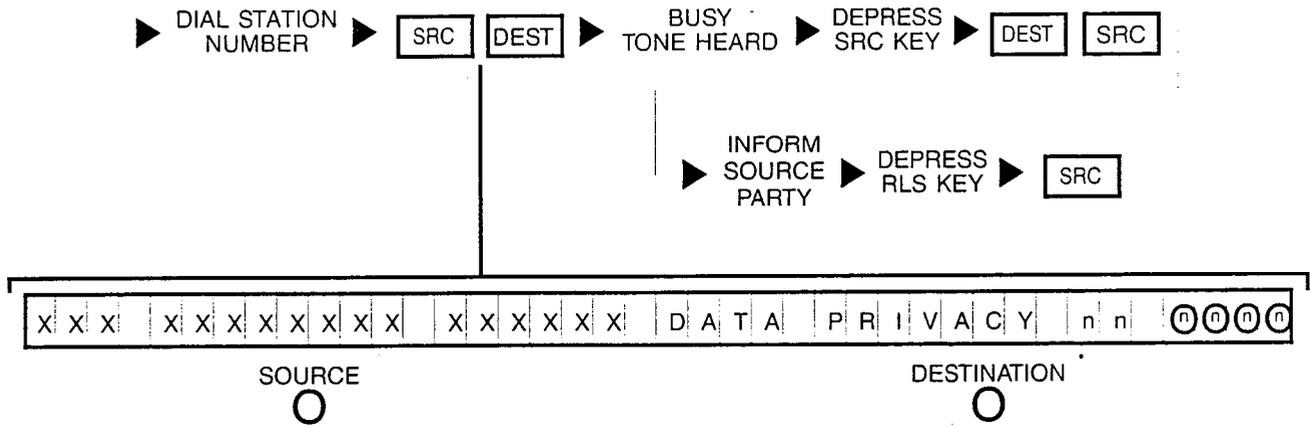
NOTE: No busy override can be performed on this condition.

3M REQUESTS CONNECTION TO STATION (STATION IN A "LINE LOCKOUT" MODE):

▶ DIAL STATION ▶ [SRC] [DEST] ▶ BUSY ▶ DEPRESS ▶ [DEST] [SRC]
NUMBER   TONE HEARD   SRC KEY

                                        INFORM
                                     ▶ SOURCE ▶ DEPRESS ▶ [SRC]
                                        PARTY   RLS KEY

| X X X | X X X X X X X X | X X X X X X | L I N E | L O C K O U T | n n | ⓝⓝⓝⓝ |

SOURCE   DESTINATION
O   O

3N REQUESTS CONNECTION TO STATION (STATION IS OUT-OF-SERVICE):

▶ DIAL STATION ▶ | SRC | |DEST| ▶ REORDER ▶ DEPRESS ▶ |DEST| | SRC |
   NUMBER   TONE HEARD   SRC KEY

                                 INFORM
                             ▶ SOURCE ▶ DEPRESS ▶ | SRC |
                                 PARTY   RLS KEY

X X X	X X X X X X X X	X X X X X X X	O U T	O F	S V C	n n	⊙⊙⊙⊙

          SOURCE   DESTINATION
             O   O
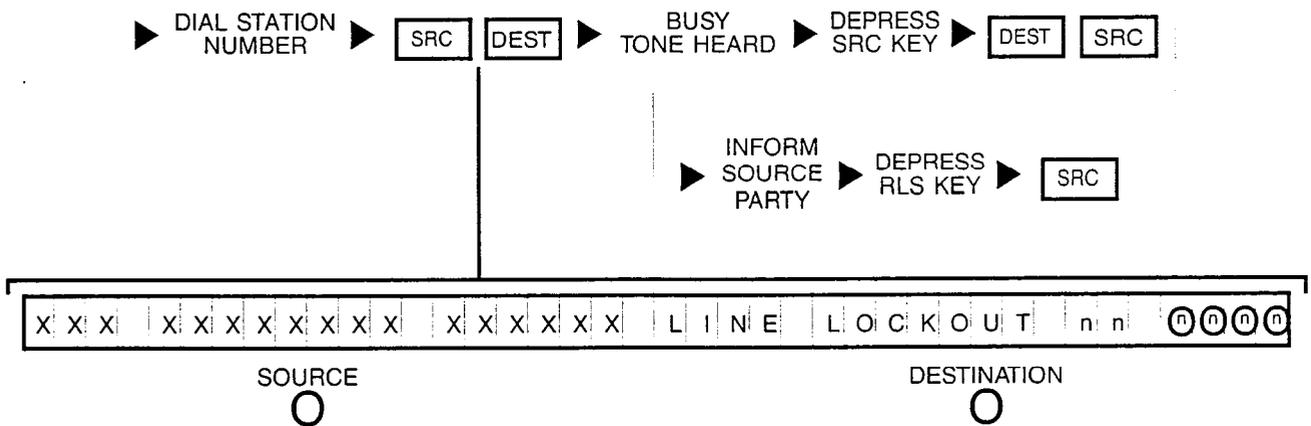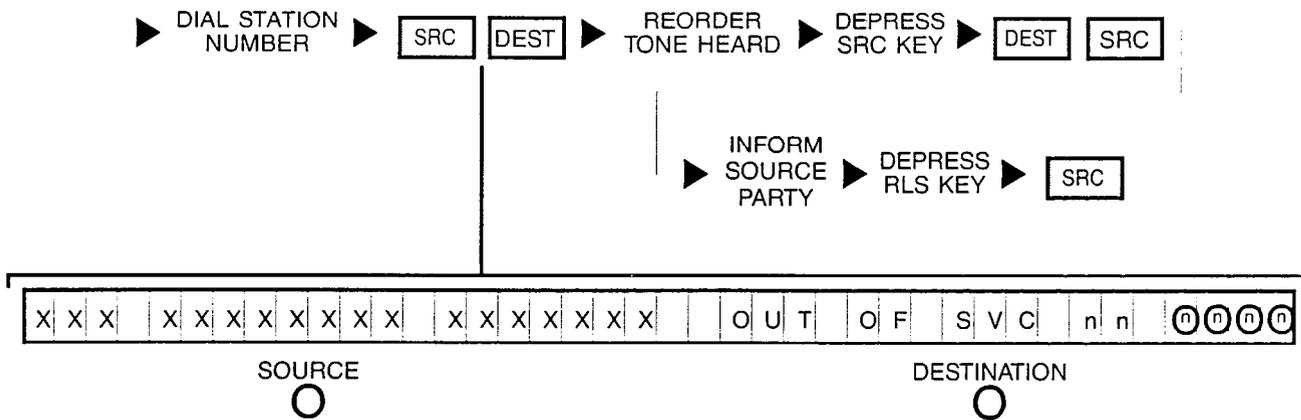
3O REQUESTS CONNECTION TO STATION (VACANT STATION OR CODE INTERCEPT NUMBER):

▶ DIAL STATION ▶ | SRC | |DEST| ▶ INTERCEPT ▶ DEPRESS ▶ |DEST| | SRC |
   NUMBER   TONE HEARD   SRC KEY

                                 INFORM
                             ▶ SOURCE ▶ DEPRESS ▶ | SRC |
                                 PARTY   RLS KEY

X X X	X X X X X X X X	X X X X X X X	V A C A N T	N O .		⊙⊙⊙⊙

          SOURCE   DESTINATION
             O   O
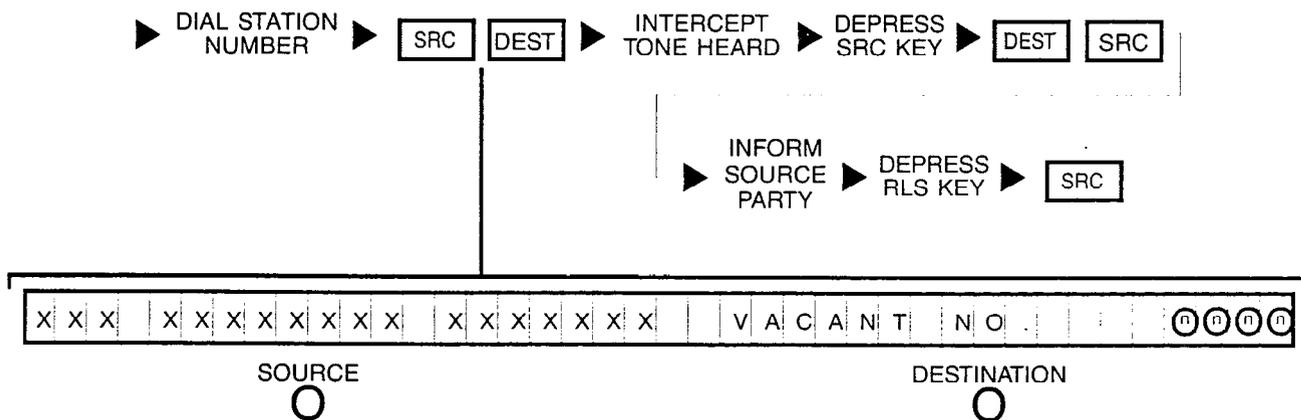
4A   REQUESTS OVERRIDE (STATION BUSY):

(1)
▶ REDIAL
  STATION NUMBER ▶ | SRC | | DEST | ▶ (2)
                                       DEPRESS
                                       OVERRIDE
                                       KEY ▶ | OVER RIDE | ▶ (3)
                                                               OVERRIDE TONE
                                                               IS HEARD

(4)
▶ INFORM STATION
  OF PRIORITY CALL ▶ INFORM OTHER OR
                     PRIMARY PARTY TO ▶ (5) | OVER RIDE | ▶ (6)
                     GO ON-HOOK   DEPRESS
                                                               ATT RLS KEY ▶ | DEST |

(7)

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | | X | X | X | X | X | | B | Y | - | O | V | | n | n | | ⓝⓝⓝⓝ |

SOURCE
O

DESTINATION
O

⌈ nn/nn ⌉ ...(Denotes destination
⌊ nnnn ⌋   connected party)
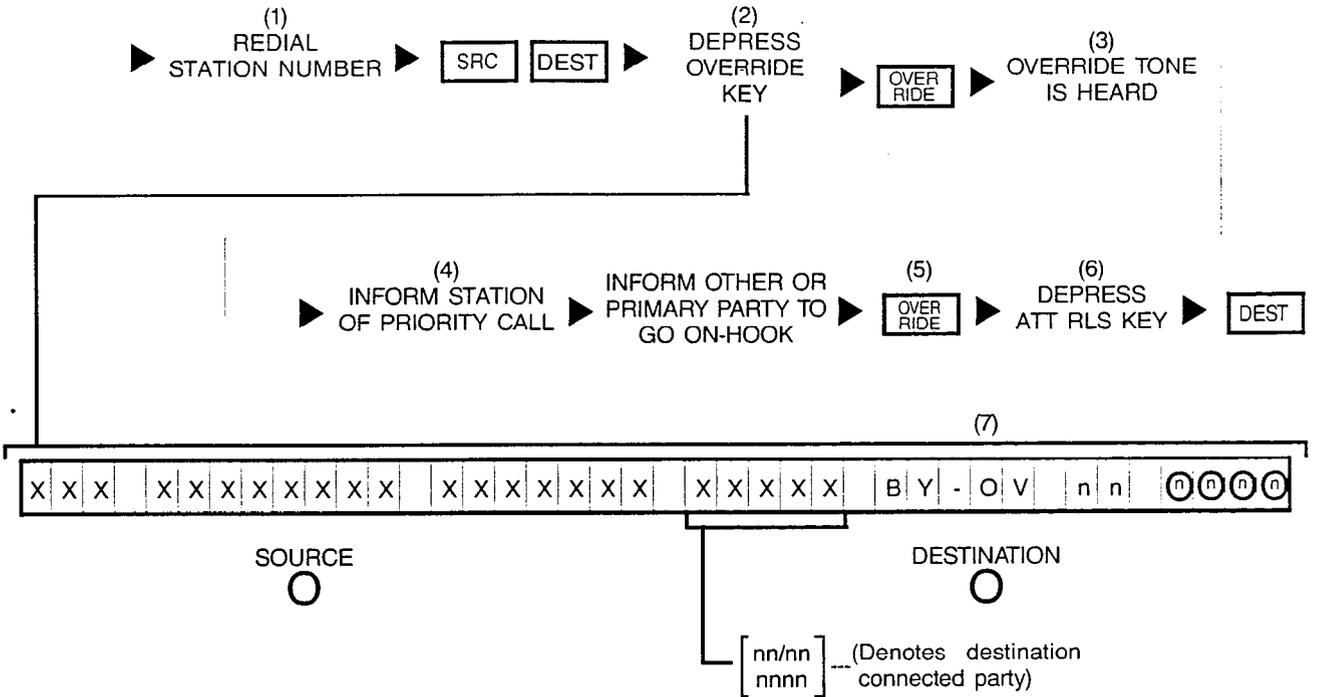
NOTES: (1) Number displayed when dialed.

(2) Optional key.

(3) Override tone applied to connection.

(4) Both destination parties can hear attendant.

(5) OVERRIDE key LED extinguishes when either of the destination parties goes on-hook and allows attendant to extend call.

(6) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(7) "BY-OV" is displayed after attendant has actually broken-in to the connection; if "PRVCY" is displayed instead, the Attendant Break-In Security or Data Privacy feature is active in either of the destination parties and connection cannot be overriden.

A station involved in a conference cannot be overriden at any time.

4B   REQUESTS OVERRIDE (STATION IN A "DO NOT DISTURB" MODE):

(1)
► REDIAL ► | SRC | DEST | ► BUSY TONE ► (2) ► RINGBACK TONE
STATION   HEARD   DEPRESS   HEARD
NUMBER   OVERRIDE KEY

► INFORM ► (3) ► | DEST |
PARTY OF   DEPRESS
PRIORITY CALL   ATT RLS KEY

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | | D | O | N | T | | D | I | S | T | U | R | B | | | | ⓝⓝⓝⓝ |

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | | | | | | | R | I | N | G | I | N | G | | n | n | ⓝⓝⓝⓝ |

SOURCE   DESTINATION
O   O
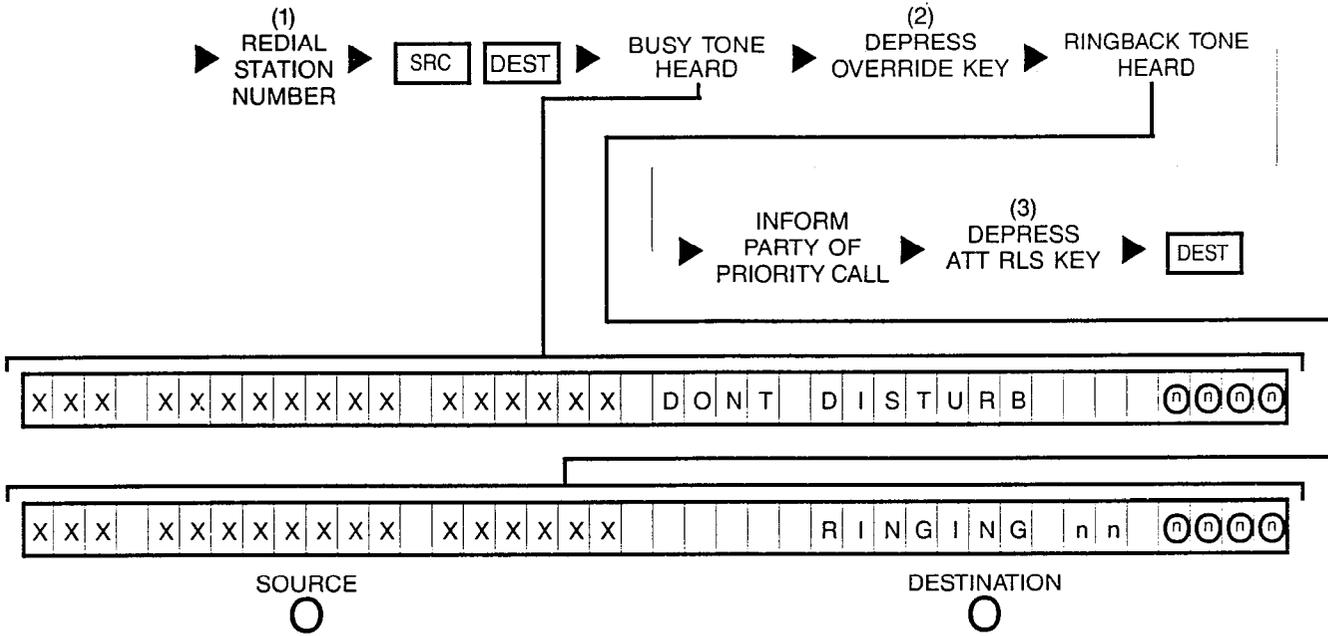
NOTES: (1)   Number displayed when dialed.

(2)   OVERRIDE key's LED remains extinguished.

(3)   Depressing a flashing INC, OPR, RCL, or ANS key performs the same function in addition to connecting the next call for processing.

5A REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES
AN IDLE OUTGOING TRUNK — ATTENDANT DIALS PUBLIC NETWORK NUMBER):

IF 'SMDR' ACCOUNT CODE IS REQUIRED

(2)   (1)   (2)
► DIAL DIRECT TRUNK   DEPRESS   ► RECALL DIAL ► DIAL REQUIRED DIGITS
► GROUP ACCESS CODE   or   TRK GRP KEY ► SRC DEST   TONE HEARD   OF 'SMDR' SPECIAL
                                                                   ACCOUNT CODE

OPTIONAL

(2)   (3)
► CO DIAL   ► DIAL PUBLIC   ► CO RINGBACK ► TRUNK ANSWERS
► TONE HEARD ► NETWORK NUMBER ► TONE HEARD   ANNOUNCE CALL

(4)
► DEPRESS
► ATT RLS KEY ► DEST

X X X | X X X X X X X X | X X X X X X X | O U T | X X X X X X X X | n n / n n

SOURCE   DESTINATION
O   O
(Customer-defined via CMU procedures)

NOTES: (1) Optional key.

(2) Number is displayed when dialed.

(3) Two loop start trunks cannot be connected together; if this condition exists, re-order tone is heard. Depending on the procedures established by company policy, either dial an alternate trunk access code or inform the calling trunk party that the connection cannot be made.

(4) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

5B REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES AN IDLE OUTGOING TRUNK — SOURCE PARTY DIALS PUBLIC NETWORK NUMBER):

```
                                                         IF 'SMDR' ACCOUNT CODE IS REQUIRED
          (3)                    (1)                                    (3)
▶ DIAL DIRECT TRUNK        DEPRESS                  ▶ RECALL DIAL ▶ DIAL REQUIRED DIGITS
▶ GROUP ACCESS CODE   or  TRK GRP KEY ▶  SRC  DEST     TONE HEARD      OF 'SMDR' SPECIAL
                                                                       ACCOUNT CODE


                                                                  (2)
                                           CO DIAL              DEPRESS
                                        ▶ TONE HEARD  ▶       ATT RLS KEY  ▶   DEST
```

```
| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | O | U | T | | X | X | X | X | X | X | X | X | | n | n | / | n | n |
```

        SOURCE   DESTINATION
          O   O
              (Customer-defined via CMU procedures)
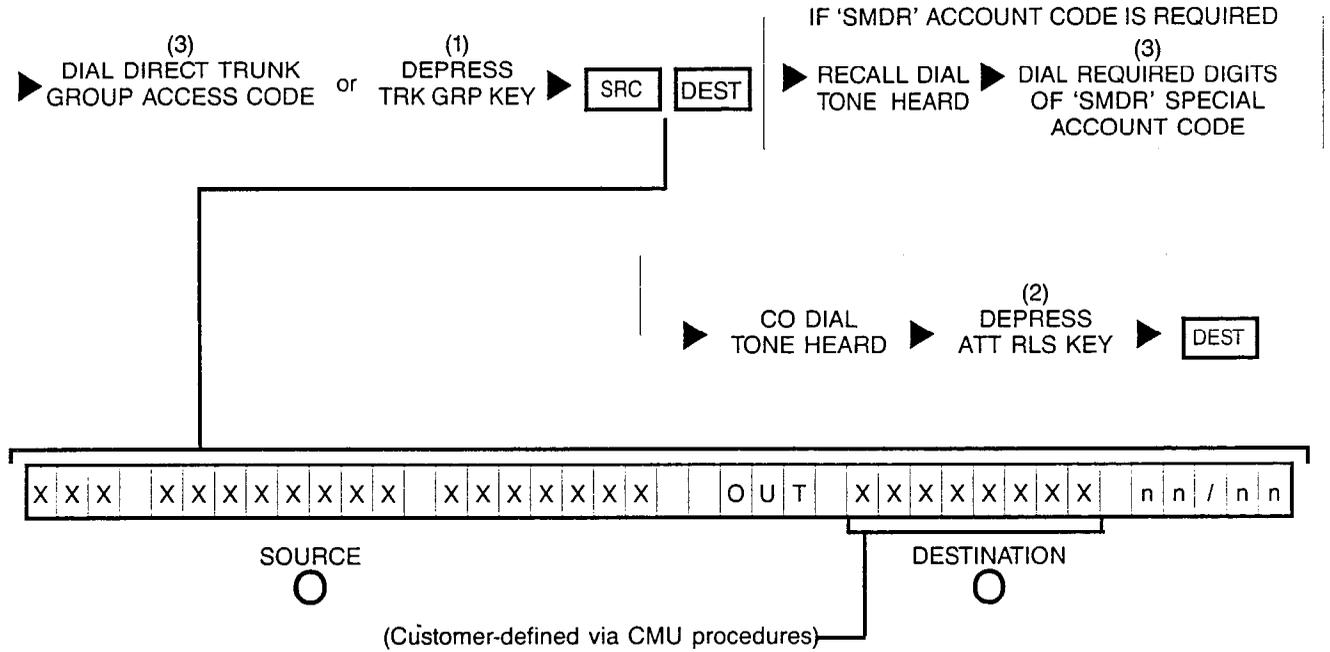
NOTES: (1) Optional key.
        (2) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.
        (3) Number is displayed when dialed.

5C1 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP — NO QUEUING REQUESTED):

```
         (2)                    (1)
►  DIAL DIRECT TRUNK    or   DEPRESS      ►  ┌─────┐ ┌─────┐  ►    BUSY       ►  DEPRESS
►  GROUP ACCESS CODE         TRK GRP KEY     │ SRC │ │DEST │     TONE HEARD      SRC KEY
                                             └─────┘ └─────┘


                                                       INFORM
                          ┌─────┐ ┌─────┐  ►  SOURCE   ►  DEPRESS   ►  ┌─────┐
                      ►   │ SRC │ │DEST │     PARTY        RLS KEY      │ SRC │
                          └─────┘ └─────┘                              └─────┘
```

```
┌──────────────────────────────────────────────────────────────────────────────────┐
│ X  X  X   X  X  X  X  X  X  X   X  X  X  X  X  X      O  U  T   X  X  X  X  X  X  X      B  U  S  Y │
└──────────────────────────────────────────────────────────────────────────────────┘
```

           SOURCE   DESTINATION
             O   O
                    (Customer-defined via CMU procedures)

NOTES: (1) Optional key.
        (2) Number is displayed when dialed.

5C2 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP — CALLBACK QUEUING REQUESTED):
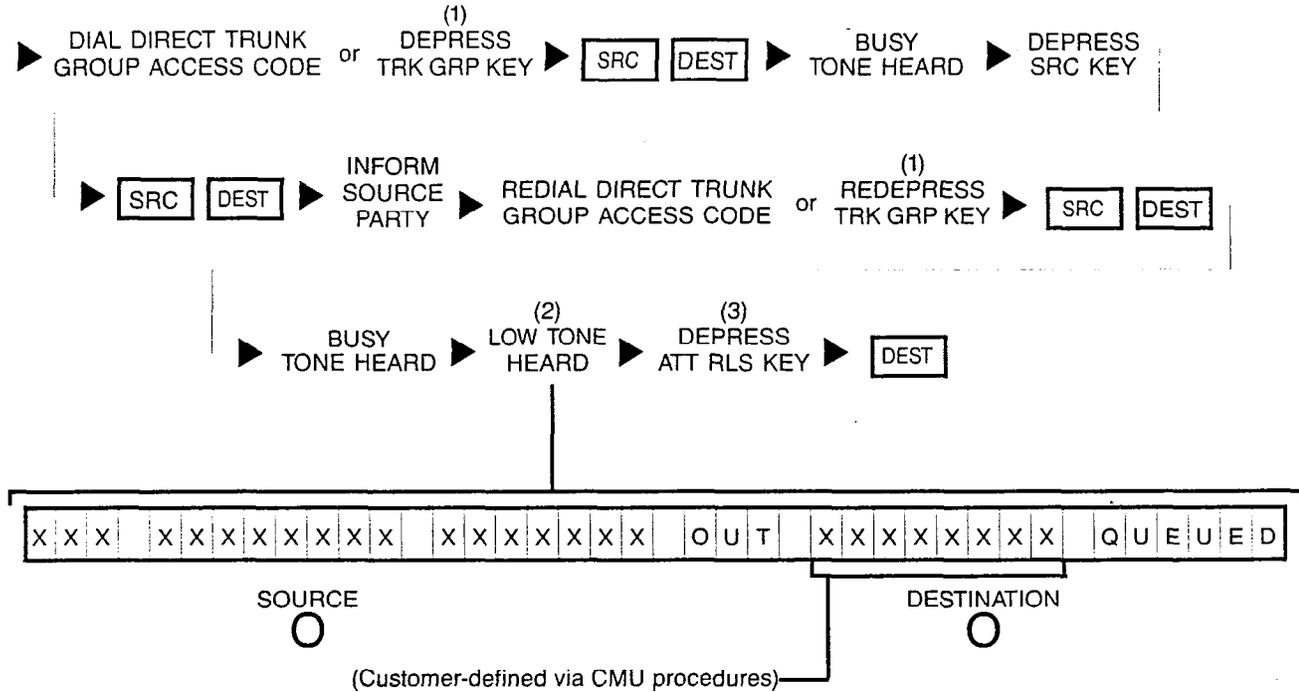
▶ DIAL DIRECT TRUNK
▶ GROUP ACCESS CODE   or   (1)
DEPRESS
TRK GRP KEY ▶ | SRC | |DEST| ▶ BUSY
TONE HEARD ▶ DEPRESS
SRC KEY

▶ | SRC | | DEST | ▶ INFORM
SOURCE
PARTY ▶ REDIAL DIRECT TRUNK
GROUP ACCESS CODE   or   (1)
REDEPRESS
TRK GRP KEY ▶ | SRC | |DEST|

▶ BUSY
TONE HEARD ▶ (2)
LOW TONE
HEARD ▶ (3)
DEPRESS
ATT RLS KEY ▶ | DEST |

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | O | U | T | | X | X | X | X | X | X | X | | Q | U | E | U | E | D |

SOURCE
O

DESTINATION
O

(Customer-defined via CMU procedures)

NOTES: (1) Optional key.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

5C3 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP — STANDBY QUEUING REQUESTED):
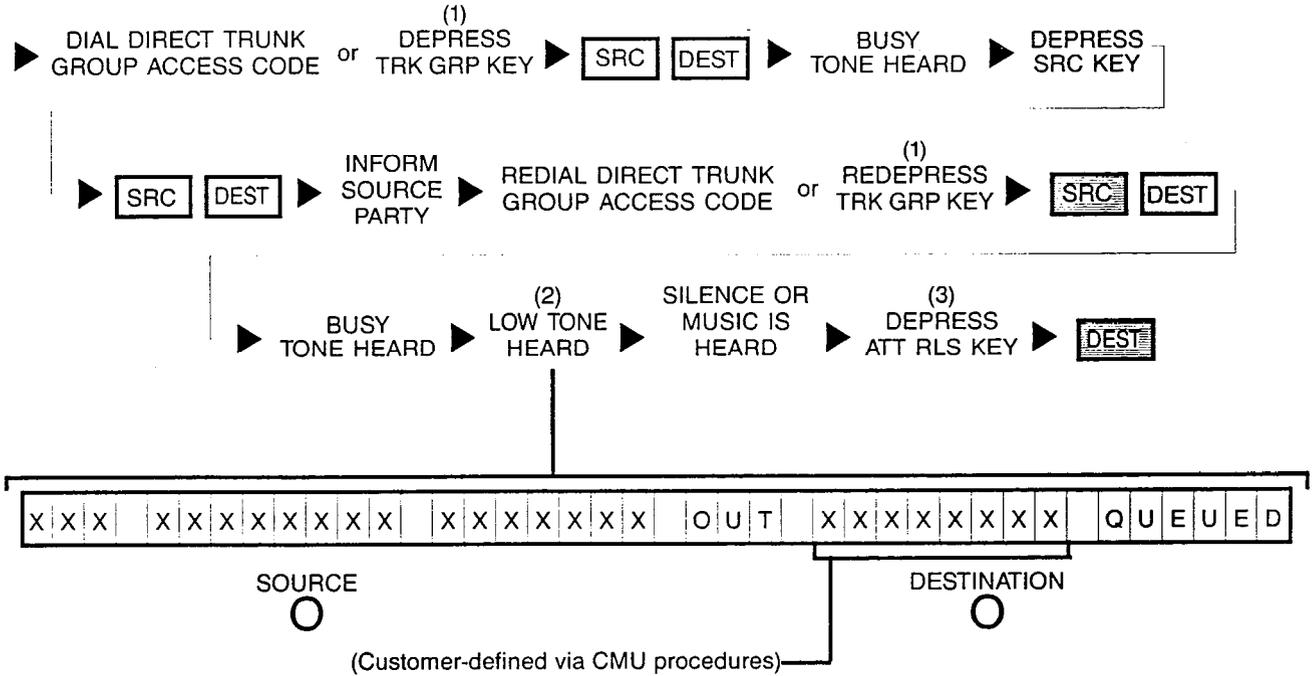
```
                         (1)
► DIAL DIRECT TRUNK   or DEPRESS    ► [SRC] [DEST] ►  BUSY      ► DEPRESS
► GROUP ACCESS CODE      TRK GRP KEY                 TONE HEARD   SRC KEY


                         INFORM                          (1)
 ► [SRC] [DEST] ►        SOURCE   ► REDIAL DIRECT TRUNK or REDEPRESS  ► [SRC] [DEST]
                         PARTY      GROUP ACCESS CODE      TRK GRP KEY


                         (2)        SILENCE OR      (3)
      ►  BUSY      ► LOW TONE ►     MUSIC IS    ► DEPRESS      ► [DEST]
         TONE HEARD   HEARD          HEARD        ATT RLS KEY
```

X X X	X X X X X X X X	X X X X X X X	O U T	X X X X X X X X	Q U E U E D

SOURCE
O

DESTINATION
O

(Customer-defined via CMU procedures)——┘

NOTES: (1) Optional key.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

5D REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES AN IDLE OUTGOING TRUNK WITH 'LCR'):

(1)
► DIAL LEAST COST ROUTING ► [SRC] [DEST] ► DIAL PUBLIC ► CALL ADVANCE
   (LCR) ACCESS CODE   NETWORK NUMBER   TONES

IF 'SMDR' ACCOUNT CODE IS REQUIRED   (2)   OPTIONAL
                (1)   CONFIRMATION TONE
► RECALL DIAL ► DIAL REQUIRED DIGITS ► RECEIVED ► TRUNK ANSWERS
  TONE HEARD   OF 'SMDR' SPECIAL   CO RINGBACK   ANNOUNCE CALL
           ACCOUNT CODE   TONE HEARD

                                          (3)
                                    DEPRESS
                              ► ATT RLS KEY ► [DEST]

```
| X X X | X X X X X X X | X X X X X X |       |   | R O U T E = n n   n n   n n |
```
          SOURCE   DESTINATION
            O   O
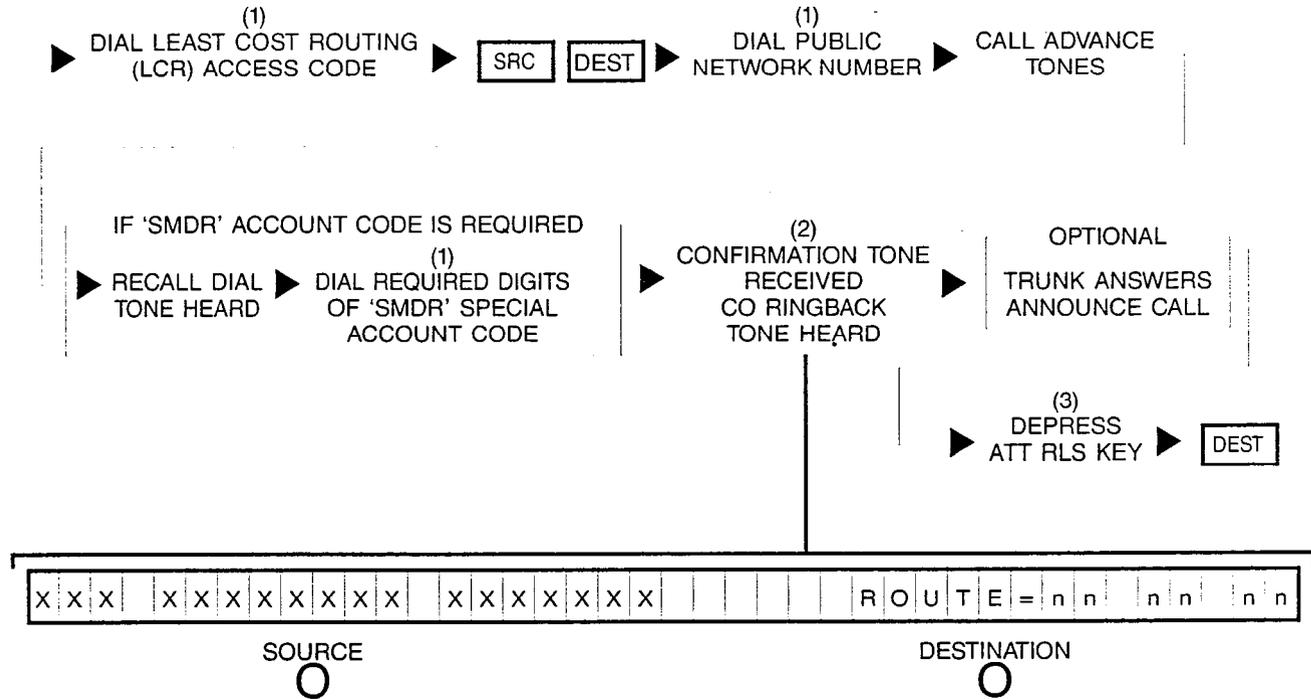
NOTES: (1) Number is displayed when dialed.

(2) Two loop start trunks cannot be connected together; if this condition exists, re-order tone is heard. Depending on the procedures established by company policy, either dial an alternate trunk access code or inform calling trunk that the connection cannot be made.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

5E1 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP WITH 'LCR' — NO QUEUING REQUESTED):

DIAL LEAST COST
► ROUTING (LCR) ► [SRC] [DEST] ► DIAL PUBLIC (1) ► CALL ADVANCE ► BUSY
ACCESS CODE   NETWORK NUMBER   TONES   TONE HEARD

► DEPRESS ► [SRC] [DEST] ► INFORM ► DEPRESS ► [SRC]
SRC KEY   SOURCE PARTY   RLS KEY

| X | X | X | | X | X | X | X | X | X | | X | X | X | X | X | X | | | | | | | R | O | U | T | E | = | n | n | | B | U | S | Y |

SOURCE   DESTINATION
O   O
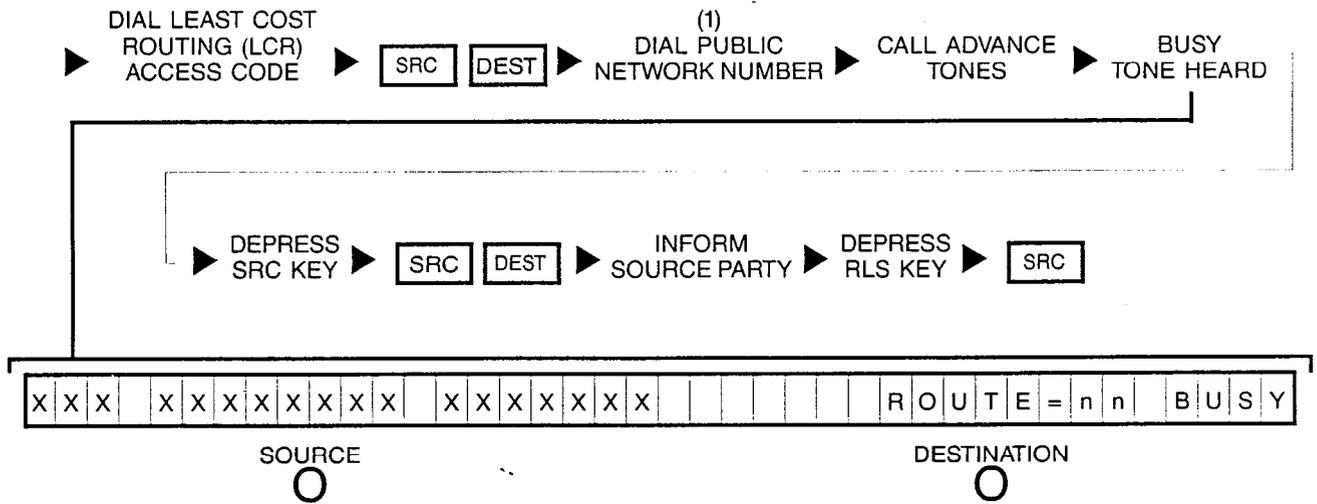
NOTE: (1) Trunk number is displayed when dialed.

5E2 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP WITH 'LCR' — CALLBACK QUEUING REQUESTED):
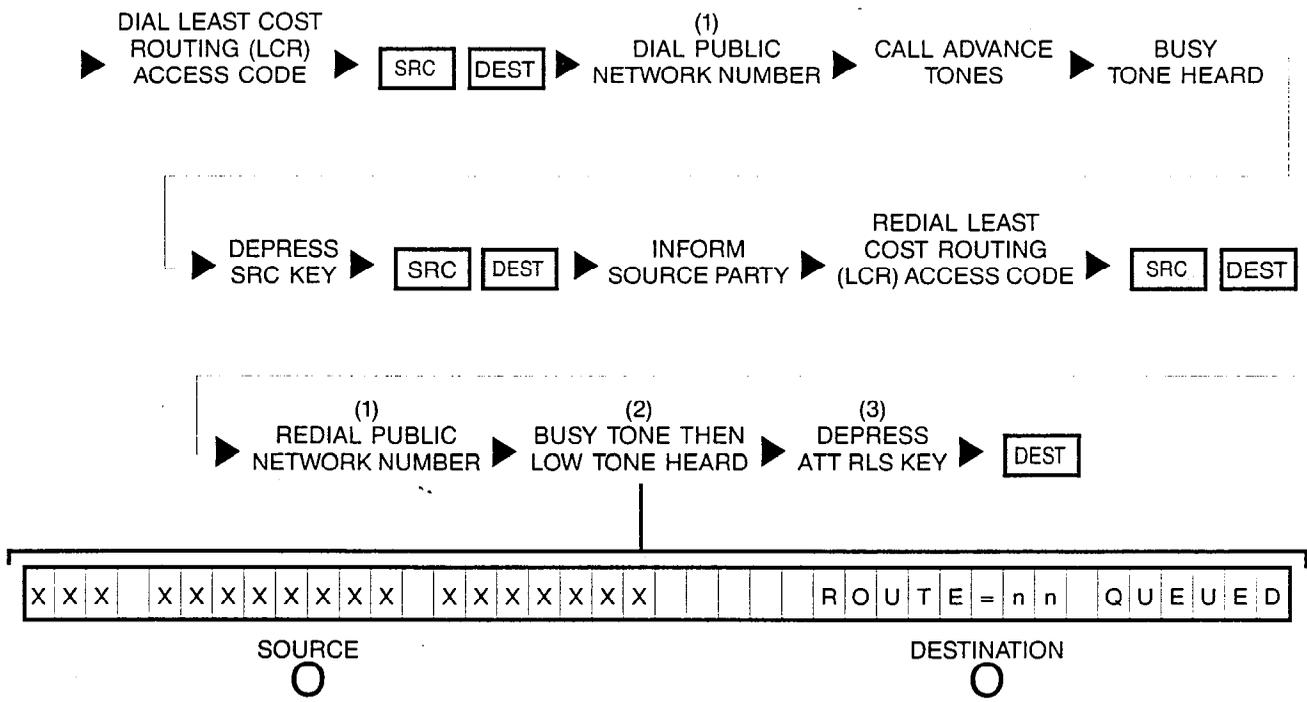
▶ DIAL LEAST COST ROUTING (LCR) ACCESS CODE ▶ [SRC] [DEST] ▶ (1) DIAL PUBLIC NETWORK NUMBER ▶ CALL ADVANCE TONES ▶ BUSY TONE HEARD

▶ DEPRESS SRC KEY ▶ [SRC] [DEST] ▶ INFORM SOURCE PARTY ▶ REDIAL LEAST COST ROUTING (LCR) ACCESS CODE ▶ [SRC] [DEST]

▶ (1) REDIAL PUBLIC NETWORK NUMBER ▶ (2) BUSY TONE THEN LOW TONE HEARD ▶ (3) DEPRESS ATT RLS KEY ▶ [DEST]

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | | | | | R | O | U | T | E | = | n | n | | Q | U | E | U | E | D |

SOURCE O

DESTINATION O

NOTES: (1) Trunk number is displayed when dialed.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

5E3 REQUESTS CONNECTION TO TRUNK (ATTENDANT ACCESSES BUSY TRUNK GROUP WITH 'LCR' — STANDBY QUEUING REQUESTED):

▶ DIAL LEAST COST ROUTING (LCR) ACCESS CODE ▶ SRC DEST ▶ DIAL PUBLIC NETWORK NUMBER (1) ▶ BUSY TONE HEARD ▶ DEPRESS SRC KEY

▶ SRC DEST ▶ INFORM SOURCE PARTY ▶ REDIAL LEAST COST ROUTING (LCR) ACCESS CODE ▶ SRC DEST

▶ REDIAL PUBLIC NETWORK NUMBER (1) ▶ BUSY TONE THEN LOW TONE HEARD (2) ▶ SILENCE OR MUSIC IS HEARD ▶ DEPRESS ATT RLS KEY (3) ▶ DEST

```
| X | X | X |   | X | X | X | X | X | X | X |   | X | X | X | X | X | X | X |   |   |   |   | R | O | U | T | E | = | n | n |   | Q | U | E | U | E | D |
```

SOURCE
O

DESTINATION
O

NOTES: (1) Trunk number is displayed when dialed.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

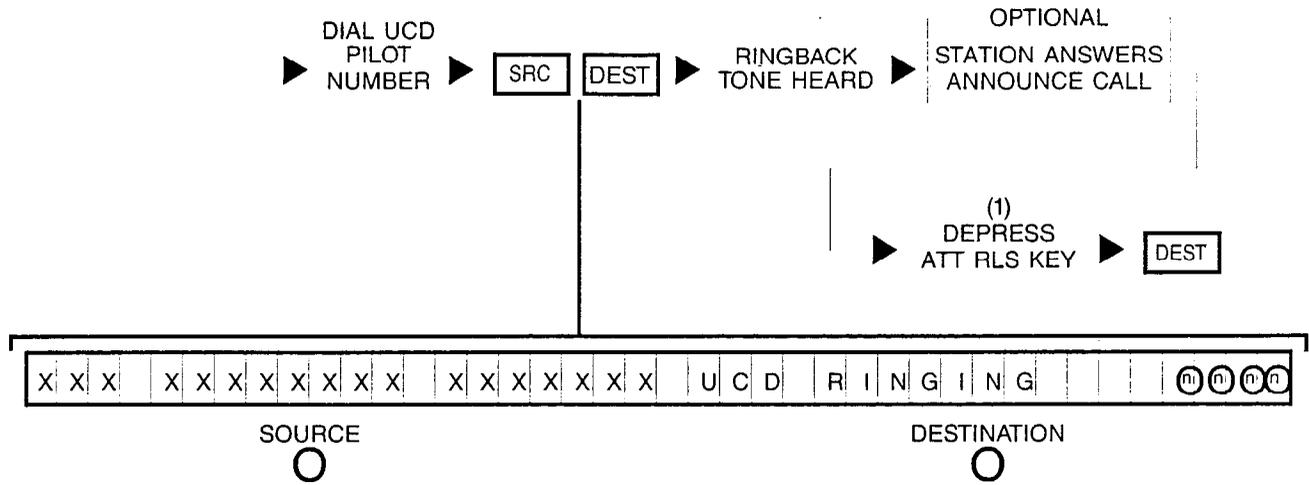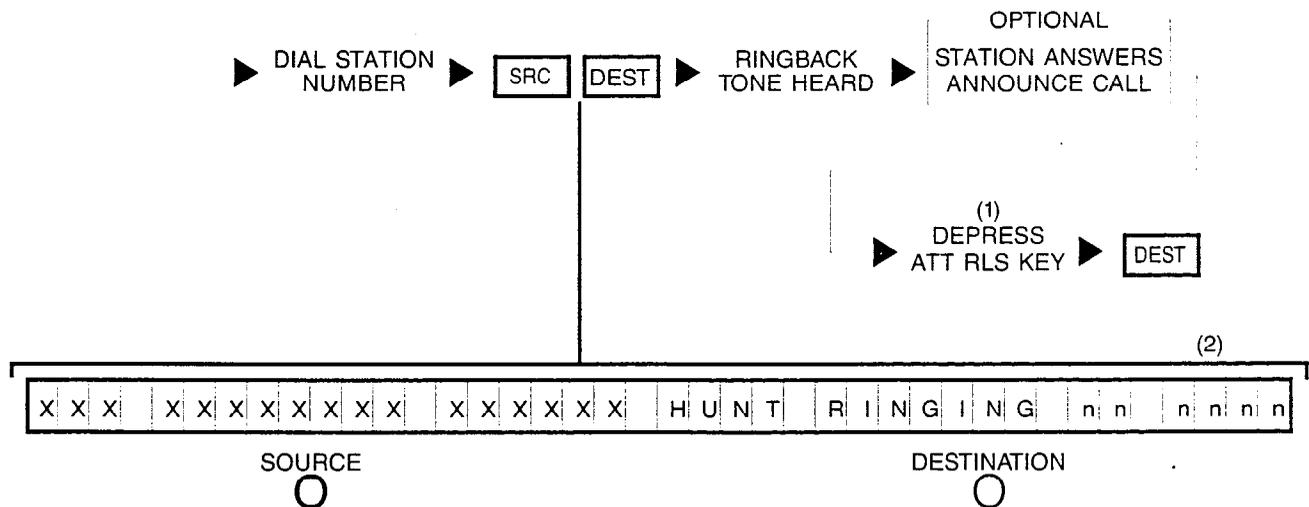# 6 INCOMING TRUNK SOURCE PARTY REQUESTS SERIAL CALLING (I.E.: ATTENDANT LOCKED LOOP OPERATION FEATURE):

```
DIAL REQUESTED                        (1)                  OPTIONAL
  STATION NUMBER OR                RINGBACK      STATION OR TRUNK ANSWERS
► ACCESS OUTGOING TRUNK ► [SRC][DEST] ► TONE HEARD ►    ANNOUNCE CALL


                              ► DEPRESS AN IDLE ► [LOOP][DEST]
                                    LOOP KEY
                                         (Winking)┘
```

```
I N C   X X X X X X X     n n / n n   X X X X X X X X X X X X X X X X X X X X X
        SOURCE                                DESTINATION
          O                                        O
      (Refer to Table 4.04)                (Destination information)
```

NOTES: (1) Two loop start trunks cannot be connected together; if this condition exists, reorder tone is heard. Depending on the procedures established by company policy, either dial an alternate trunk access code or inform the calling trunk party that the connection cannot be made.

When the attendant-dialed destination party releases from the call, calling trunk party automatically recalls attendant. The associated LOOP key flashes.

7A   PLACING A PARTY ON HOLD:

(Reference only)

▶ SRC   ▶   OPTIONAL
INFORM SOURCE PARTY
BEING PLACED ON HOLD   ▶   DEPRESS AN
IDLE LOOP KEY   ▶   SRC   LOOP

(Winking)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X																						

SOURCE
O

DESTINATION
O

(Source party information)
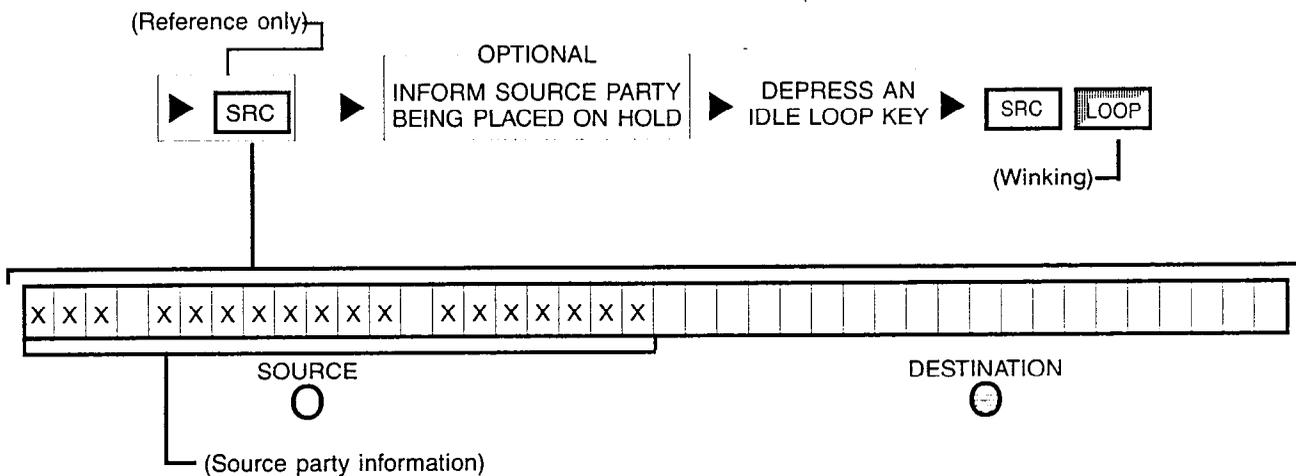
NOTE: After placing call on hold and in the event that the hold condition times out, the source
party automatically recalls attendant and the LOOP key flashes.

7B   RETRIEVING A PARTY ON HOLD:
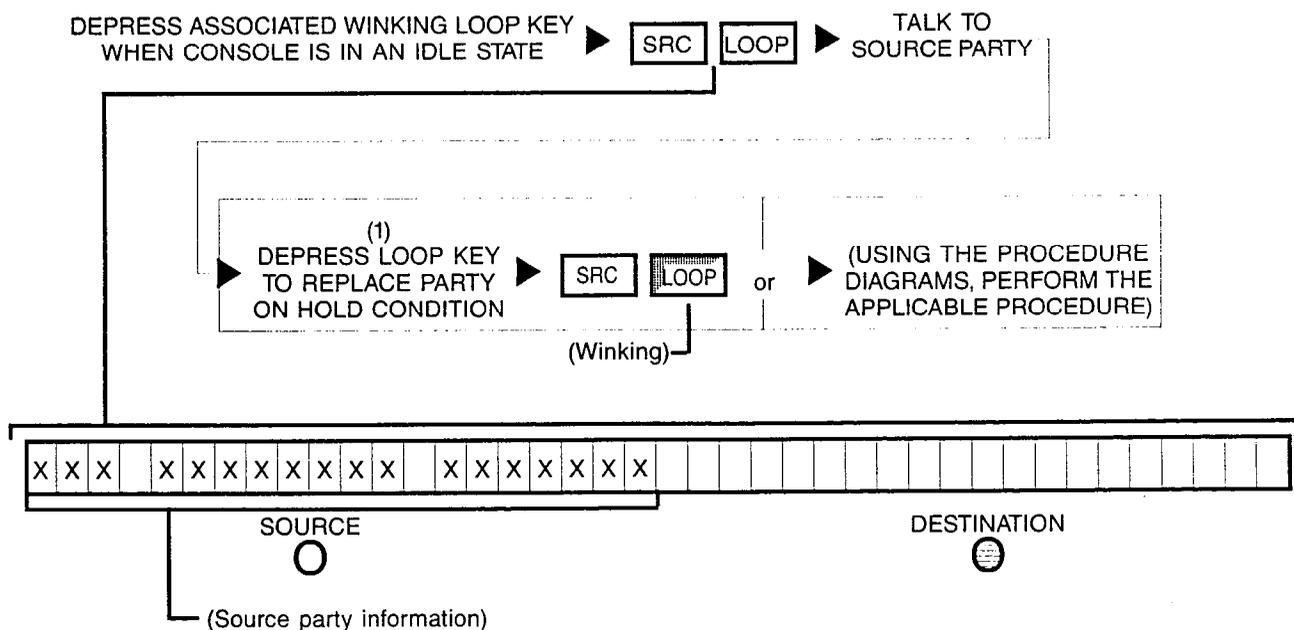
DEPRESS ASSOCIATED WINKING LOOP KEY
WHEN CONSOLE IS IN AN IDLE STATE   ▶   SRC   LOOP   ▶   TALK TO
SOURCE PARTY

(1)
▶ DEPRESS LOOP KEY
TO REPLACE PARTY   ▶   SRC   LOOP   or   ▶   (USING THE PROCEDURE
DIAGRAMS, PERFORM THE
ON HOLD CONDITION   APPLICABLE PROCEDURE)

(Winking)

X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X																						

SOURCE
O

DESTINATION
O

(Source party information)

NOTE: (1) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in ad-
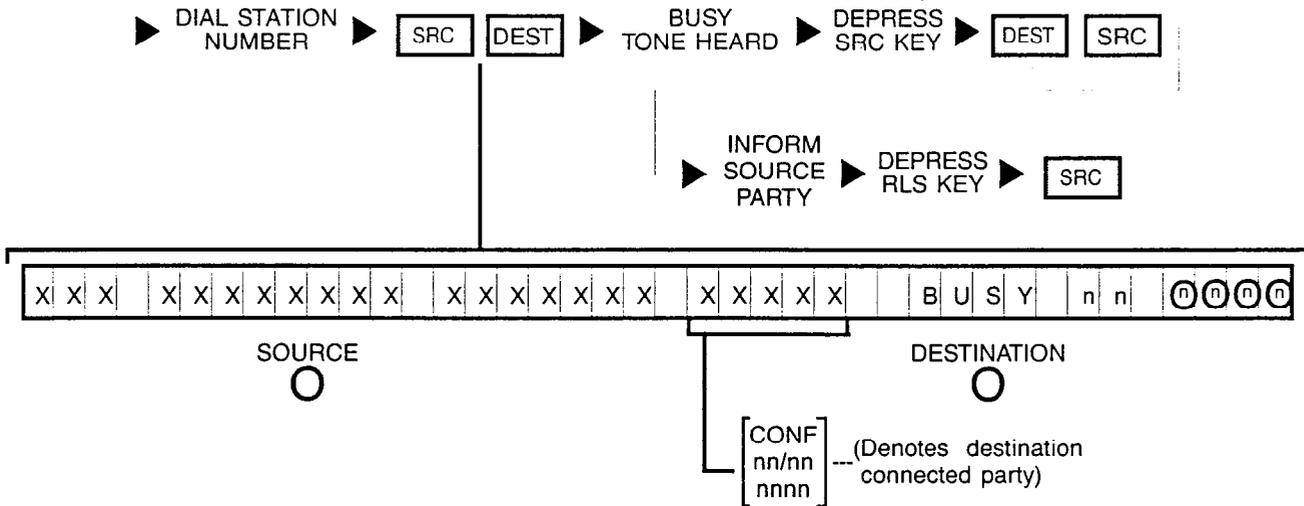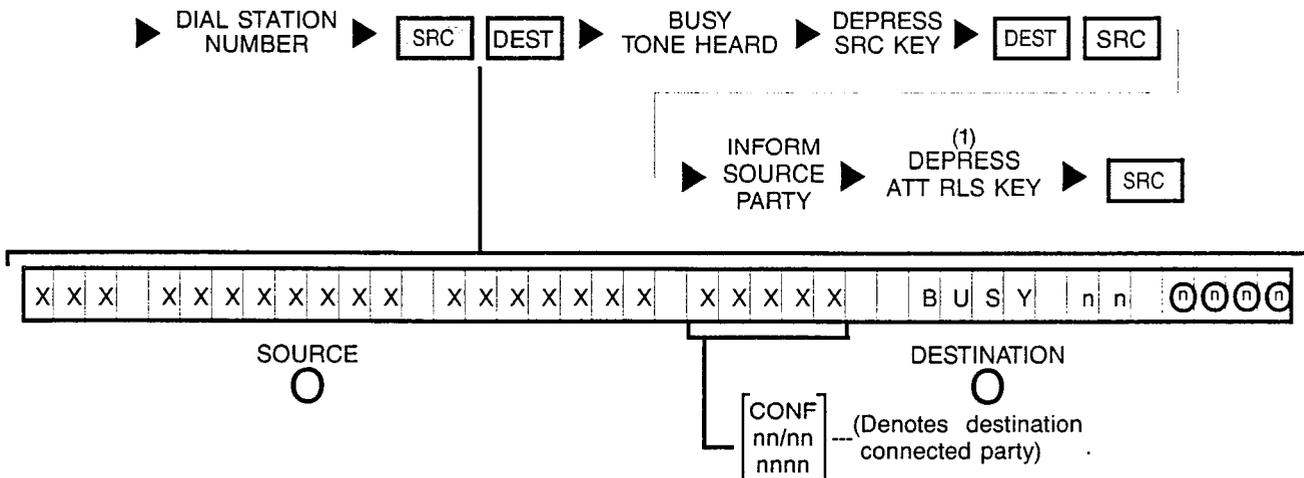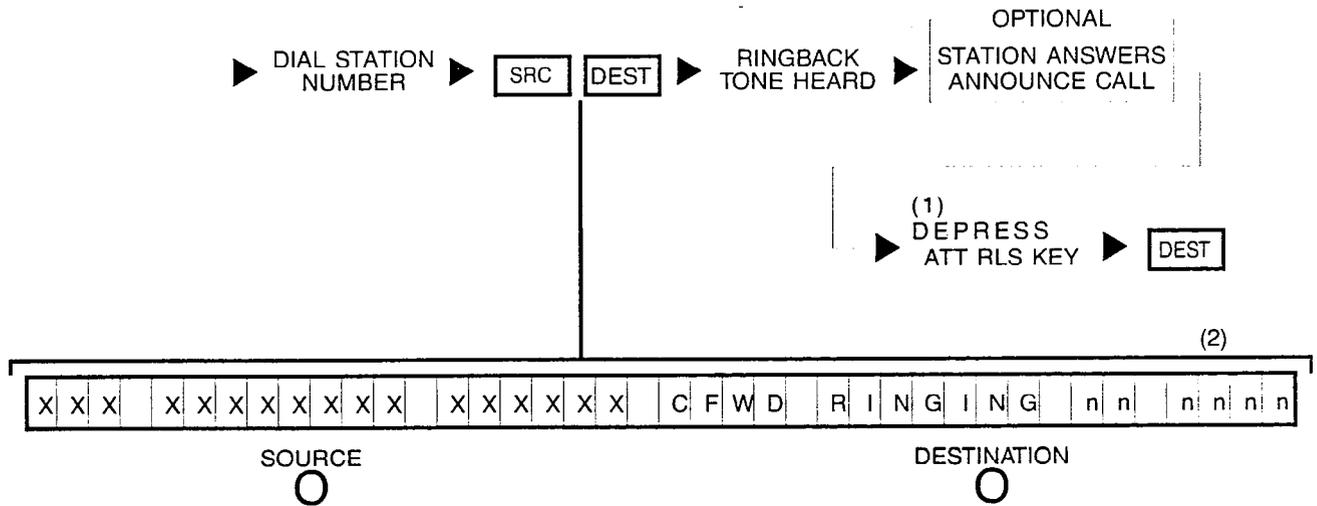dition to connecting the next call for processing.

8A ESTABLISHING A LOCKED LOOP CONNECTION:
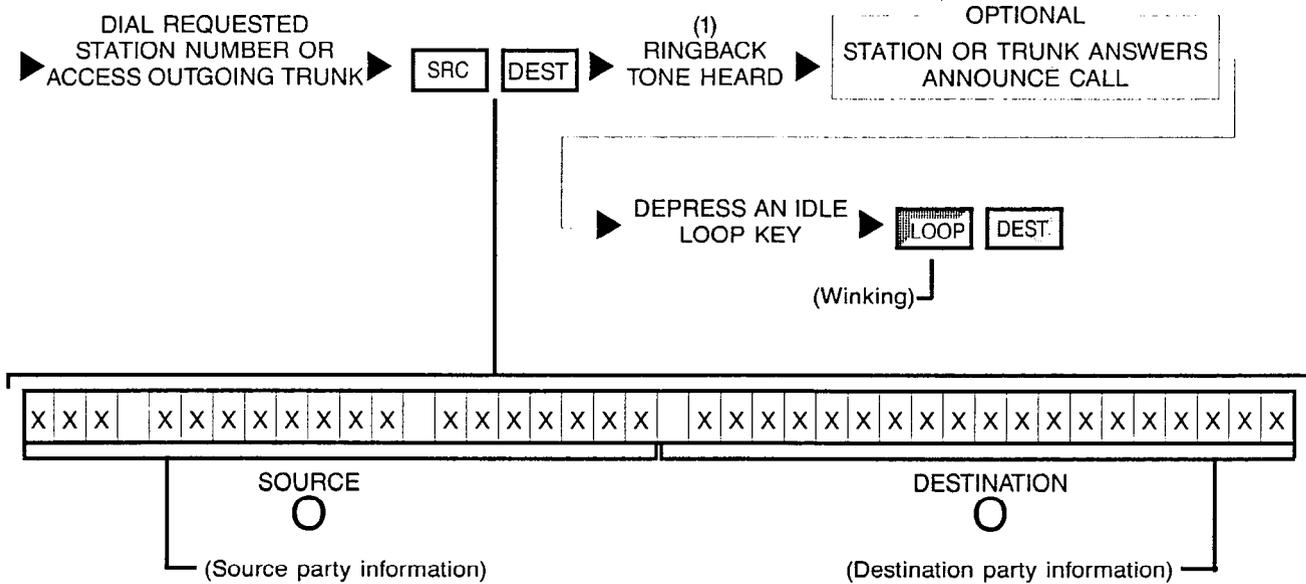
```
        DIAL REQUESTED                          (1)              |⎺⎺⎺⎺  OPTIONAL  ⎺⎺⎺⎺|
►       STATION NUMBER OR        ►  [SRC] [DEST] ►  RINGBACK  ►  | STATION OR TRUNK ANSWERS |
►    ACCESS OUTGOING TRUNK ►                       TONE HEARD    |     ANNOUNCE CALL        |
                                                                 |⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽⎽|

                                    ►  DEPRESS AN IDLE  ►  [LOOP] [DEST.]
                                           LOOP KEY

                                            (Winking)⎦
```
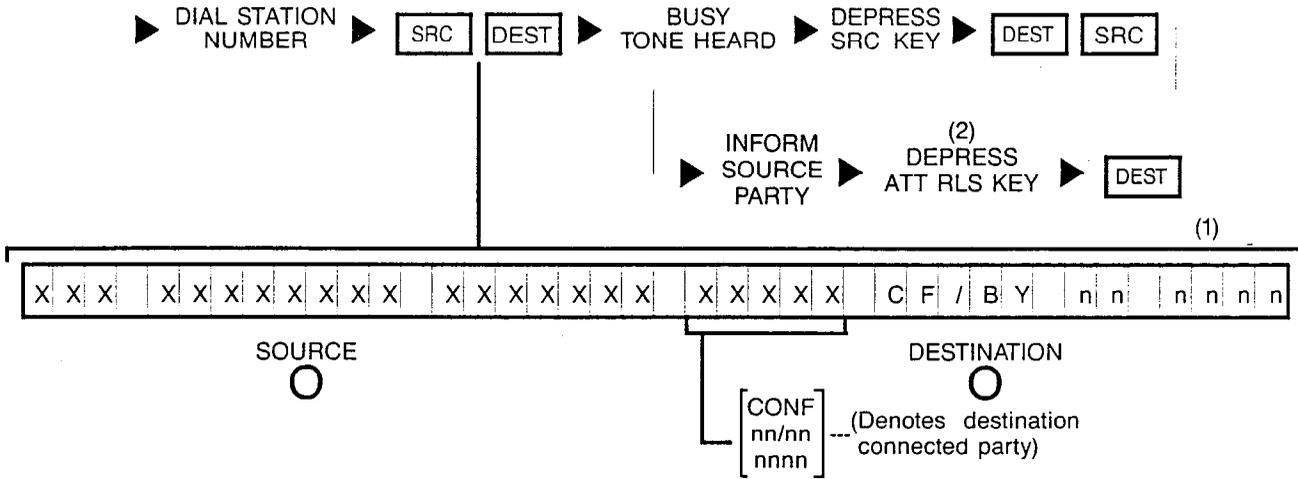
```
| X | X | X |   | X | X | X | X | X | X | X |   | X | X | X | X | X | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
```

SOURCE	DESTINATION
O	O
(Source party information)	(Destination party information)

NOTES: (1) Two loop start trunks cannot be connected together; if this condition exists, reorder tone is heard. Depending on the procedures established by company policy, either dial an alternate trunk access code or inform calling trunk party that the connection cannot be made.

After placing both source and destination parties on hold, only a station can manually recall attendant. The associated LOOP key flashes.

8B   RE-ENTERING A LOCKED LOOP CONNECTION:

DEPRESS ASSOCIATED LOOP KEY
WHEN CONSOLE IS IN AN IDLE STATE ▶ | LOOP | | BOTH | ▶

(1)
BUSY OVERRIDE INJECTION
TONE HEARD

▶ TALK TO
BOTH PARTIES ▶

(2)
DEPRESS LOOP KEY
TO REESTABLISH THE
LOCKED LOOP CONNECTION ▶ | BOTH | | LOOP |

(Winking)

| X | X | X | | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

SOURCE
O
(Source party information)

DESTINATION
O
(Destination party information)

NOTES: (1)   If no tone (silence) is heard and "ATT LOCKOUT" is displayed instead, one of the parties has the Lockout with Secrecy feature activated and attendant cannot enter connection.

(2)   Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

9A PLACING A PARTY IN CALL PARK:

▶ DIAL CALL PARK or (1) ▶ [SRC] [DEST] [PARK] ▶ (2)
  ACCESS CODE   DEPRESS   CONFIRMATION
                      PARK KEY   TONE HEARD

                                (3)
                           ▶ DEPRESS ▶ [DEST] [PARK]
                              ATT RLS KEY

```
| X | X | X |   | X | X | X | X | X | X | X | X |   | X | X | X | X | X | X | X |   | P | A | R | K |   | L | O | C | A | T | I | O | N |   | n | n | n | n | Y |
```

            SOURCE   DESTINATION
              O   O

                                            (Call Park Access Code) ⌐

                                                 (Call Park Location) ⌐

NOTES: (1) Optional key.

(2) If busy tone is heard and "PARK LOCATION BUSY" is displayed instead, depress
     RLS key to release from function and connect back to source party to inform
     that the park facilities are busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function
     in addition to connecting the next call for processing.

     After placing call in park and in the event that the park condition times out, the
     source party automatically recalls attendant.

9B RETRIEVING A PARKED CALL:

                    (1)
▶ DIAL CALL PARK ACCESS   ▶ TALK TO   ▶ (USING THE PROCEDURE DIAGRAMS,
  CODE AND LOCATION NUMBER   SOURCE PARTY   PERFORM THE APPLICABLE PROCEDURE)

```
| X | X | X |   | X | X | X | X | X | X | X | X |   | X | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
```

            SOURCE   DESTINATION
              O   ⊜

      (Source party information)

NOTE: (1) Number displayed when dialed.

10A CALL SPLITTING BETWEEN ATTENDANT AND SOURCE OR DESTINATION PARTY:

(1) [SRC] (2) [DEST] ▶ TALK TO DESTINATION PARTY ▶ DEPRESS SRC KEY ▶ (2) [SRC] (1) [DEST] ▶ TALK TO SOURCE PARTY

▶ (USING PROCEDURE DIAGRAMS, PERFORM
▶ THE APPLICABLE PROCEDURE)

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

SOURCE
O
— (Source party information)

DESTINATION
O
(Destination party information) —

NOTES: (1) Splitted party.
(2) Connected party.

10B CALL UNSPLITTING BETWEEN ATTENDANT, SOURCE AND DESTINATION PARTIES:

(1) [SRC] (2) [DEST] ▶ TALK TO DESTINATION PARTY ▶ DEPRESS SRC KEY ▶ (2) [SRC] (1) [DEST] ▶ TALK TO SOURCE PARTY

▶ DEPRESS BOTH KEY [SRC] [DEST] (3) [BOTH] ▶ TALK TO BOTH PARTIES ▶ (USING THE PROCEDURE DIAGRAMS, PERFORM THE APPLICABLE PROCEDURE)

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

SOURCE
O
— (Source party information)

DESTINATION
O
(Destination party information) —

NOTES: (1) Splitted party.
(2) Connected party.
(3) Unsplitted 3-way connection established (i.e.; source-attendant-destination).

4-39

11A CALLING A STATION (STATION IDLE):

DIAL DESIRED STATION NUMBER ▶ [SRC] ▶ RINGBACK ▶ STATION ANSWERS
WHEN CONSOLE IS IDLE   TONE HEARD   TALK TO PARTY

▶ DEPRESS ▶ [SRC]
  RLS KEY

| | | | |R|I|N|G|I|N|G| |n|n| |ⓝⓝⓝ| | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

11B CALLING A STATION (STATION WAS RINGING BUT
CALL ANSWERED BY ANOTHER STATION):

DIAL DESIRED STATION NUMBER ▶ [SRC] ▶ RINGBACK ▶ CALL PICKED-UP STATION ANSWERS
WHEN CONSOLE IS IDLE   TONE HEARD   TALK TO PARTY

▶ DEPRESS ▶ [SRC]
  RLS KEY

(1)

|C|A|L|L| |P|I|C|K|-|U|P| |n|n| |n|n|n|n| | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O

NOTE: (1) Dialed station number is displayed first, then the station number which picked-up
(answered) the call.

11C   CALLING A UCD GROUP:
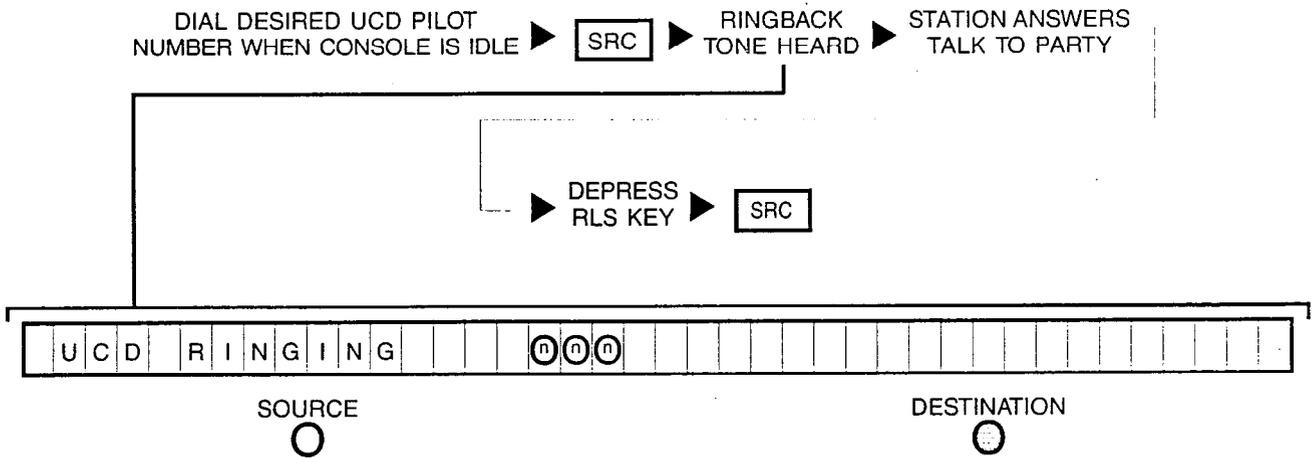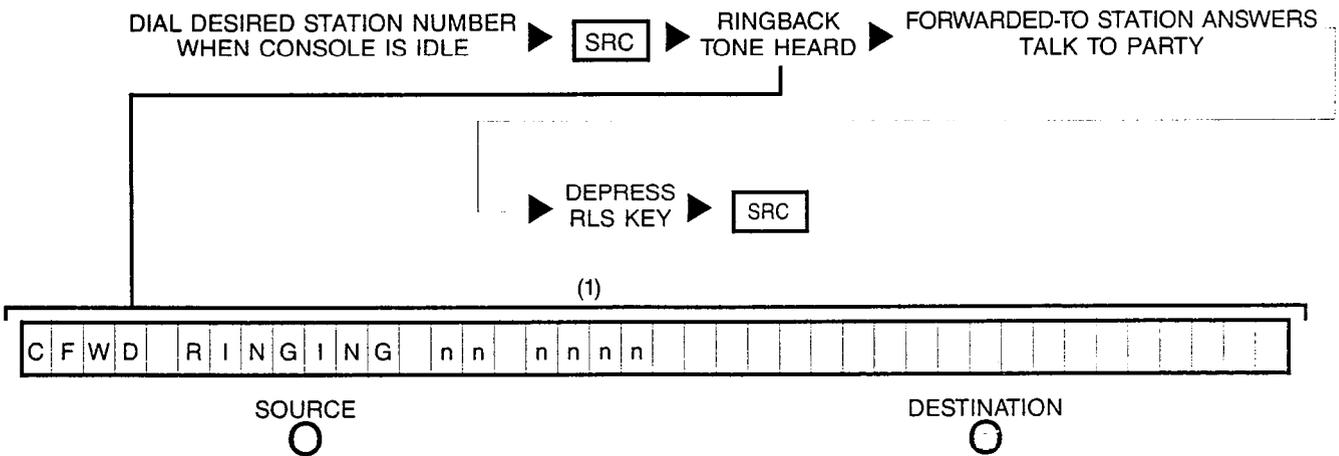
DIAL DESIRED UCD PILOT
NUMBER WHEN CONSOLE IS IDLE ▶ [SRC] ▶ RINGBACK
TONE HEARD ▶ STATION ANSWERS
TALK TO PARTY

▶ DEPRESS
RLS KEY ▶ [SRC]

| U | C | D | | R | I | N | G | I | N | G | | | | | (n)(n)(n) | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O

11D   CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO AN IDLE STATION):

DIAL DESIRED STATION NUMBER
WHEN CONSOLE IS IDLE ▶ [SRC] ▶ RINGBACK
TONE HEARD ▶ FORWARDED-TO STATION ANSWERS
TALK TO PARTY

▶ DEPRESS
RLS KEY ▶ [SRC]

(1)

| C | F | W | D | | R | I | N | G | I | N | G | | n | n | | n | n | n | n | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O

NOTE: (1) Dialed station number is displayed first, then changes to the forwarded-to station number.

11E CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO A BUSY STATION):
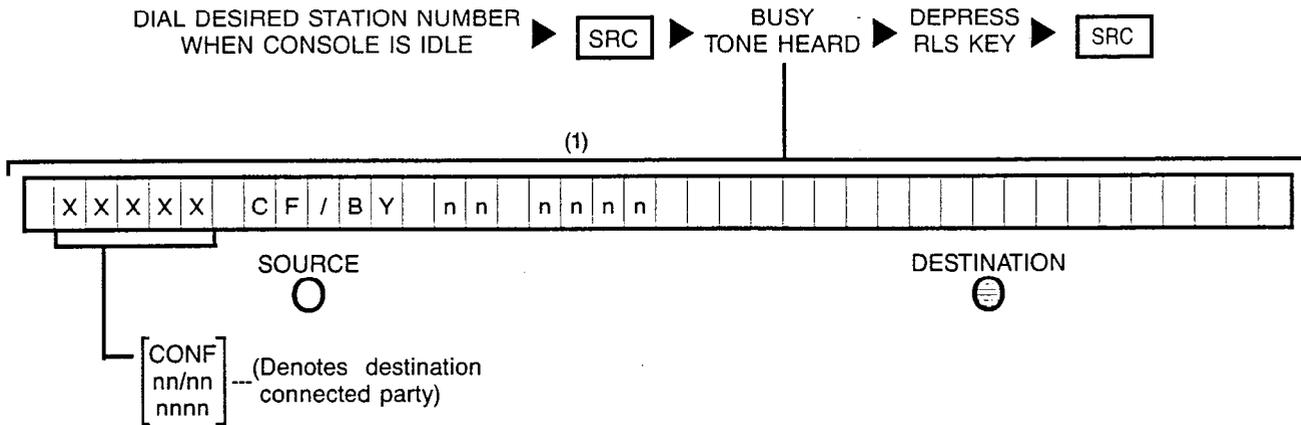
DIAL DESIRED STATION NUMBER WHEN CONSOLE IS IDLE ▶ [SRC] ▶ BUSY TONE HEARD ▶ DEPRESS RLS KEY ▶ [SRC]

(1)

| X | X | X | X | X | | C | F | / | B | Y | | n | n | | n | n | n | n | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

$\begin{bmatrix} \text{CONF} \\ \text{nn/nn} \\ \text{nnnn} \end{bmatrix}$ ---(Denotes destination connected party)

NOTES: (1) Dialed station number is displayed first, then changes to the forwarded-to station number.

Busy override can be performed on this condition if not connected to a conference.

11F1 CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTSIDE TRUNK NUMBER IDLE):

DIAL DESIRED STATION NUMBER WHEN CONSOLE IS IDLE ▶ [SRC] ▶ CO RINGBACK TONE HEARD ▶ TRUNK ANSWERS TALK TO PARTY

▶ DEPRESS RLS KEY ▶ [SRC]

(1)

| C | F | W | D | | T | O | | N | T | W | K | | n | n | / | n | n | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

NOTE: (1) Dialed station number is displayed first, then changes to the forwarded-to trunk group and trunk circuit numbers.

11F2 CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTSIDE TRUNK NUMBER BUSY):

DIAL DESIRED STATION NUMBER ► [SRC] ► CO BUSY ► DEPRESS ► [SRC]
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

(1)

| C | F | W | D | | T | O | | N | T | W | K | | n | n | / | n | n | | | | | | | | | | | | | | | | | | | | | |

SOURCE   DESTINATION
O   O

NOTES: (1) Dialed station number is displayed first, then changes to the forwarded-to
           trunk group and trunk circuit numbers.

       Busy override cannot be performed on this condition.

11G CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO NETWORK — OUTGOING TRUNK GROUPS BUSY):

DIAL STATION ► [SRC] ► BUSY ► DEPRESS ► [SRC]
NUMBER   TONE HEARD   RLS KEY

(1)

| C | F | W | D | | T | O | | N | E | T | W | O | R | K | | B | U | S | Y | | | | | | | | | | | | | | | | | | |

SOURCE   DESTINATION
O   ⊖

NOTE: (1) Dialed station number is displayed first, then changes to the forwarded-to
          trunk group and trunk circuit numbers.

11H CALLING A STATION (STATION IN "CALL FORWARDING" MODE TO ATTENDANT):

DIAL DESIRED STATION NUMBER
WHEN CONSOLE IS IDLE ▶ [SRC] ▶ RINGBACK
TONE HEARD ▶ DEPRESS
RLS KEY ▶ [SRC]

```
| | | | | |C|F|/|B|Y| |n|n| |(n)(n)(n)(n)| | | | | | | | | | | | | | | | | | | | | | | | | | |
```
SOURCE
O

DESTINATION
⊜

11I CALLING A STATION (STATION BUSY BUT A "HUNT" GROUP MEMBER):

DIAL DESIRED STATION NUMBER
WHEN CONSOLE IS IDLE ▶ [SRC] ▶ RINGBACK
TONE HEARD ▶ STATION ANSWERS
TALK TO PARTY

▶ DEPRESS
RLS KEY ▶ [SRC]

(1)

```
|H|U|N|T| |R|I|N|G|I|N|G| |n|n| |n|n|n|n| | | | | | | | | | | | | | | | | | | | |
```
SOURCE
O

DESTINATION
⊜

NOTE: (1) Dialed station number is displayed first, then changes to the hunted-to station number.

11J CALLING A STATION (STATION BUSY):

DIAL DESIRED STATION NUMBER ▶ [SRC] ▶ BUSY ▶ DEPRESS ▶ [SRC]
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

| | | X | X | X | X | X | | B | U | S | Y | | n | n | ⓝ | ⓝ | ⓝ | ⓝ | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

└─ [CONF]
   [nn/nn] ─(Denotes destination connected party)
   [nnnn]

NOTE: Busy override can be performed on this condition if not connected to a conference.

11K CALLING A STATION (STATION IN A "DO NOT DISTURB" MODE):

DIAL DESIRED STATION NUMBER ▶ [SRC] ▶ BUSY ▶ DEPRESS ▶ [SRC]
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

| D | O | N | T | | D | I | S | T | U | R | B | | n | n | | ⓝ | ⓝ | ⓝ | ⓝ | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

NOTE: Busy override can be performed on this condition.

11L   CALLING A STATION (STATION CLASS-MARKED AS A DATA LINE):

DIAL DESIRED STATION NUMBER ▶ ☐ SRC ☐ ▶ BUSY ▶ DEPRESS ▶ ☐ SRC ☐
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

D	A	T	A		P	R	I	V	A	C	Y		n	n		Ⓝ	Ⓝ	Ⓝ	Ⓝ																				

SOURCE   DESTINATION
O   ⊖

NOTE: Busy override cannot be performed on this condition.

11M   CALLING A STATION (STATION IN A "LINE LOCKOUT" MODE):

DIAL DESIRED STATION NUMBER ▶ ☐ SRC ☐ ▶ BUSY ▶ DEPRESS ▶ ☐ SRC ☐
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

L	I	N	E		L	O	C	K	O	U	T		n	n		Ⓝ	Ⓝ	Ⓝ	Ⓝ																				

SOURCE   DESTINATION
O   ⊖

11N   CALLING A STATION (STATION IS OUT-OF-SERVICE):

DIAL DESIRED STATION NUMBER ▶ | SRC | ▶ REORDER ▶ DEPRESS ▶ | SRC |
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

```
| | O | U | T | | O | F | | S | V | C | | | | ⓝⓝⓝⓝ | | | | | | | | | | | | | | | | | | | | | |
```

SOURCE   DESTINATION
O   O

11O   CALLING A STATION (VACANT STATION OR CODE INTERCEPT NUMBER):

DIAL DESIRED STATION NUMBER ▶ | SRC | ▶ INTERCEPT ▶ DEPRESS ▶ | SRC |
WHEN CONSOLE IS IDLE   TONE HEARD   RLS KEY

```
| | V | A | C | A | N | T | | N | O | | | | | ⓝⓝⓝⓝ | | | | | | | | | | | | | | | | | | | | |
```

SOURCE   DESTINATION
O   O

12A OVERRIDING (STATION BUSY):

(REFERENCE ONLY)

| SRC | ▶ BUSY TONE HEARD | ▶ (1) DEPRESS OVERRIDE KEY | ▶ | OVER RIDE | ▶ (2) OVERRIDE TONE IS HEARD | ▶ (3) INFORM STATION OF PRIORITY CALL |

▶ INFORM OTHER OR PRIMARY PARTY TO GO ON-HOOK ▶ (4) | OVER RIDE | ▶ (5) DEPRESS ATT RLS KEY ▶ | SRC |

(6)

| X | X | X | X | X | | B | Y | - | O | V | | n | n | | Ⓝ Ⓝ Ⓝ Ⓝ | | | | | | | | | | | | | | | | | | | | | n | | |

SOURCE
◯

DESTINATION
⊜

$\begin{bmatrix} nn/nn \\ nnnn \end{bmatrix}$ ---(Denotes source connected party)

NOTES: (1) Optional key.

(2) Override tone applied to connection.

(3) Both destination parties can hear attendant.

(4) OVERRIDE key LED extinguishes when either of the destination parties goes on-hook and allows attendant to extend call.
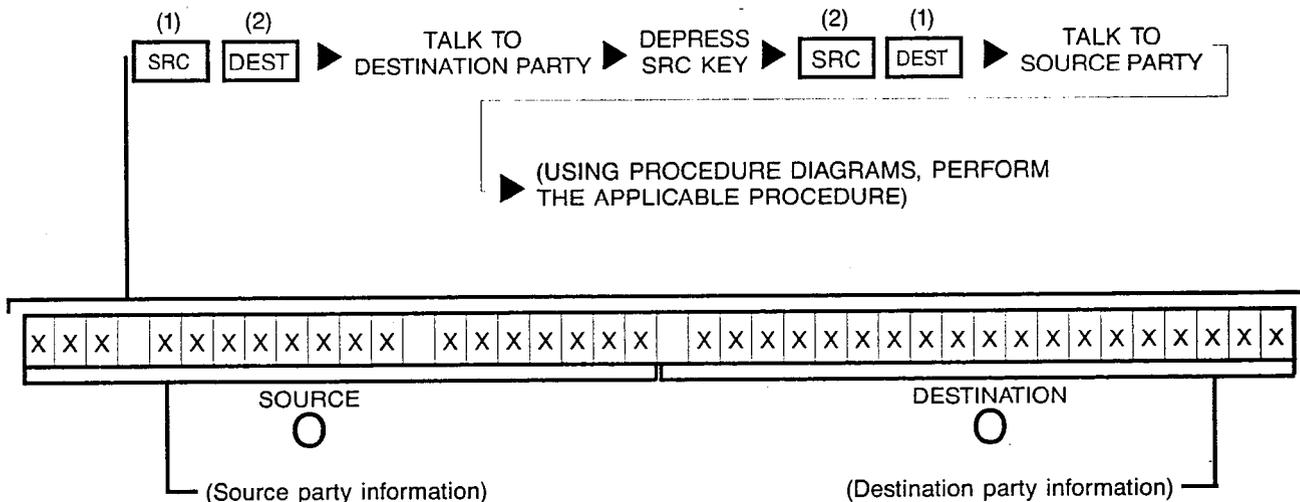
(5) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(6) "BY-OV" is displayed after attendant has actually broken-in to the connection; if "PRVCY" is displayed instead, the Attendant Break-In Security or Data Privacy feature is active in either of the destination parties and connection cannot be overridden.

A station involved in a conference cannot be overridden at any time.

12B OVERRIDING (STATION IN A "DO NOT DISTURB" MODE):

Note: (1) OVERRIDE key's LED remains extinguished.

13A CALLING A PUBLIC NETWORK NUMBER (OUTGOING TRUNK IDLE):

(1)
DIAL DIRECT TRUNK
GROUP ACCESS CODE or
WHEN CONSOLE IS IDLE

(2)
DEPRESS TRK
GRP KEY WHEN
CONSOLE IS IDLE ▶ | SRC |

IF 'SMDR' ACCOUNT CODE IS REQUIRED
(1)
▶ RECALL DIAL ▶ DIAL REQUIRED DIGITS
TONE HEARD   OF 'SMDR' SPECIAL
                ACCOUNT CODE

(1)
▶ CO DIAL ▶ DIAL PUBLIC ▶ CO RINGBACK ▶ TRUNK ANSWERS
TONE HEARD   NETWORK NUMBER   TONE HEARD   TALK TO PARTY

▶ DEPRESS ▶ | SRC |
RLS KEY

| | O | U | T | | X | X | X | X | X | X | X | | n | n | / | n | n | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

— (Customer-defined via CMU procedures)

NOTES: (1) Number is displayed when dialed.
(2) Optional key.

4-51
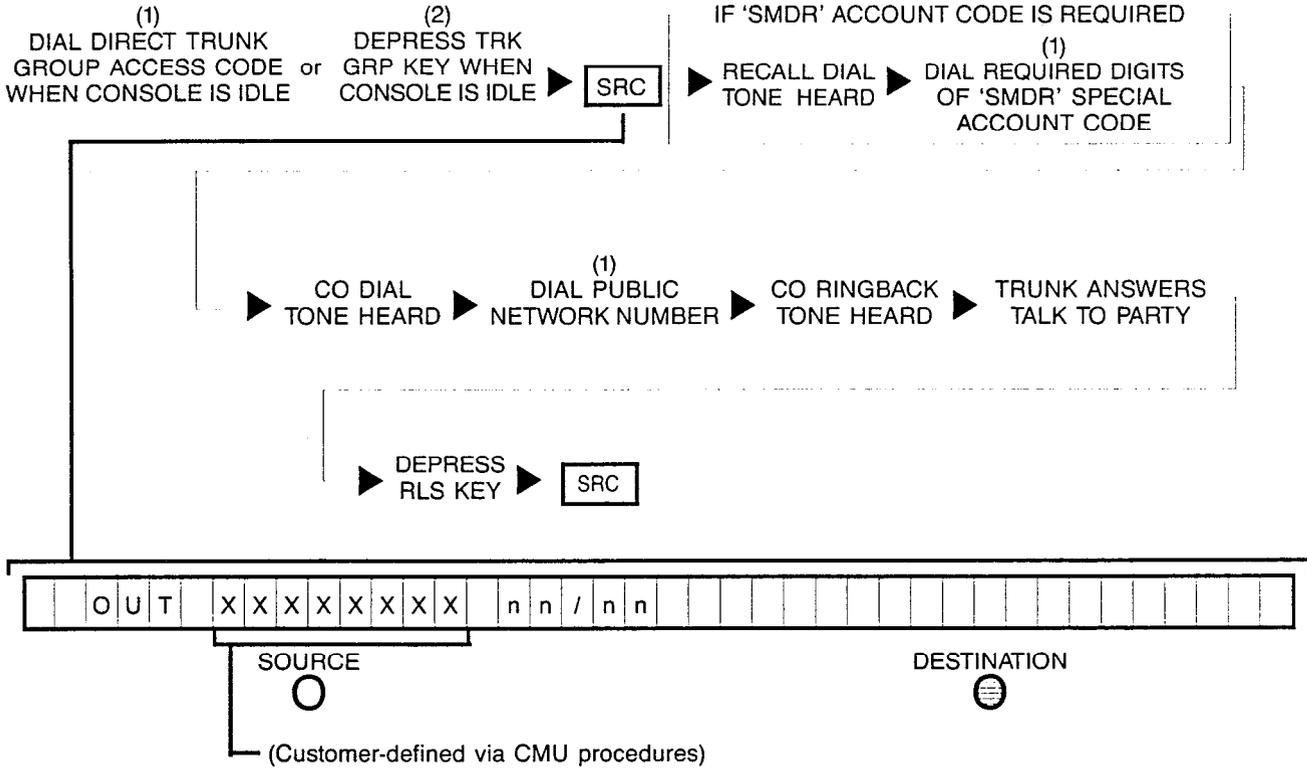
13B1 CALLING A PUBLIC NETWORK NUMBER (OUTGOING TRUNK GROUP BUSY — NO QUEUING DESIRED):

(1)
DIAL DIRECT TRUNK
GROUP ACCESS CODE or
WHEN CONSOLE IS IDLE

(2)
DEPRESS
TRK GRP KEY
WHEN CONSOLE
IS IDLE ▶ SRC ▶

IF 'SMDR' ACCOUNT CODE IS REQUIRED
(1)
▶ RECALL DIAL ▶ DIAL REQUIRED DIGITS
TONE HEARD   OF 'SMDR' SPECIAL
                ACCOUNT CODE

▶ BUSY ▶ DEPRESS ▶ SRC
TONE HEARD   SRC KEY

| | O | U | T | | X | X | X | X | X | X | X | | B | U | S | Y | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O

(Customer-defined via CMU procedures)
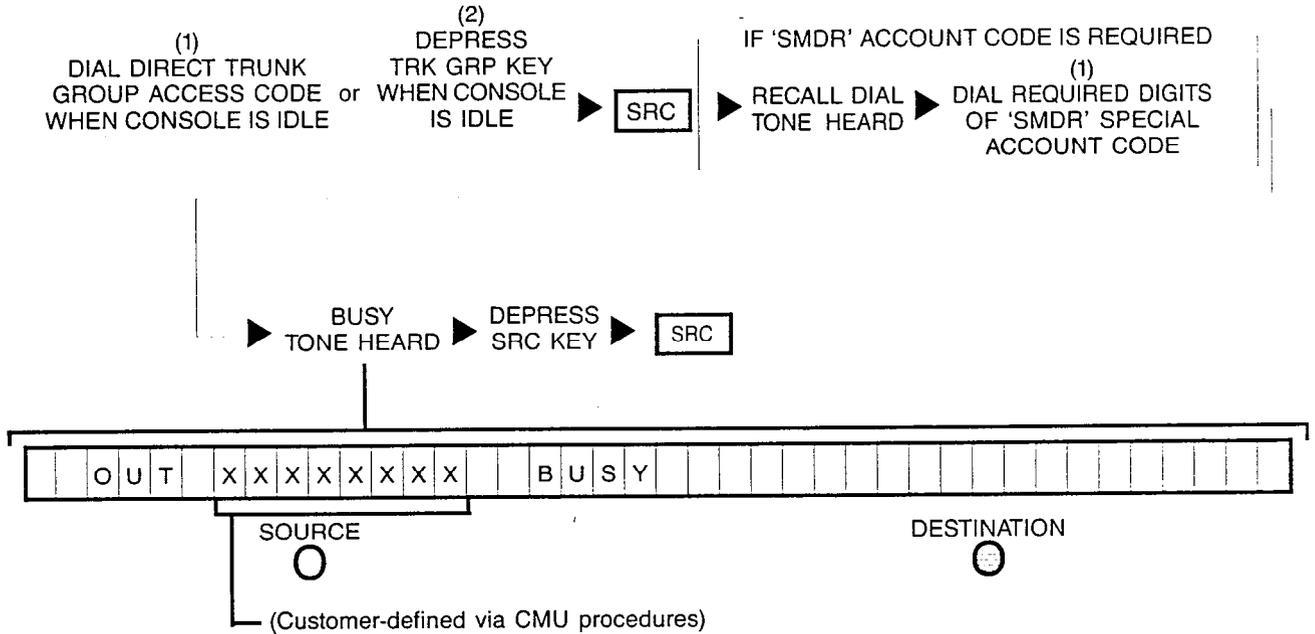
NOTES: (1) Number is displayed when dialed.
       (2) Optional key.

13B2 CALLING A PUBLIC NETWORK NUMBER (OUTGOING
TRUNK GROUP BUSY — CALLBACK QUEUING DESIRED):
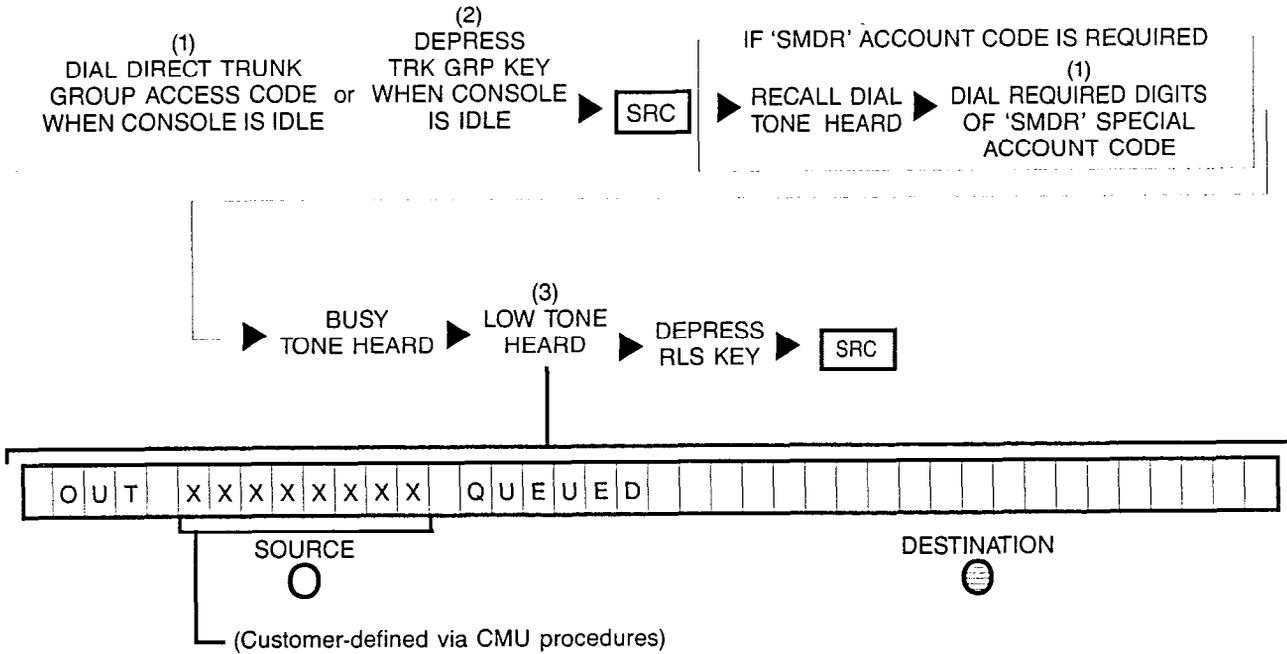
```
        (1)                    (2)                  IF 'SMDR' ACCOUNT CODE IS REQUIRED
   DIAL DIRECT TRUNK       DEPRESS                              (1)
  GROUP ACCESS CODE  or  TRK GRP KEY        ► RECALL DIAL ► DIAL REQUIRED DIGITS
  WHEN CONSOLE IS IDLE   WHEN CONSOLE  ► [SRC]   TONE HEARD ► OF 'SMDR' SPECIAL
                          IS IDLE                              ACCOUNT CODE
```

```
                           (3)
         BUSY         LOW TONE    DEPRESS
      ► TONE HEARD ►   HEARD   ► RLS KEY ► [SRC]
```

```
| O|U|T| |X|X|X|X|X|X|X| |Q|U|E|U|E|D| | | | | | | | | | | | | | | | | | |
        SOURCE                              DESTINATION
          O                                     ⊖
   (Customer-defined via CMU procedures)
```

NOTES: (1) Number is displayed when dialed.

(2) Optional key.

(3) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

When trunk is free, queuing feature recalls attendant.

13B3 CALLING A PUBLIC NETWORK NUMBER (OUTGOING TRUNK GROUP BUSY — STANDBY QUEUING DESIRED):

(1)
DIAL DIRECT TRUNK
GROUP ACCESS CODE or
WHEN CONSOLE IS IDLE

(2)
DEPRESS
TRK GRP KEY
WHEN CONSOLE
IS IDLE ► [SRC]

IF 'SMDR' ACCOUNT CODE IS REQUIRED

(1)
► RECALL DIAL ► DIAL REQUIRED DIGITS
TONE HEARD   OF 'SMDR' SPECIAL
ACCOUNT CODE

► BUSY ► (3) LOW TONE ► SILENCE OR ► REMAIN OFF-HOOK
TONE HEARD   HEARD   MUSIC IS   UNTIL DIAL TONE
HEARD   IS HEARD

| O | U | T | | X | X | X | X | X | X | X | | Q | U | E | U | E | D | | | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
O

(Customer-defined via CMU procedures)

NOTES: (1) Number displayed when dialed.

(2) Optional key.

(3) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

13C CALLING A PUBLIC NETWORK NUMBER WITH 'LCR' (OUTGOING TRUNK WITH 'LCR' IDLE):

(1)
DIAL LEAST COST
ROUTING (LCR) ACCESS
CODE WHEN CONSOLE
IS IDLE ► SRC ►
(1)
DIAL PUBLIC
NETWORK NUMBER

IF 'SMDR' ACCOUNT CODE IS REQUIRED
(1)
► RECALL DIAL ► DIAL REQUIRED DIGITS
TONE HEARD OF 'SMDR' SPECIAL
ACCOUNT CODE

(2)
► CONFIRMATION TONE ► CO RINGBACK ► TRUNK ANSWERS ► DEPRESS ► SRC ►
IS HEARD TONE HEARD TALK TO PARTY RLS KEY

| | | | | R | O | U | T | E | = | n | n | | n | n | / | n | n | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

NOTES: (1) Number displayed when dialed.

(2) Confirmation tone heard if SMDR special account code was dialed.

13D1 CALLING A PUBLIC NETWORK NUMBER (OUTGOING

TRUNK GROUP WITH 'LCR' BUSY — NO QUEUING DESIRED):
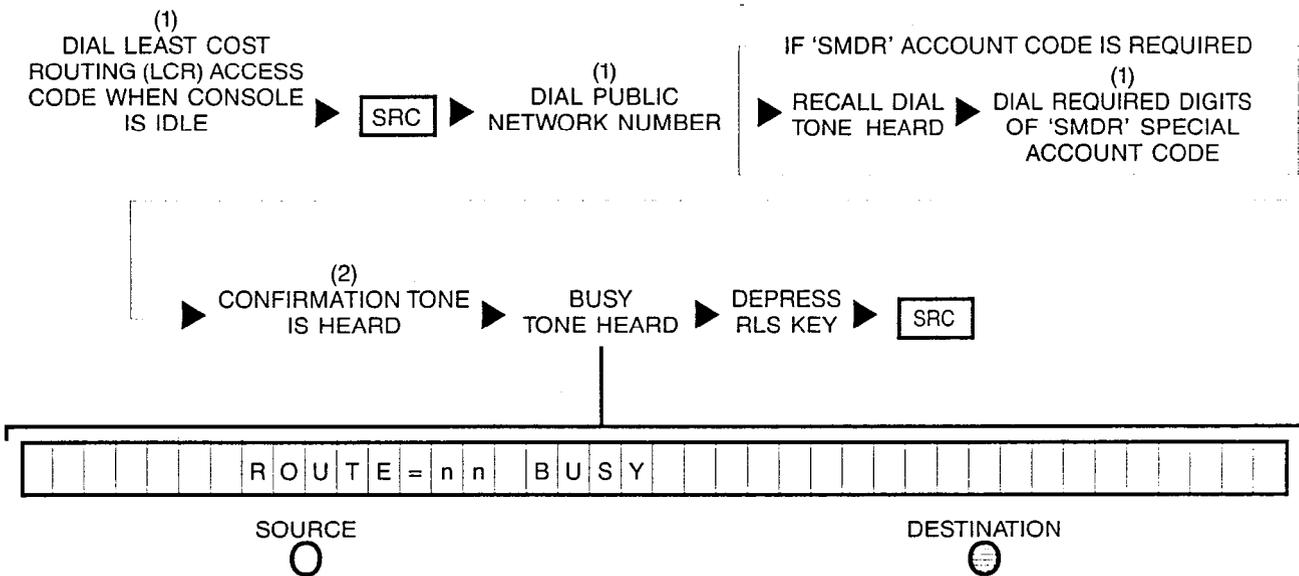
(1)
DIAL LEAST COST
ROUTING (LCR) ACCESS
CODE WHEN CONSOLE ► SRC ►
IS IDLE

(1)
DIAL PUBLIC
NETWORK NUMBER

IF 'SMDR' ACCOUNT CODE IS REQUIRED
(1)
► RECALL DIAL ► DIAL REQUIRED DIGITS
TONE HEARD OF 'SMDR' SPECIAL
ACCOUNT CODE

(2)
► CONFIRMATION TONE ► BUSY ► DEPRESS ► SRC
IS HEARD TONE HEARD RLS KEY

```
|   |   |   |   | R | O | U | T | E | = | n | n | B | U | S | Y |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
```

SOURCE
O

DESTINATION
⊖

NOTES: (1) Number displayed when dialed.
(2) Confirmation tone heard if SMDR special account code was dialed.

13D2 CALLING A PUBLIC NETWORK NUMBER WITH 'LCR' (OUTGOING TRUNK GROUP WITH 'LCR' BUSY — CALLBACK QUEUING DESIRED):

```
        (1)
  DIAL LEAST COST                                          IF 'SMDR' ACCOUNT CODE IS REQUIRED
ROUTING (LCR) ACCESS  ▶ ┌─────┐ ▶        (1)
CODE WHEN CONSOLE       │ SRC │    DIAL PUBLIC       ▶ RECALL DIAL  ▶ DIAL REQUIRED DIGITS
     IS IDLE            └─────┘    NETWORK NUMBER      TONE HEARD      OF 'SMDR' SPECIAL
                                                                      ACCOUNT CODE
```

```
                                                   (2)
      ▶ CONFIRMATION TONE ▶    BUSY     ▶    LOW    ▶ DEPRESS ▶ ┌─────┐
          IS HEARD          TONE HEARD    TONE HEARD   RLS KEY   │ SRC │
                                                                 └─────┘
```

			R	O	U	T	E	=	n	n		Q	U	E	U	E	D																	

```
         SOURCE                                    DESTINATION
            O                                          ⊖
```
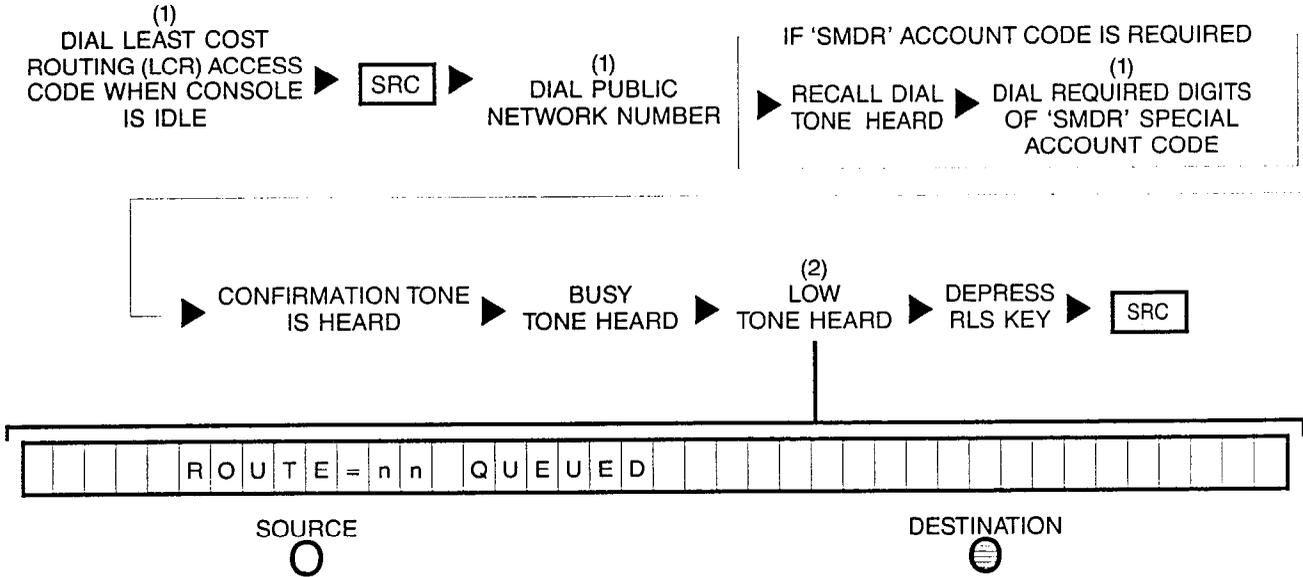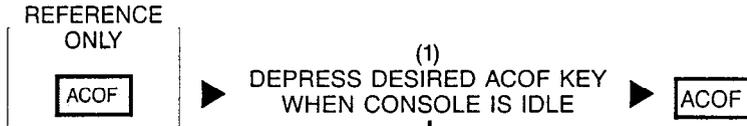
NOTES: (1) Number displayed when dialed.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

13D3 CALLING A PUBLIC NETWORK NUMBER
WITH 'LCR' (OUTGOING TRUNK GROUP WITH 'LCR' BUSY — STANDBY QUEUING DESIRED):

(1)
DIAL LEAST COST ROUTING (LCR) ACCESS CODE WHEN CONSOLE IS IDLE ▶ SRC ▶ (1) DIAL PUBLIC NETWORK NUMBER

IF 'SMDR' ACCOUNT CODE IS REQUIRED
(1)
▶ RECALL DIAL TONE HEARD ▶ DIAL REQUIRED DIGITS OF 'SMDR' SPECIAL ACCOUNT CODE

▶ CONFIRMATION TONE IS HEARD ▶ BUSY TONE HEARD ▶ (2) LOW TONE HEARD ▶ SILENCE OR MUSIC IS HEARD ▶ REMAIN OFF-HOOK UNTIL RINGBACK TONE IS HEARD

`ROUTE=nn QUEUED`

SOURCE O

DESTINATION ⊖

NOTES: (1) Number displayed when dialed.

(2) If busy tone continues and "Q-FULL" is displayed instead, retry later since all facilities are presently busy.

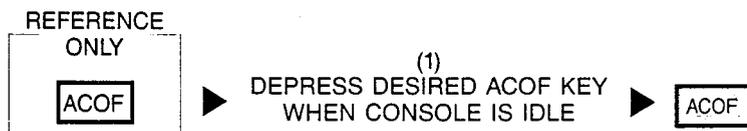# 14A ACTIVATING ATTENDANT CONTROL OF FACILITY (ACOF) FEATURE:

REFERENCE
ONLY

| ACOF |

▶

(1)
DEPRESS DESIRED ACOF KEY
WHEN CONSOLE IS IDLE

▶

| ACOF |

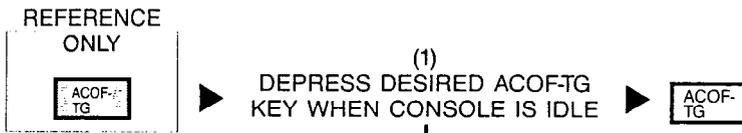| ACOF KEY NO.	CONTROLLED-FACILITY	ACOF KEY NO.	CONTROLLED FACILITY
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	
ACOF( )		ACOF( )	

NOTES: (1) Optional key.

When activating and deactivating the ACOF feature, the Call Information Display
remains in the idle state display.

14B DE-ACTIVATING ATTENDANT CONTROL OF FACILITY (ACOF) FEATURE:

REFERENCE
ONLY

| ACOF |

▶

(1)
DEPRESS DESIRED ACOF KEY
WHEN CONSOLE IS IDLE

▶

| ACOF |

14C ACTIVATING ATTENDANT CONTROL OF FACILITY FOR TRUNK GROUPS (ACOF-TG) FEATURE:

REFERENCE ONLY

| ACOF-TG | ▶ | (1)
DEPRESS DESIRED ACOF-TG
KEY WHEN CONSOLE IS IDLE | ▶ | ACOF-TG |

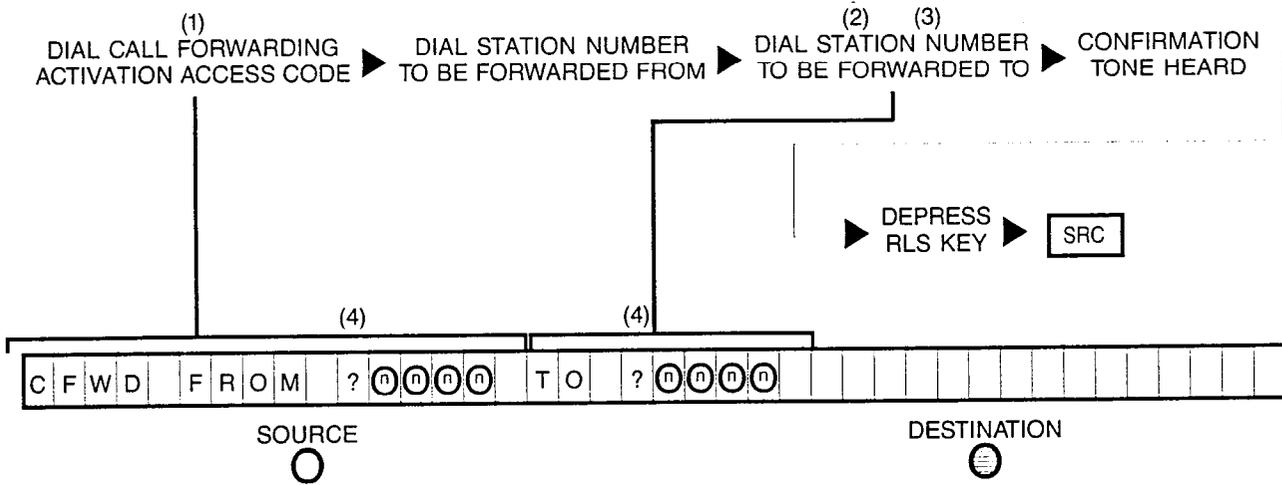| ACOF-TG KEY NO.	CONTROLLED-TRUNK GROUP	ACOF-TG KEY NO.	CONTROLLED-TRUNK GROUP
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	
ACOF-TG( )		ACOF-TG( )	

NOTES: (1) Optional key.

When activating and deactivating the ACOF-TG feature, the Call Information Display remains in the idle state display.

14D DE-ACTIVATING ATTENDANT CONTROL OF FACILITY FOR TRUNK GROUPS (ACOF-TG) FEATURE:

REFERENCE ONLY

| ACOF-TG | ▶ | (1)
DEPRESS DESIRED ACOF-TG
KEY WHEN CONSOLE IS IDLE | ▶ | ACOF-TG |
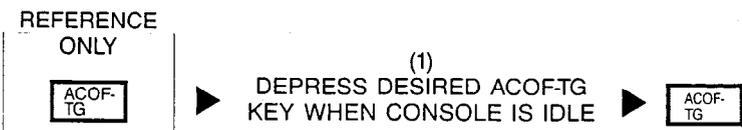
15A ACTIVATING CALL FORWARDING FEATURE FOR A PARTICULAR STATION:

```
        (1)                                            (2)    (3)
  DIAL CALL FORWARDING  ►  DIAL STATION NUMBER  ►  DIAL STATION NUMBER  ►  CONFIRMATION
  ACTIVATION ACCESS CODE    TO BE FORWARDED FROM     TO BE FORWARDED TO     TONE HEARD


                                                        ►  DEPRESS  ►  | SRC |
                                                           RLS KEY

                    (4)                    (4)

  | C | F | W | D |   | F | R | O | M |   | ? |(n)(n)(n)(n)| | T | O |   | ? |(n)(n)(n)(n)| | | | | | | | | | | | | |
                        SOURCE                                  DESTINATION
                          O                                        ⊜
```
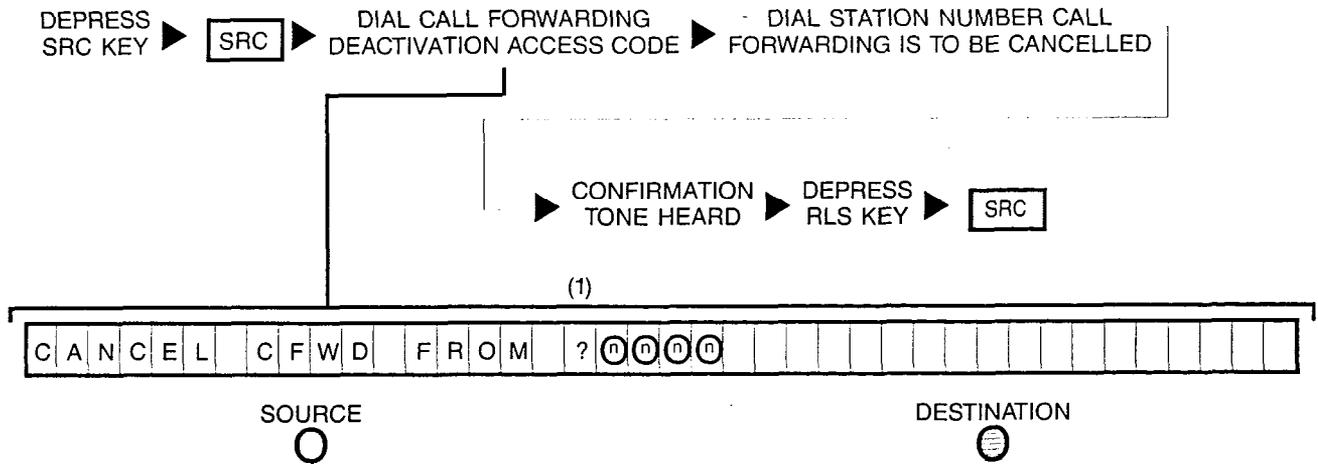
NOTES: (1) Attendant cannot call forward to public network.

(2) Dial '0' required to forward calls to console.

(3) Not required for Secretarial Call Forwarding.

(4) Station numbers overwrite question marks.

Activation of call forwarding feature depends on the station's call forwarding class-mark.

If attendant makes an error in dialing the access code or selects an unassigned or invalid station number, reorder tone will be heard and attendant must depress the RLS key and attempt the procedure again.

If the attendant successfully completes the call forwarding procedure for a station already in call forwarding mode, the original call forwarding is cancelled and the new call forwarding takes effect.

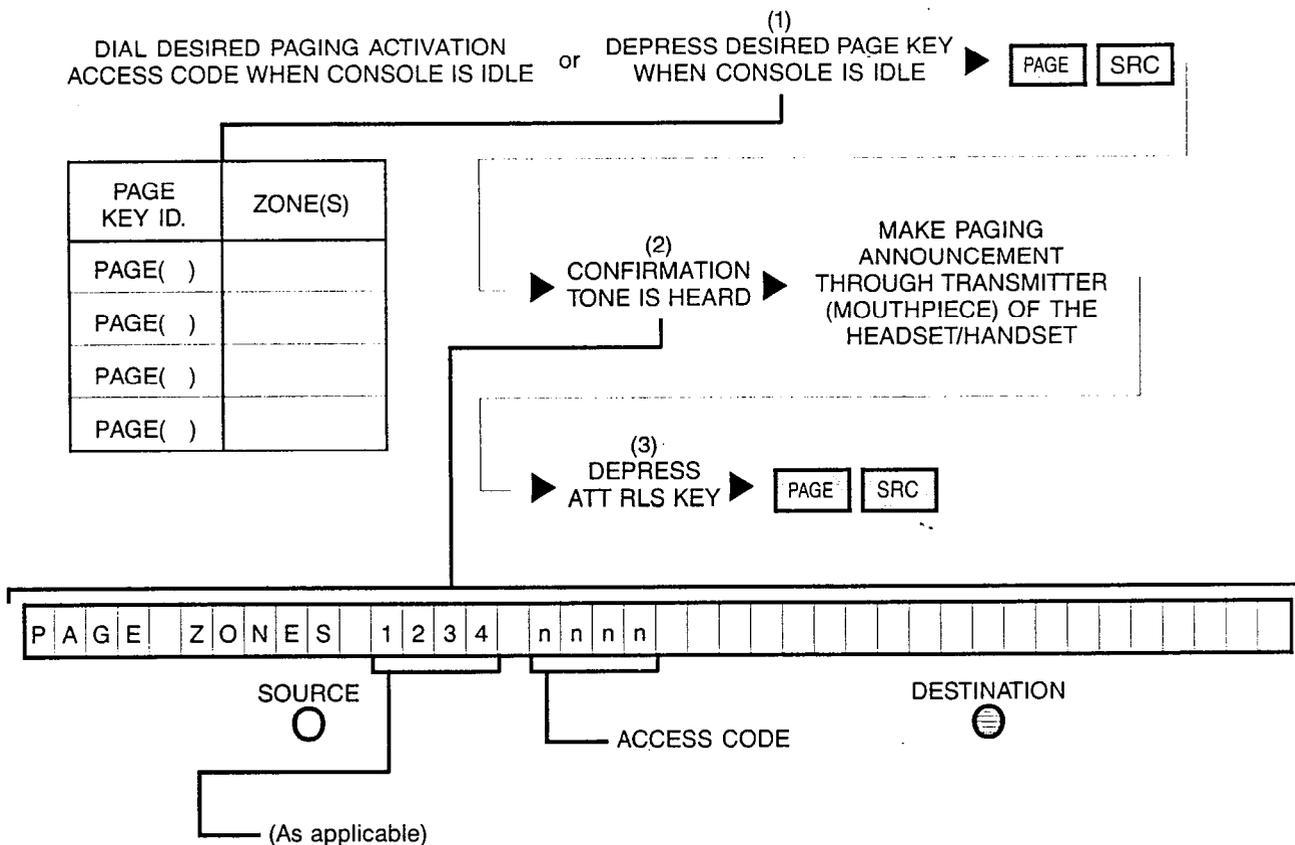# 15B CANCELLING CALL FORWARDING FEATURE FOR A PARTICULAR STATION:

DEPRESS ▶ | SRC | ▶ DIAL CALL FORWARDING ▶ DIAL STATION NUMBER CALL
SRC KEY   DEACTIVATION ACCESS CODE   FORWARDING IS TO BE CANCELLED

▶ CONFIRMATION ▶ DEPRESS ▶ | SRC |
  TONE HEARD   RLS KEY

(1)

| C | A | N | C | E | L | | C | F | W | D | | F | R | O | M | | ? | n | n | n | n | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊖

NOTES: (1) Station number overwrites question mark.

Deactivation of call forwarding feature depends on the station's call forwarding class-mark.

If attendant makes an error in dialing the access code or selects an unassigned or invalid number, reorder tone is heard and attendant must depress RLS key and attempt the procedure again.
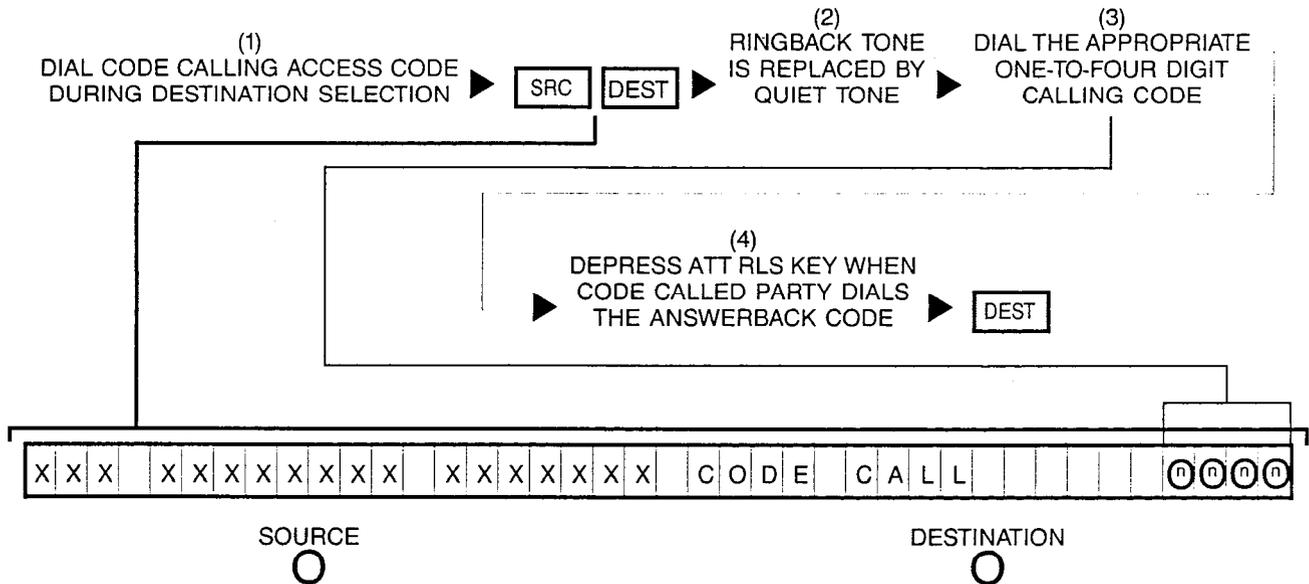
If attendant successfully completes the call forwarding deactivation procedure for a station already in call forwarding mode, the original call forwarding is cancelled.
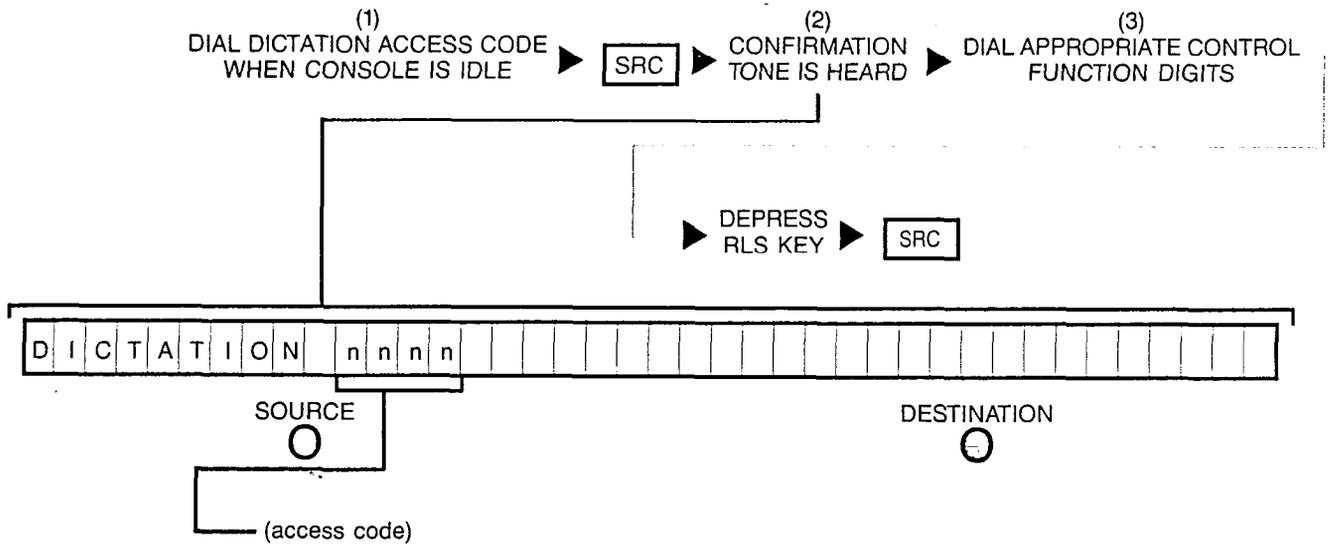
16 ACCESSING CUSTOMER-PROVIDED PAGING EQUIPMENT:

DIAL DESIRED PAGING ACTIVATION
ACCESS CODE WHEN CONSOLE IS IDLE

or

(1)
DEPRESS DESIRED PAGE KEY
WHEN CONSOLE IS IDLE ► ☐ PAGE ☐ SRC

PAGE KEY ID.	ZONE(S)
PAGE( )	
PAGE( )	
PAGE( )	
PAGE( )	

(2)
► CONFIRMATION ►
TONE IS HEARD

MAKE PAGING
ANNOUNCEMENT
THROUGH TRANSMITTER
(MOUTHPIECE) OF THE
HEADSET/HANDSET

(3)
► DEPRESS ►
ATT RLS KEY ☐ PAGE ☐ SRC

```
P A G E   Z O N E S   1 2 3 4   n n n n
```

SOURCE
O

ACCESS CODE

DESTINATION
⊖

(As applicable)

NOTES: (1) Optional key.

(2) If Busy Tone is heard and Call Information Display prompts "PAGE BUSY" instead; retry later since paging facilities are presently busy.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

If a source party is present and paging is desired, attendant must first place the source party on hold (via LOOP key) and proceed with procedure.

17A ACCESSING CUSTOMER-PROVIDED CODE CALLING EQUIPMENT (SOURCE PARTY PRESENT):
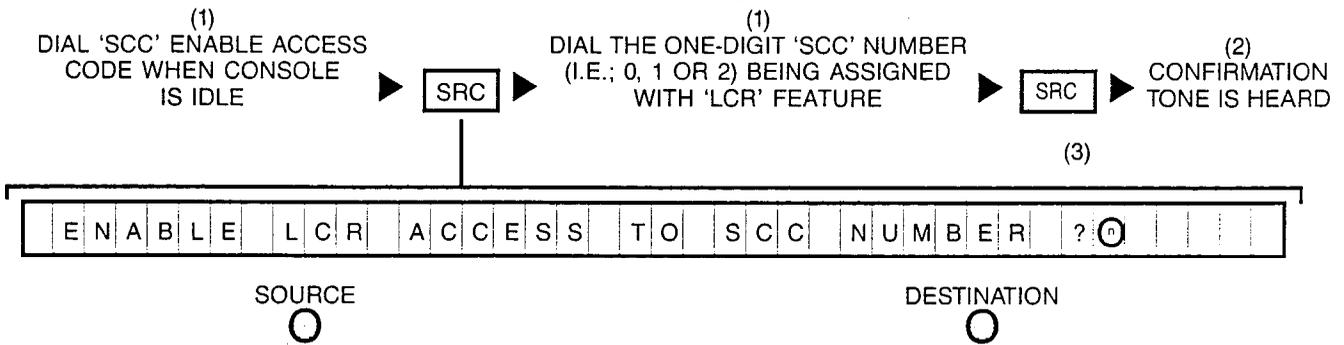
(1)
DIAL CODE CALLING ACCESS CODE ▶ ☐SRC☐ ☐DEST☐ ▶
DURING DESTINATION SELECTION

(2)
RINGBACK TONE
IS REPLACED BY ▶
QUIET TONE

(3)
DIAL THE APPROPRIATE
ONE-TO-FOUR DIGIT
CALLING CODE

(4)
DEPRESS ATT RLS KEY WHEN
▶ CODE CALLED PARTY DIALS ▶ ☐DEST☐
THE ANSWERBACK CODE

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | | C | O | D | E | | C | A | L | L | | | | | | ⓞⓞⓞⓞ |

SOURCE
O

DESTINATION
O

NOTES: (1) Access code is displayed when dialed.

(2) The access code is cleared from the Call Information Display at this time. If Busy Tone is heard and the Call Information Display prompts "CODE CALL BUSY" instead, retry later since the code calling facility is presently being used.

(3) The one-to-four digit calling code is customer-defined via CMU procedures. Also, the ATT RLS key may be depressed at this time to allow the source party to dial the calling code. If the Call Information Display prompts "NO RCVR: RETRY" when the ATT RLS key is depressed, this indicates there is no DTMF receiver available and attendant must dial the calling code before extending the code calling facility to the source party.

(4) The destination information changes to display the identity of the answering party when the code called party dials the Answerback Code. Also, depressing a flashing INC, OPR, RCL, or ANS key performs the same function in addition to connecting the next call for processing.

17B ACCESSING CUSTOMER-PROVIDED CODE CALLING EQUIPMENT (SOURCE PARTY NOT PRESENT):

(1)
DIAL CODE CALLING ACCESS CODE WHEN CONSOLE IS IDLE ▶ SRC ▶

(2)
RINGBACK TONE IS REPLACED BY QUIET TONE ▶

(3)
DIAL THE APPROPRIATE ONE-TO-FOUR DIGIT CALLING CODE

(4)
TALK TO CODE CALLED PARTY WHEN SUCH DIALS THE ANSWERBACK CODE ▶ DEPRESS RLS KEY ▶ SRC

(4)

| C | O | D | E | | C | A | L | L | | | | | | Ⓝ | Ⓝ | Ⓝ | Ⓝ | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊜

NOTES: (1) Access code is displayed when dialed.

(2) The access code is cleared from the Call Information Display at this time. If Busy Tone is heard and the Call Information Display prompts "CODE CALL BUSY" instead, retry later since the code calling facility is presently being used.

(3) The one-to-four digit calling code is customer-defined via CMU procedures.

(4) Attendant indentifies when the code called party dials the Answerback Code when the Call Information Display changes the displayed source information with the information on the answering party.

18A ACCESSING CUSTOMER-PROVIDED DICTATION EQUIPMENT (SOURCE PARTY NOT PRESENT):

(1)
DIAL DICTATION ACCESS CODE ▶ [SRC] ▶ (2) CONFIRMATION ▶ (3) DIAL APPROPRIATE CONTROL
WHEN CONSOLE IS IDLE   TONE IS HEARD   FUNCTION DIGITS

▶ DEPRESS ▶ [SRC]
   RLS KEY

| D | I | C | T | A | T | I | O | N | | n | n | n | n | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SOURCE   DESTINATION
O   O

└── (access code)

NOTES: (1) Number displayed when dialed.

(2) If Busy Tone is heard and the Call Information Display prompts "DICTATION BUSY" instead; retry later since dictation facility is presently busy. Also the dial dictation access code is cleared from the Call Information Display.

(3) The last control digit dialed is displayed in the Call Information Display.

18B ACCESSING CUSTOMER-PROVIDED DICTATION EQUIPMENT (SOURCE PARTY PRESENT):

```
         (1)                                      (2)              (3)
 DIAL DICTATION ACCESS CODE        ┌─────┬──────┐  CONFIRMATION    DEPRESS      ┌──────┐
 DURING DESTINATION SELECTION  ▶   │ SRC │ DEST │  TONE IS HEARD ▶ ATT RLS KEY ▶ │ DEST │
                                   └─────┴──────┘                                └──────┘
```

```
┌──────────────────────────────────────────────────────────────────────────────┐
│ X X X   X X X X X X X   X X X X X X   D I C T A T I O N   n n n n   │ │ │ │    │
└──────────────────────────────────────────────────────────────────────────────┘
        SOURCE                                        DESTINATION
          O                                                O
                                                                    (access code)
```

NOTES: (1) Number displayed when dialed.

(2) If Busy Tone is heard and the Call Information Display prompts "DICTATION BUSY" instead, retry later since dictation facility is presently busy. Also, the dial dictation access code is cleared from the Call Information Display.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

Attendant is not permitted to unsplit a connection to the dictation equipment when a split party exists.

19A ENABLING 'LCR' FEATURE ACCESS TO A PARTICULAR SPECIALIZED COMMON CARRIER (SCC):

(1)
DIAL 'SCC' ENABLE ACCESS CODE WHEN CONSOLE IS IDLE ▶ SRC ▶

(1)
DIAL THE ONE-DIGIT 'SCC' NUMBER (I.E.; 0, 1 OR 2) BEING ASSIGNED WITH 'LCR' FEATURE ▶ SRC ▶

(2)
CONFIRMATION TONE IS HEARD

(3)

| E | N | A | B | L | E | | L | C | R | | A | C | C | E | S | S | | T | O | | S | C | C | | N | U | M | B | E | R | | ? | O | | | | |

SOURCE
O

DESTINATION
O

NOTES: (1) Number displayed when dialed.

(2) If intercept tone is heard and "INVALID SCC NUMBER" is displayed instead, it indicates an invalid or unassigned SCC number was dialed; check for accuracy and reattempt procedure.

(3) Question mark is overwritten when the SCC number is dialed.

Attendant can exit from this procedure at any time by depressing either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key which causes the SRC key to be extinguished and the Call Information Display to restore idle state display.

19B DISABLING 'LCR' FEATURE ACCESS TO A SPECIALIZED COMMON CARRIER (SCC):
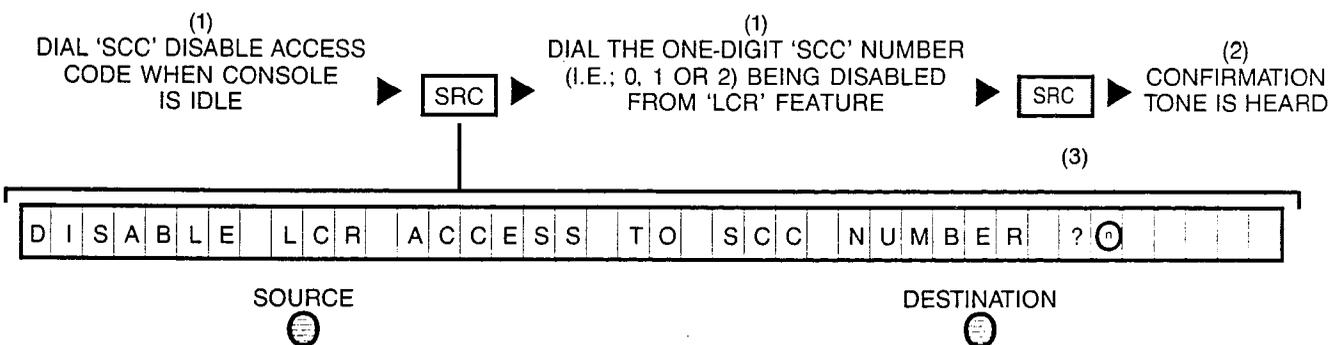
(1)
DIAL 'SCC' DISABLE ACCESS CODE WHEN CONSOLE IS IDLE ▶ SRC ▶

(1)
DIAL THE ONE-DIGIT 'SCC' NUMBER (I.E.; 0, 1 OR 2) BEING DISABLED FROM 'LCR' FEATURE ▶ SRC ▶

(2)
CONFIRMATION TONE IS HEARD

(3)

| D | I | S | A | B | L | E | | L | C | R | | A | C | C | E | S | S | | T | O | | S | C | C | | N | U | M | B | E | R | | ? | O | | | | |

SOURCE
⊜

DESTINATION
O

NOTES: (1) Number displayed when dialed.

(2) If intercept tone is heard and "INVALID SCC NUMBER" is displayed instead, it indicates an invalid or unassigned SCC number was dialed; check for accuracy and reattempt procedure.

(3) Question mark is overwritten when the SCC number is dialed.

Attendant can exit from this procedure at any time by depressing either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key which causes the SRC key to be extinguished and the Call Information Display to restore idle state display.

20A1 ACTIVATING MESSAGE WAITING LAMP FEATURE WITHOUT BEING CONNECTED TO STATION:

```
DIAL MESSAGE WAITING                    (1)
ACTIVATION ACCESS CODE  or  DEPRESSS MSG SET KEY  ►  ┌─────┐ ┌─────┐  ►  DIAL DESIRED
WHEN CONSOLE IS IDLE        WHEN CONSOLE IS IDLE      │ SRC │ │ MSG │     STATION NUMBER
                                                     └─────┘ │ SET │
                                                             └─────┘

                                          (2)           (3)
                          ┌─────┐ ┌─────┐  CONFIRMATION   DEPRESS
                       ►  │ SRC │ │ MSG │  ►  TONE HEARD  ►  ATT RLS KEY
                          └─────┘ │ SET │
                                  └─────┘
```

(4)

```
┌───────────────────────────────────────────────────────────────────────┐
│ M │ S │ G │   │ T │ O │   │ ? │ⓝⓝⓝⓝ│   │   │   │   │   │   │   │   │   │  │
└───────────────────────────────────────────────────────────────────────┘
```

SOURCE   DESTINATION
⊖   ⊖

NOTES: (1) Optional key.

(2) If intercept tone is heard instead, and the display shows 'NOT EQUIPPED', the dialed station is not equipped with the Message Waiting Lamp feature. If reorder tone is heard instead, and the display shows 'NO SPACE', it indicates there is no space in the message waiting buffer; retry later.

(3) Depressing at any time either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key allows the attendant to exit from this function.

(4) The question mark is overwritten when the station number is dialed.

20A2 CANCELLING MESSAGE WAITING LAMP FEATURE WITHOUT BEING CONNECTED TO STATION:

DIAL MESSAGE WAITING   (1)
DEACTIVATION ACCESS CODE   or DEPRESSS MSG CANCEL KEY ▶ ☐ MSG CANCEL   ☐ SRC ▶ DIAL DESIRED
WHEN CONSOLE IS IDLE   WHEN CONSOLE IS IDLE   STATION NUMBER

                                (2)   (3)
                          ▶ CONFIRMATION ▶   DEPRESS   ▶ ☐ MSG CANCEL   ☐ SRC
                            TONE HEARD   ATT RLS KEY

                                (4)

| C | A | N | C | E | L | | M | S | G | | T | O | | ? | ⓝ | ⓝ | ⓝ | ⓝ | | | | | | | | | | | | | | | | | | | | | |

SOURCE   DESTINATION
  ⊖   ⊖

NOTES: (1) Optional key.

(2) If intercept tone is heard instead, and display shows 'NOT EQUIPPED', the dialed station is not equipped with the Message Waiting Lamp feature.

(3) Depressing at any time either the RLS or ATT RLS key, or a flashing INC, OPR, RCL or ANS key allows the attendant to exit from this function.

(4) The question mark is overwritten when the station number is dialed.

20B1 ACTIVATING MESSAGE WAITING LAMP FEATURE WHILE RINGING A STATION:

```
DIAL MESSAGE WAITING         (1)                    (2)             (3)
ACTIVATION ACCESS CODE  or  DEPRESS                           CONFIRMATION
                            MSG SET    ▶ [SRC][DEST][MSG  ▶    TONE HEARD
                              KEY                    SET]


                                                              (USING THE PROCEDURE
                            ▶ [SRC][DEST][MSG  ▶  TALK TO    ▶ DIAGRAMS, PERFORM THE
                                          SET]   SOURCE PARTY   APPLICABLE PROCEDURE)
```

```
| M| S| G|  | T|O|  | n| n| n| n|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
```

          SOURCE   DESTINATION
            ⊜   ○

NOTES: (1) Optional key.

(2) MSG SET key is steadily lit for only 1½ seconds.

(3) If a timed NAK tone is heard, it indicates the dialed station is not equipped with the Message Waiting Lamp feature. If reorder tone is heard instead, it indicates there is no space in the message waiting buffer; retry later. After any tone is heard, the attendant is automatically reconnected to source party and Call Information Display prompts source party information.

Activation of this feature can be performed while connected to station in either a busy, ringing or talking state.

20B2 CANCELLING MESSAGE WAITING LAMP FEATURE WHILE CONNECTED TO STATION:

DIAL MESSAGE WAITING CANCEL CODE or
(1) DEPRESS MSG CANCEL KEY ▶ [SRC] [DEST] [MSG CANCEL] ▶ (3) CONFIRMATION TONE HEARD

(2)

▶ [SRC] [DEST] [MSG CANCEL] ▶ TALK TO SOURCE PARTY ▶ (USING PROCEDURE DIAGRAMS, PERFORM THE APPLICABLE PROCEDURE)

| C | A | N | C | E | L | | M | S | G | | T | O | | | n | n | n | n | | | | | | | | | | | | | | | | | | | |

SOURCE ⊖

DESTINATION ⊖

NOTES: (1) Optional key.

(2) MSG CANCEL key is steadily lit for only 1½ seconds.

(3) If a timed NAK tone is heard, it indicates the dialed station is not equipped with the Message Waiting Lamp feature. After either tone is heard, the attendant is automatically reconnected to source party and Call Information Display prompts source party information.

Cancellation of this feature can be performed while connected to station in either a busy, ringing or talking state.

21A PLACING CONSOLE IN THE "UNSTAFFED" MODE OF OPERATION:

(1)
UNPLUG HANDSET OR ► [NIGHT] REMAINING CONSOLE DISPLAY INDICATORS
HEADSET ASSEMBLY   ARE EXTINGUISHED AFTER 10 SECONDS

NOTES: (1) The stated "10 seconds" is a typical time parameter; such time parameter is customer-set via CMU procedures.

When the console is in the "unstaffed" mode of operation, no incoming calls are routed to console and no calls or special functions can be performed (e.g.; console is completely inoperative).

21B RESTORING CONSOLE TO NORMAL OPERATION FROM "UNSTAFFED" MODE:

PLUG IN HANDSET OR ► [NIGHT] CONSOLE DISPLAY INDICATORS ARE EITHER FLASHING,
HEADSET ASSEMBLY   STEADILY LIT OR EXTINGUISHED, CALL INFORMATION
                          DISPLAY PROMPTS THE IDLE STATE DISPLAY.

22A ACTIVATING 'SMDR' FEATURE FOR A PARTICULAR TRUNK GROUP:

```
                                                          (1)      (2)
                (1)                            DIAL THE TWO-DIGIT TRUNK GROUP
    DIAL 'SMDR' ACTIVATION ACCESS    ►  SRC  ►   NUMBER (I.E.; 00 to 31) BEING
    CODE WHEN CONSOLE IS IDLE                   ASSIGNED WITH 'SMDR' FEATURE


                    (3)                                      (4)
              ► CONFIRMATION  ►  DEPRESS    or    DEPRESS    ►  SRC
                TONE IS HEARD     RLS KEY          ATT RLS KEY
```

		A	C	T	I	V	A	T	E		S	M	D	R		F	O	R		T	R	U	N	K		G	R	O	U	P		=		n	n		

SOURCE
O

DESTINATION
O
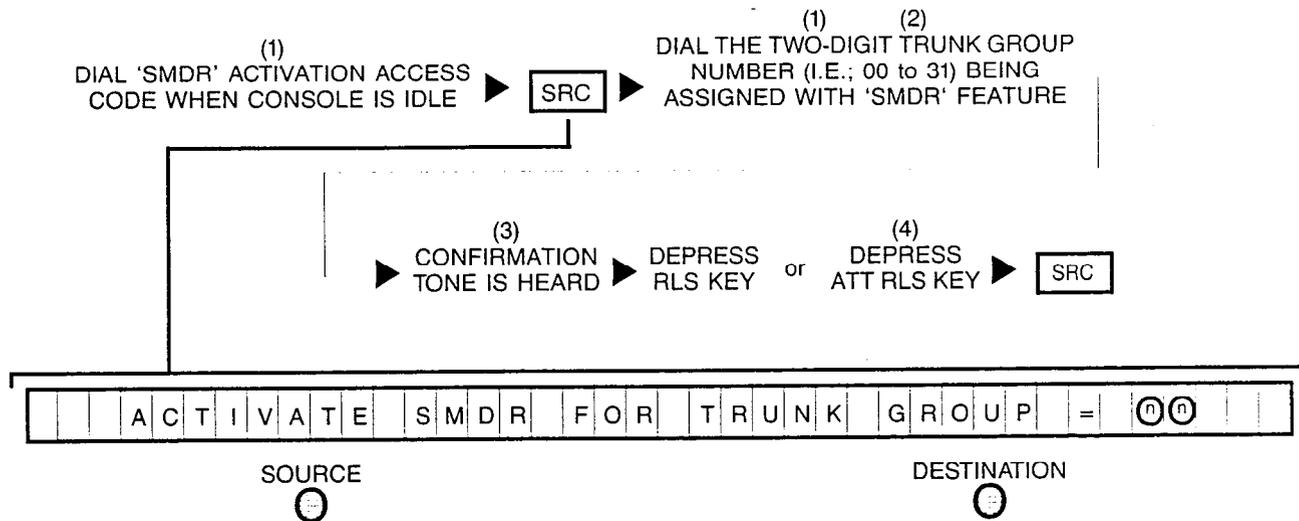
NOTES: (1) Number displayed when dialed.

(2) If the dialed trunk group number is valid, the 'SMDR' feature is immediately activated for incoming, outgoing or all calls according to the trunk group's static data base assignment after confirmation tone is heard.

(3) If intercept tone is heard instead, it indicates the dialed trunk group number is invalid; check for accuracy and retry procedure.

(4) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

22B CANCELLING 'SMDR' FEATURE FOR A PARTICULAR TRUNK GROUP:

(1)
DIAL 'SMDR' CANCEL CODE
WHEN CONSOLE IS IDLE ▶ SRC ▶

(1)
DIAL THE TWO-DIGIT TRUNK GROUP
NUMBER (I.E.; 00 to 31) BEING
CANCELLED FROM 'SMDR' FEATURE

(2)
▶ CONFIRMATION ▶ DEPRESS   or   DEPRESS ▶ SRC
TONE IS HEARD   RLS KEY   ATT RLS KEY

(3)

```
D E - A C T I V A T E   S M D R   F O R   T R U N K   G R O U P =     ⓝⓝ
```

SOURCE
◯

DESTINATION
◯

NOTES: (1) Number displayed when dialed.

(2) If intercept tone is heard instead, it indicates the dialed trunk group number is invalid; check for accuracy and retry procedure.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

23A DISPLAYING CURRENT STANDARD (OR DEFAULT) 'SMDR' ACCOUNT CODE ASSOCIATED WITH A PARTICULAR INCOMING OR OUTGOING TRUNK CALL:

INCOMING/OUTGOING TRUNK   (1)
CALL CONNECTED TO ATTENDANT   ▶ [SRC] ▶   DEPRESS   ▶ [ACCT]
     AS SOURCE PARTY   ACCT KEY

```
                      DEPRESS APPROPRIATE CONSOLE KEY
                   ▶  TO CONTINUE NORMAL PROCESSING OF  ▶ [ACCT]
                      CALL AND APPLY THE DISPLAYED 'SMDR'
                      ACCOUNT CODE NUMBER TO CALL

                                   (2)

| A | C | C | T |   | N | O |   |   | n | n | n | n | n | n | n | n | n | n |   |   |   |   |   |   |   |   |   |   |   |   |   |
                              SOURCE                                                        DESTINATION
                                 O                                                              ⊜
```

└── (Initial display of incoming/outgoing trunk information)

NOTES: (1) Optional key; also, if Intercept Tone is heard after depressing ACCT key, it indicates connected call has no associated 'SMDR' Account.

'SMDR' Account Codes are customer-defined via CMU Procedures.

(2) 'SMDR' Account Code may not yet be associated with call, in which case the numerical digits are not prompted.

The 'SMDR' Account Code overlays the source field.

23B ENTERING A SPECIAL 'SMDR' ACCOUNT CODE FOR A PARTICULAR INCOMING OR OUTGOING TRUNK CALL:

INCOMING/OUTGOING TRUNK
CALL CONNECTED TO ATTENDANT ► [SRC] ►
AS SOURCE PARTY

(1)
DEPRESS ► [ACCT] ►
ACCT KEY

(2)
DIAL NEW 'SMDR' ACCOUNT
CODE TO BE APPLIED TO CALL

DEPRESS APPROPRIATE CONSOLE KEY
► TO CONTINUE NORMAL PROCESSING OF ►
CALL AND APPLY THE DISPLAYED 'SMDR'
ACCOUNT CODE NUMBER TO CALL

[ACCT]

(3)

| A | C | C | T | | N | O | . | | n | n | n | n | n | n | n | n | n | n | | | | | | | | | | | | | | | | | | | | |

| A | C | C | T | | N | O | . | | (n)(n)(n)(n)(n)(n)(n)(n)(n)(n) | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊖

(Initial display of incoming/outgoing trunk information)

NOTES: (1) Optional key; also, if Intercept Tone is heard after depressing ACCT key, it indicates the connected call has no associated 'SMDR' Account.

(2) Number displayed when dialed.

'SMDR' Account Codes are customer-defined via CMU procedures.

(3) The 'SMDR' Account Code overlays the source field.

24 UPDATING THE DATE AND TIME DISPLAYED ON THE CALL INFORMATION DISPLAY:

(1)

DEPRESS ▶ | SRC | ▶ DIAL TIME PROGRAMMING
SRC KEY   ACCESS CODE

(2)

▶ DIAL THE INDICATED SEQUENCE "MMDDYYhhmm" TO EDIT
THE DATE AND TIME FIELDS BEING DISPLAYED ON THE
DESTINATION SIDE OF THE CALL INFORMATION DISPLAY

(3)

▶ DEPRESS   or   DEPRESS | SRC |
RLS KEY   ATT RLS KEY

| | | | | M | M | / | D | D | / | Y | Y | | h | h | : | m | m | | | | | | M | M | / | D | D | / | Y | Y | | h | h | : | m | m |

SOURCE
O

or

DESTINATION
O - Date Field selected

⊜   O - Time Field selected

NOTES: (1) Number displayed when dialed. Also, if after the Time Programming Access
Code is dialed and the Call Information Display prompts "CLOCK BUSY", retry
later, if necessary since it indicates that the clock update mode is presently be-
ing used.

(2) MM = two digit month number; DD = two digit day number; YY = two digit
year number; hh = two digit hour number; and mm = two digit minute number.
Note that when updating the time field for either a 12 or 24-hour time plan, a
24-hour input time plan is used (refer to chart for valid entry codes).

24-HOUR CLOCK VALID ENTRY CODES	12-HOUR CLOCK		
0000 to 0059	12:00 Midnite	thru	12:59 AM
0100 to 0159	1:00 AM	thru	1:59 AM
0200 to 0259	2:00 AM	thru	2:59 AM
0300 to 0359	3:00 AM	thru	3:59 AM
0400 to 0459	4:00 AM	thru	4:59 AM
0500 to 0559	5:00 AM	thru	5:59 AM
0600 to 0659	6:00 AM	thru	6:59 AM
0700 to 0759	7:00 AM	thru	7:59 AM
0800 to 0859	8:00 AM	thru	8:59 AM
0900 to 0959	9:00 AM	thru	9:59 AM
1000 to 1059	10:00 AM	thru	10:59 AM
1100 to 1159	11:00 AM	thru	11:59 AM
1200 to 1259	12:00 Noon	thru	12:59 PM
1300 to 1359	1:00 PM	thru	1:59 PM
1400 to 1459	2:00 PM	thru	2:59 PM
1500 to 1559	3:00 PM	thru	3:59 PM
1600 to 1659	4:00 PM	thru	4:59 PM
1700 to 1759	5:00 PM	thru	5:59 PM
1800 to 1859	6:00 PM	thru	6:59 PM
1900 to 1959	7:00 PM	thru	7:59 PM
2000 to 2059	8:00 PM	thru	8:59 PM
2100 to 2159	9:00 PM	thru	9:59 PM
2200 to 2259	10:00 PM	thru	10:59 PM
2300 to 2359	11:00 PM	thru	11:59 PM

(3) Depressing a flashing INC, OPR, RCL, or ANS key performs the same function
in addition to connecting the next call for processing.

The date field (i.e.; MMDDYY) can be specifically selected (or reselected) by
depressing the SRC key (represented by a steadily lit SOURCE indicator). The
time field (i.e.; hhmm) can be specifically selected (or reselected) by depressing
the DEST key (represented by a steadily lit DESTINATION indicator).

25 DISPLAYING MINOR ALARM CONDITIONS ON THE CALL INFORMATION DISPLAY:

(MINOR ALARM INDICATION)

O
MIN
ALM

[MIN ALM] ▶ DEPRESS MIN ALM KEY
WHEN CONSOLE IS IDLE ▶ [MIN ALM]

(1)
O
MIN
ALM

▶ (OPTIONAL)
RECORD MINOR ALARM
CONDITION AS DISPLAYED ▶ REDEPRESS
MIN ALM KEY ▶ [MIN ALM]

(2)

(3)
▶ DEPRESS RLS KEY
OR ATT RLS KEY

SOURCE
⊜

DESTINATION
⊜

⌐ Refer to SATURN II or III EPABX Maintenance and
⌊ Trouble shooting practice for minor alarm displays.
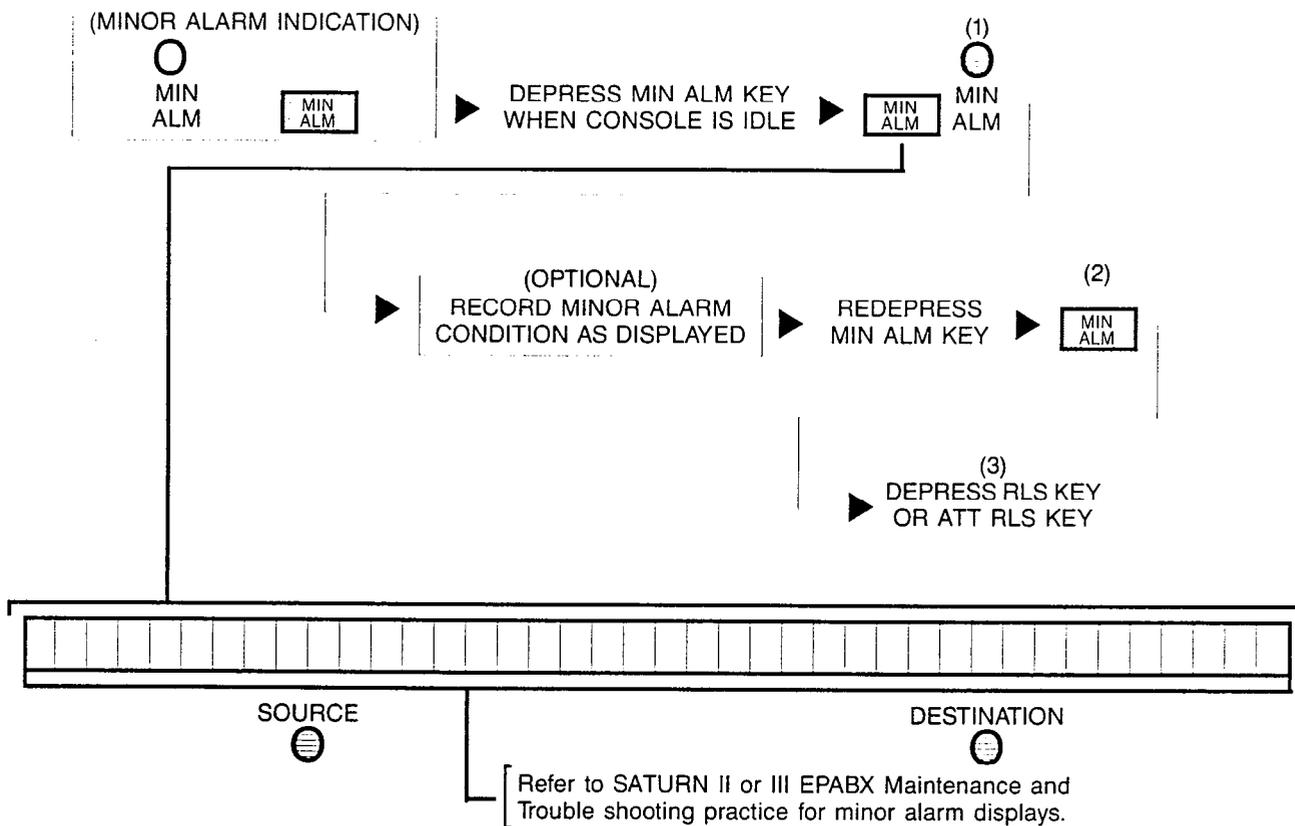
NOTES: (1) If the MIN ALM indicator remains steadily lit, it indicates additional minor
alarm condition(s) to be displayed.

(2) If the LED in the MIN ALM key remains steadily lit, it indicates that an additional
minor alarm condition still exists aside from the minor alarm condition being shown
in the Call Information Display. Redepress the MIN ALM key until all minor alarm
conditions are displayed and the LED in the MIN ALM key is extinguished.

(3) Depressing a flashing INC, OPR, RCL, or ANS key performs the same function
in addition to connecting the next call for processing. Also, if the attendant depress-
es either of these keys before all the minor alarm conditions have been displayed,
the LED in the MIN ALM key is extinguished and the MIN ALM indicator remains
steadily lit.

26 TRUNK TESTING:

(1)
DIAL DIRECT TRUNK ACCESS CODE ▶
WHEN CONSOLE IS IDLE

DIAL THE TWO-DIGIT TRUNK GROUP
NO. (00-31) FOLLOWED BY THE ▶
TWO-DIGIT TRUNK CIRCUIT NO. (00-99)

SRC

(2)
▶ CO DIAL TONE
IS HEARD

or

(3)
BUSY TONE
IS HEARD

or

(4)
INTERCEPT
TONE IS HEARD

▶

DEPRESS
RLS KEY

▶

SRC

| | O | U | T | | X | X | X | X | X | X | X | X | | n | n | / | n | n | | | | | | | | | | | | | | | | | | | | | | |

| | O | U | T | | X | X | X | X | X | X | X | | | B | U | S | Y | | | | | | | | | | | | | | | | | | | | | |

| | V | A | C | A | N | T | | N | O | . | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SOURCE
O

DESTINATION
⊖
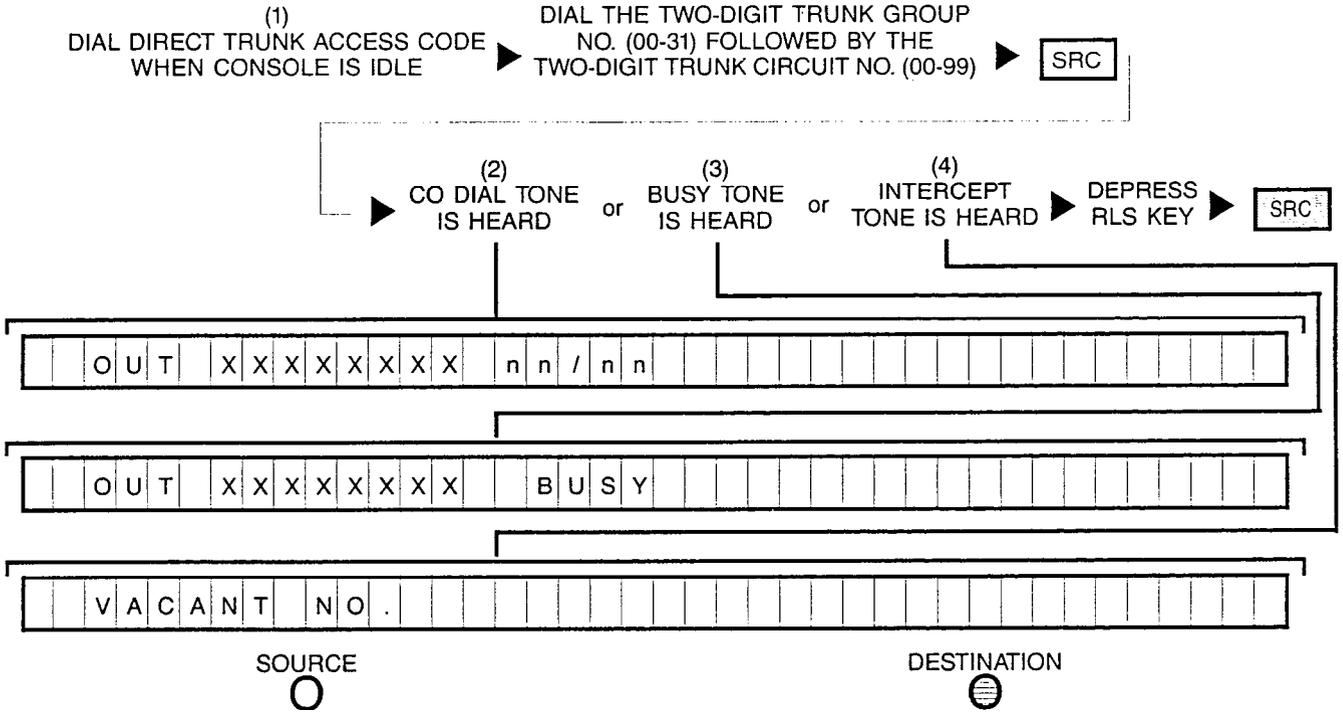
NOTES: (1) Number displayed when dialed.

(2) Idle state indication.

(3) Busy state indication.

(4) Invalid or unassigned digits; check dialed numbers for accuracy and retry.

This procedure can also be used to access a particular trunk directly with or without a source party present.

27A ESTABLISHING AN ATTENDANT-CONTROLLED CONFERENCE (SOURCE PARTY NOT PRESENT):
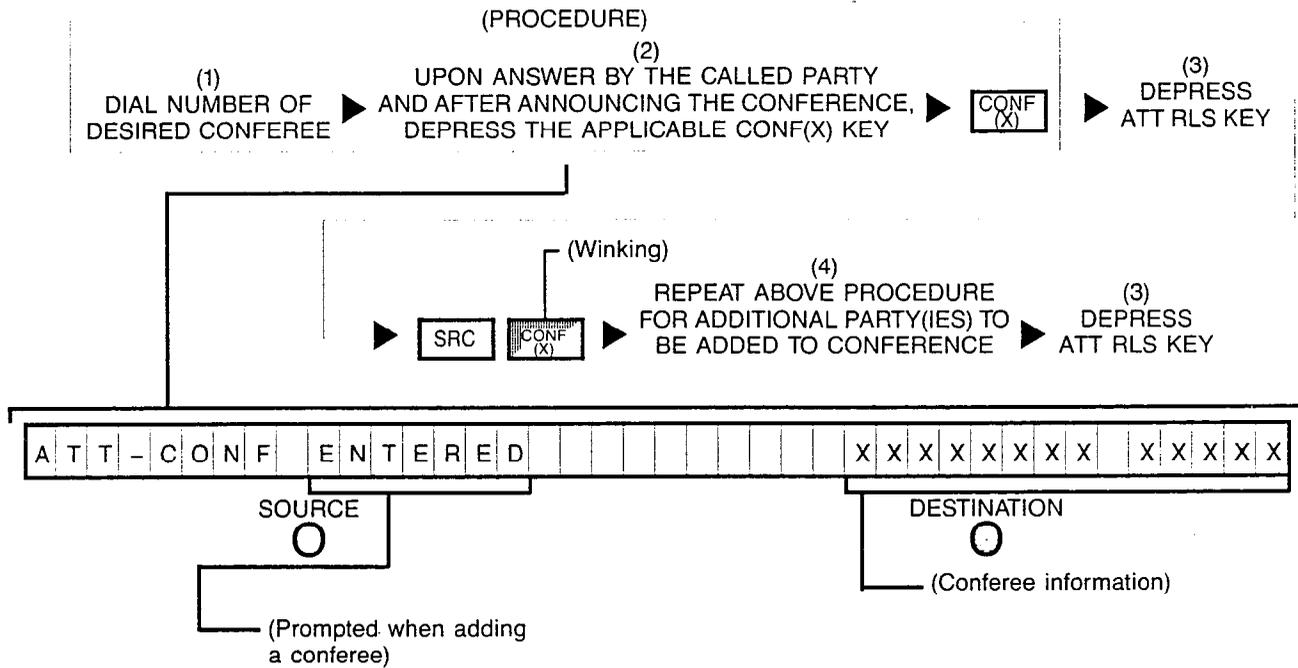
(PROCEDURE)

(1)
DIAL NUMBER OF
DESIRED CONFEREE
▶
(2)
UPON ANSWER BY THE CALLED PARTY
AND AFTER ANNOUNCING THE CONFERENCE,
DEPRESS THE APPLICABLE CONF(X) KEY
▶
CONF
(X)
▶
(3)
DEPRESS
ATT RLS KEY

(Winking)

▶ SRC CONF (X) ▶
(4)
REPEAT ABOVE PROCEDURE
FOR ADDITIONAL PARTY(IES) TO
BE ADDED TO CONFERENCE
▶
(3)
DEPRESS
ATT RLS KEY

| A | T | T | – | C | O | N | F | | E | N | T | E | R | E | D | | | | | | | | X | X | X | X | X | X | X | X | | X | X | X | X | X |

SOURCE
O

(Prompted when adding
a conferee)

DESTINATION
O

(Conferee information)

NOTES: (1) Number displayed when dialed.

(2) When initially establishing an attendant-controlled conference, CONF(X) key used must be idle (e.g.; extinguished). When adding a party to an existing attendant-controlled conference, related CONF(X) key is winking.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

(4) Up to seven parties can be connected to an attendant-controlled conference circuit.

27B ESTABLISHING AN ATTENDANT-CONTROLLED CONFERENCE (SOURCE PARTY PRESENT):
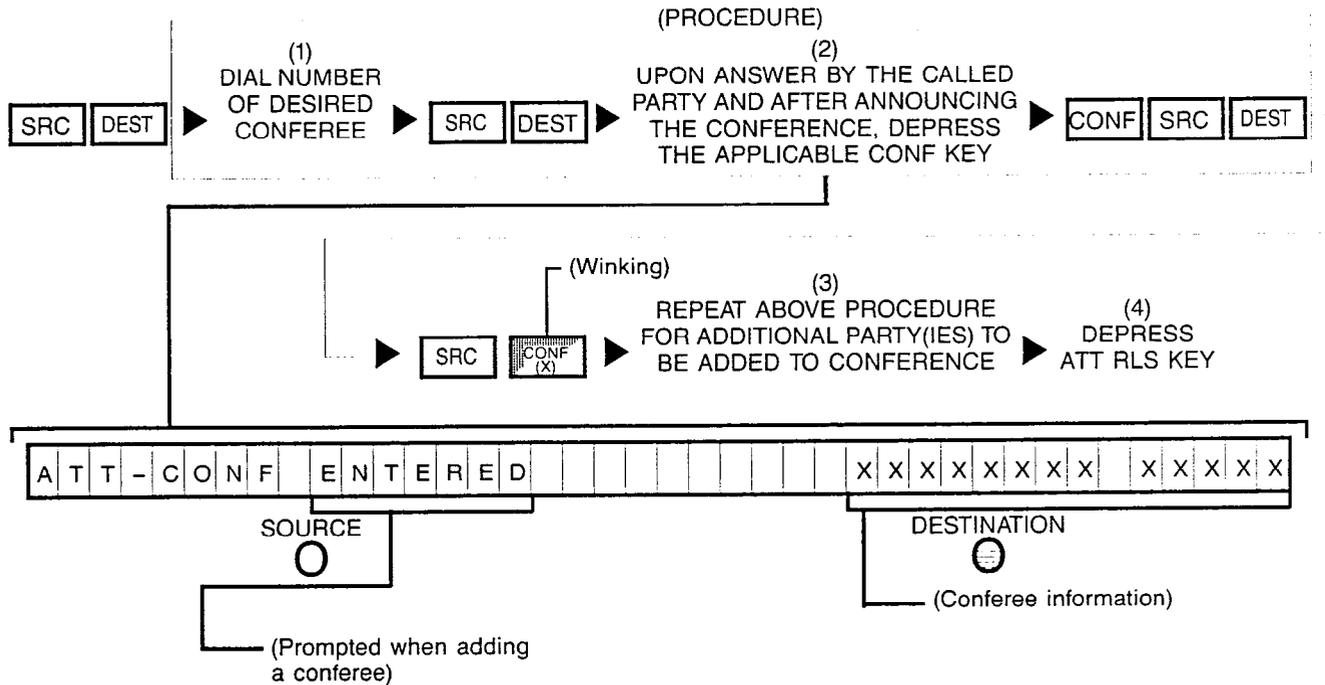
(PROCEDURE)

```
              (1)                          (2)
          DIAL NUMBER           UPON ANSWER BY THE CALLED
          OF DESIRED            PARTY AND AFTER ANNOUNCING
[SRC][DEST] ▶  CONFEREE  ▶ [SRC][DEST] ▶ THE CONFERENCE, DEPRESS  ▶ [CONF][SRC][DEST]
                                  THE APPLICABLE CONF KEY
```

```
                              (Winking)
                                          (3)
                                REPEAT ABOVE PROCEDURE         (4)
                                FOR ADDITIONAL PARTY(IES) TO   DEPRESS
          ▶ [SRC][CONF(X)] ▶    BE ADDED TO CONFERENCE    ▶   ATT RLS KEY
```

| A | T | T | – | C | O | N | F | | E | N | T | E | R | E | D | | | | | | | | | | X | X | X | X | X | X | X | | X | X | X | X | X |

SOURCE
O

DESTINATION
⊖

(Conferee information)

(Prompted when adding a conferee)

NOTES: (1) Number displayed when dialed.

(2) When initially establishing an attendant-controlled conference, CONF key used must be idle (e.g.; extinguished). When adding a party to an existing attendant-controlled conference, related CONF key is winking.

(3) Up to seven parties can be connected to an attendant-controlled conference circuit.

(4) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

28 EXTENDING AN ANSWERED CALL TO A MEET-ME CONFERENCE BRIDGE:

(1)
| SRC | | DEST | ▶ DIAL MEET-ME CONFERENCE ACCESS CODE ▶ | SRC | | DEST | ▶ (2) CONFERENCE TONE IS HEARD

(3)
▶ DEPRESS ATT RLS KEY | DEST |

| X | X | X | | X | X | X | X | X | X | X | | X | X | X | X | X | X | | M | E | E | T | - | M | E | | | E | N | T | E | R | E | D | | n | n |

SOURCE
O

DESTINATION
O

(Meet-me conference number) ——
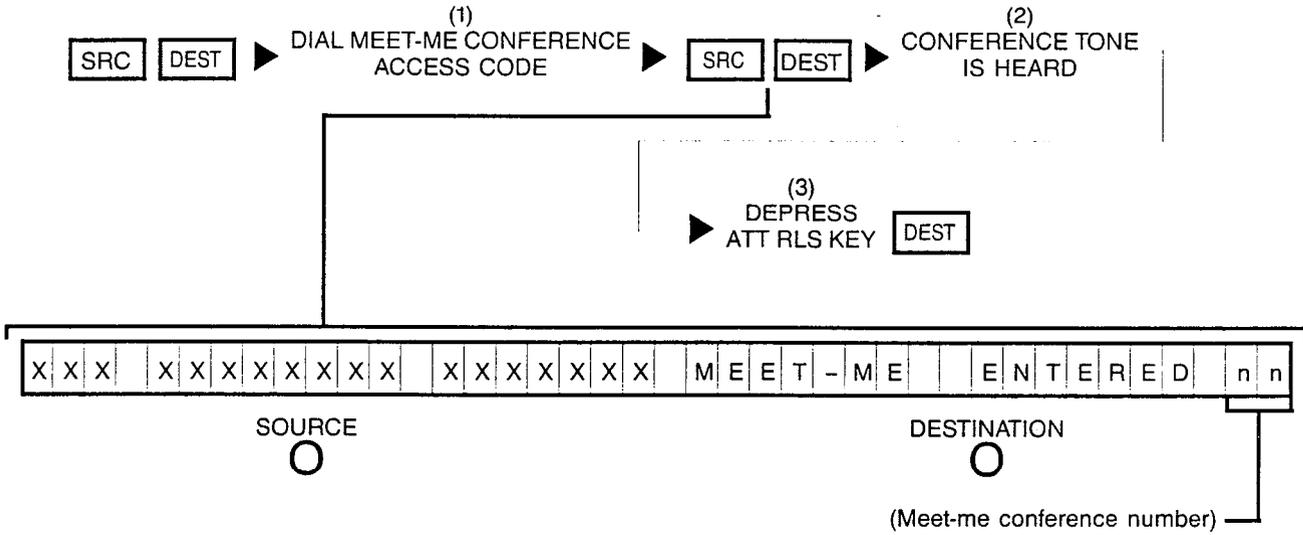
NOTES: (1) Number displayed when dialed.

(2) If the Call Information Display prompts "MEET-ME FULL" or "MEET-ME DISAL-LOW", and NAK tone is returned, the conference bridge is either full or not allowed at the moment; retry later.

(3) Depressing a flashing INC, OPR, RCL or ANS key performs the same function in addition to connecting the next call for processing.

Meet-me conference is a prearranged conference call whereby station users dial a special access code at a specific time to be connected to the conference circuit.

29 EXCLUDING CLASS OF CALLS TO A CONSOLE VIA EXCLUSION KEY(S):

DEPRESS THE EXE-OPR, EXC-INC, OR EXC-RCL KEY WHEN THE CONSOLE IS IDLE ► [EXC XXX]

(1) (2) (3) (4) (5)

| O | P | - | n | n | | | R | C | - | n | n | X | | I | N | - | n | n | | | | | N | O | V | 1 | 0 | | 4 | : | 4 | 5 |

SOURCE ⊜

EXCLUSION INDICATION

DESTINATION ⊜
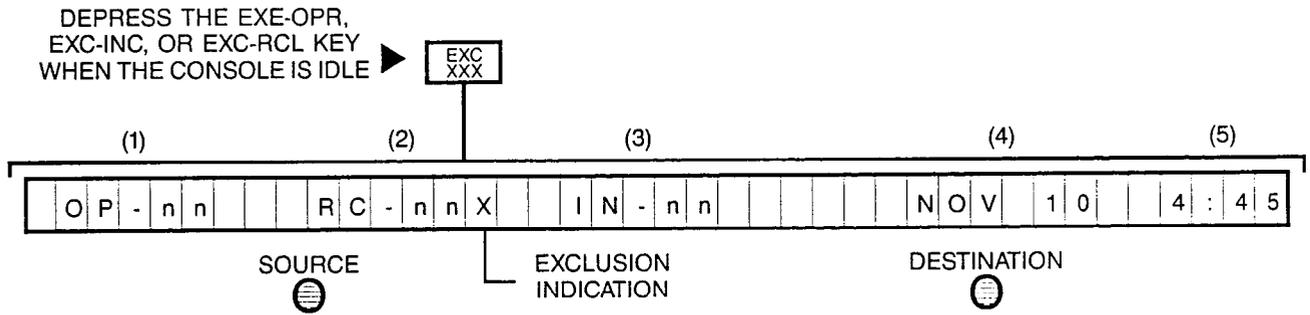
NOTES: To cancel the exclusion for a particular call-type, perform the reverse operation. This reverse operation will extinguish the internal LED indicator of the particular call-type exclusion key.

After activating the exclusion key, an "X" will be prompted after the call waiting condition for the call-type on the Call Information Display.

Call Information Display, as follows:

(1) Number of operator-type calls waiting for service

(2) Number of recalls waiting for service

(3) Number of incoming-type calls waiting for service

(4) Present date

(5) Present time

SATURN® EPABX

OC1E

CUSTOMER MEMORY UPDATE
PROCEDURES

CONTENTS

LIST OF FIGURES

LIST OF TABLES

SECTION 1.00   INTRODUCTION

1.01 Purpose. This practice is intended as an aid to the user responsible for establishing and maintaining the customer memory portion of the SATURN Electronic Private Automatic Branch Exchange (EPABX); this process is called "Customer Memory Updating (CMU)." Descriptive data is provided herein to allow the user to make changes to the customer portion of the system memory. Table 1.00 lists the mnemonics used in this practice.

When DPI appears in text or CMU prompts, it refers to the Siemens line of Digital Premium Instrument (DPI) telephones.

1.02 Scope. Section 2.00 presents general information pertaining to the system and the CMU process. Section 3.00 pro-

vides reference data that is required in some of the CMU procedures. Section 4.00 of this practice itemizes the equipment and documentation that is required to initiate the CMU session. The methods of implementation, and examples of each, are provided in Section 5.00.

Following Section 5.00, a glossary of CMU-procedure terms is presented in Appendix A; Appendix B provides the procedures for accessing the system via a data terminal, to enable the user to input the CMU procedures, as well as an example of a typical CMU procedure.

Finally, Appendixes C, D, and E respectively provide an index to all of the CMU procedures by title and command, and the actual SATURN CMU procedures.

Table 1.00   Mnemonics Used in This Practice

MNEMONIC	DEFINITION
ASCII	American Standard Code for Information Interchange
CAS	Centralized Attendant Service
CMU	Customer Memory Updating
COS	Class of Service
CPU	Central Processing Unit
DCI	Data Communications Interface
DISA	Direct Inward System Access
DP	Dial Pulse
DPI	Digital Premium Instrument
DTMF	Dual-Tone Multifrequency
EIA	Electronics Industries Association
EPABX	Electronic Private Automatic Branch Exchange
LSI	Large-Scale Integration
MMLP	Man-Machine Language Processor
MS	Main-Satellite
OC II	Office Communications II
PCB	Printed Circuit Board
PEF	Plain English Format
PEN	Port Equipment Number
SLT	Single-Line Telephone
SMDR	Station Message Detail Recording
UCD	Uniform Call Distribution

Table 1.01   Customer Memory Update Matrix Chart

CUSTOMER MEMORY UPDATE PROCEDURE NAMES	Ref	CUSTOMER MEMORY UPDATE ISSUE NUMBERS FOR SATURN III AND IIE SOFTWARE RELEASES		
		SATURN III	SATURN IIE	
		Release 13.1	Release 1.1	COMMENTS
ACDGRP	205	1	1	
ACDSCAN	810	2	2	
ALMDATA	522	1	1	
ATTASSN	303	3	3	
ATTMAP	304	2	2	
AUDIT	524	1	1	
AUTHCODE	406	1	1	
COMMAND	590	1	1	
CONFASSN	507	1	1	
COSASSN	402	4	4	
CUSTDATA	551	1	1	
DATAASSN	261	1	1	
DATACOS	460	2	2	
DIDCONV	103	1	1	
DPIASSN	216	1	1	
DPICHGE	218	1	1	
DPIDISP	217	1	1	
DPIMAP	215	4	4	
DTMFASSN	501	1	1	
DUPLEX	610	1	—	
EXTRN	270	1	1	
FEATACC	420	3	3	
HOTLINE	210	1	1	
HUNTGRP	203	1	1	
LCRCOS	901	1	1	
LCRDPLN	900	1	1	
LCRODR	903	1	1	
LCRROUTE	902	1	1	
LCRSCC	906	2	2	
LCRSCHD	904	1	1	
MODMASSN	561	1	1	

Table 1.01 Customer Memory Update Matrix Chart (Continued)

CUSTOMER MEMORY UPDATE PROCEDURE NAMES	Ref	CUSTOMER MEMORY UPDATE ISSUE NUMBERS FOR SATURN III AND IIE SOFTWARE RELEASES		
		SATURN III	SATURN IIE	
		Release 13.1	Release 1.1	COMMENTS
MODMPOOL	560	1	1	
MODMRTE	562	1	1	
NAILUP	260	1	1	
OFFRCRD	605	1	1	
PICKGRP	204	1	1	
PROTOCOL	461	2	2	
RECOVERY	606	1	1	
SECURITY	531	1	1	
SERVICE	523	1	1	
SLMBSCHD	570	1	1	
SMDRACCT	505	1	1	
SMDRASSN	800	1	1	
SPCLEQPT	509	6	6	
SPEEDGRP	405	1	1	
STNASSN	201	7	7	
STNDATA	220	2	2	
STNEXT	202	1	1	
SYSOPT	502	4	4	
SYSTIMER	506	5	5	
T1SPAN	105	1	1	
TCRLIST	112	1	1	
TENANT		2	2	
TIMEDATE	321	1	1	
TRACE	602	3	3	
TRAFASSN	801	1	1	
TRAFCTR		3	3	
TRKASSN	101	5	5	
TRKGRP	102	3	3	
TTYPARMS	199	—	1	
VFAC		1	1	

SECTION 2.00   THE SATURN SYSTEM

2.01 General. The SATURN EPABX uses software-programmed switching techniques. The system software is contained in two basic areas: generic and customer memory. Switching control, performed by the Central Processing Unit (CPU), uses data which is stored in the generic software. The system includes a wide range of features to satisfy a variety of telephoné system requirements. The software that controls these features resides in the customer memory area, and is alterable via the CMU procedures. (The generic software may not be altered by the customer.)

Because the features may be controlled by the customer, an extremely flexible selection and arrangement of the large number of features is possible. In most cases, the features are provided and controlled exclusively by the software routines and require no additional hardware. These features may be added, changed, or deleted by entering the appropriate input commands. In some cases, hardware modifications may be required. These modifications may require the installation of one or more Printed Circuit Boards (PCBs), or strapping modifications to existing hardware. Activation of the feature via software is done after completion of any such hardware or wiring changes.

Changes to the system may be made by inputting coded instructions via a data entry terminal. The instructions consist primarily of actions and commands, and alphameric responses to questions.

2.02 Customer Memory Update Procedures. Each of the CMU procedures is identified by title and by a command name mnemonic. The various CMU procedures include routines for implementing changes in the following areas:

- Centralized Attendant Service (CAS)
- Main Satellite (MS)
- Office Communication (OC IE)

- Trunks
- Stations
- Attendant Console(s)
- System Features
- Station Message Detail Recording
- Traffic Metering
- Least Cost Routing
- Maintenance

Some procedures consist of closely-related functions that need to be considered together to maintain data base consistency. Therefore, if a change is made to the data base by a procedure within a certain category, other procedures in the same category may also need to be used, particularly during initial programming of the system. The system prompts the user, via error messages, about the other procedures to ensure that an inconsistency is not accidentally introduced into the data base.

Within each of the above categories, one or more CMU procedures comprise a group pertaining to a specific alterable area, to allow complete flexibility of assignment within that category. Examples of such groups include: definitions; group variables and night service; feature access code assignments; and, miscellaneous assignments. There is no strict ordering of these groups because the various CMU procedures may change from time to time, or new CMU procedures may be added.

The administrable features of the SATURN system are categorized into individual operational procedures, using the above scheme. Each procedure is identified by a distinct CMU procedure command name mnemonic.

2.03 Siemens Customer Support Services. Siemens maintains a nationwide network of field service offices. Contact the Siemens regional office for any assistance which may be required.

SECTION 3.00   REFERENCE DATA

3.01 Requirements. Certain reference data should be on hand prior to beginning the CMU session. Some of this data (e.g., trunk type definitions) is required information when inputting certain CMU procedures. The following paragraphs describe the reference data that should be available.

3.02 Siemens SATURN Practices. A current copy of this practice, or a working knowledge of its contents, is required plus the latest field change information affecting this practice. (This may consist of one or more addendums or other supplemental information.) Supporting practices, such as Data Base Preparation, Feature Descriptions, etc., should also be available for reference, particularly for the inexperienced user. The practices issue numbers and dates for the SATURN II/III EPABX are listed in the appropriate Practices Documentation Index:

- SATURN II Practices Documentation Index
  A30808-X5049-A190-＊-B987

- SATURN III Practices Documentation Index
  A30808-X5050-A190-＊-B987

3.03 Timers. The SATURN System contains a variety of timers for various call-processing functions and feature operations. Most of their values may be changed via the CMU procedures. Six trunk group timers may be changed via the Trunk Group (TRKGRP) procedure, all remaining timers may be changed via the System Timer (SYSTIMER) procedures.

3.04 Access Levels and Security Keys. All areas of the SATURN EPAPX memory are protected against unauthorized access. The customer memory has been divided into five access levels. Levels 1 to 4, as indicated in the individual CMU procedures, are available to the customer for the addition,

deletion, or change of data. The "Display," "End," and "Help" actions may be accessed by any security level. Level 5 is reserved for Siemens use. A character security key is assigned to each access level. Entering the correct security key for an access level provides access to that level and all lower levels. For example, proper (authorized) access to level 3 permits the user to access levels 1, 2, and 3, but not level 4. The required access level is specified on each CMU procedure.

The SATURN EPAPX is delivered with security keys assigned by Siemens in the supplied feature program disk. The security keys are assigned by the Siemens marketing activity, who should be contacted for anything pertaining to this subject. Because of their obvious protective purpose, th⁻ security keys are intended to be given to the exclusive custody of the proper customer authority, who may then assign accessibility to different levels of the data base to system users on a selective basis.

The user is required to enter the security key at the beginning of each CMU session, during the logon procedure. This action is required for each CMU session. The key is then compared against a list stored in the memory. A "match" must occur in order for the user to proceed. (The key code is not "echoed" to the printer to prevent unauthorized users from obtaining same.) If the key code is accepted by the system, the program advances to an initial prompting statement on the printout, which requests further procedure information to be entered.

Security keys that are not assigned to the system (invalid keys), unassigned procedures, or mismatched key-to-procedure command information results in error conditions which halt the CMU program and require that the correct information be entered as directed by the system prompts.

SECTION 4.00   PREPARATION

4.01 Reference Items. The user making the CMU changes may wish to have certain items on hand prior to beginning the CMU session. The following paragraphs list the items which might be helpful.

4.02 Data Entry Terminal. A standard keyboard/printer data terminal that provides alphameric input is recommended for inputting the CMU procedures. The terminal must be e-quipped with an appropriate interface corresponding to Electronic Industries Association (EIA) specification RS-232-C.

The user may enter the CMU changes as described in Appendix B. Further, the CMU software includes instructions for automatic line feed during data entry, thus reducing the number of operations required to input data.

4.03 Security Key Data. The necessary security key data listed in the applicable site documentation must be known for access to the appropriate level (or levels) during the CMU session.

4.04 Data Base Preparation Tables. The data base preparation tables that were completed for this site should be available. These tables list all of the various changeable system features, trunk and station assignments, toll restrictions, etc., and therefore may be used to determine if the proposed CMU changes are compatible with the system and the installation. Any changes implemented should be documented in these tables.

4.05 Site Configuration Documentation. The specific site configuration documentation should be available. This documentation includes any hardware layout drawings, cabling information, and other system assignment data. As with the data base tables, this documentation may be used to determine if the proposed CMU changes are compatible with the system and the installation.

4.06 Local Entry of Data. The CMU process can be made at the on-premises location by connecting the data terminal to the service terminal connector.

4.07 Remote Entry of Data. Remote entry of data may be made via a modem. For detailed information, refer to the Siemens Installation and Maintenance practices.

Once the remote data connection is established, the keyboard/printer receives its first prompt message. The user can now proceed with the CMU process.

NOTE: If the initial prompt is not printed after establishing the connection at a remote location but other data is received, do not make further entries via the terminal. This situation may occur when CMU procedures, diagnostic testing, or traffic metering is being performed locally at the SATURN EPAPX.

Remote operation can be resumed when the initial prompt is received.

SECTION 5.00   IMPLEMENTATION

5.01 User Information. The following paragraphs describe the nature of how to access the system (known as "logon"), selecting the mode of input to be used, information on prompting and commands available, error messages, functions of the service terminal, and examples of actual CMU inputs to the system. Because a number of terms may be unfamiliar to the user, Appendix A provides a list or glossary of such terms that are common to the CMU procedures used in the SATURN EPAPX.

5.02 Service Terminal Functions. Certain functions must be provided by the service terminal in order for some CMU procedures to be run. Table 5.00 is a list of those functions and the American Standard Code for Information Interchange (ASCII) codes associated with them.

5.03 Accessing the System. After the terminal is connected to the system, and the system is operational, the system initially prompts the user with a message indicating the system software release level and the customer site identification. An example of this message is shown in Figure 5.00.

NOTE: The security key is not printed (nor displayed) during entry, to prevent unauthorized users from observing same.

```
AC-SAT AOS 8.06-DB 8.1-PL:055 -SITE: ES9-CHICAGO
PLEASE ENTER PASSWORD >
```

Figure 5.00 Initial System Prompt for Password

The system then responds with the two-line response message shown in Figure 5.01. The response includes the date (YY-MM-DD), representing the year, month, and day, and the time (HH:MM:SS), representing the hour, minute, and seconds, based on a 24-hour clock. For example, 1:00:00 PM is represented by 13:00:00. The second line of output prints the character ">", which indicates that the system is ready for the next input by the user.

```
YY-MM-DD HH:MM:SS
>
```

Figure 5.01   System Response to Proper Password

5.04 Prompting. The CMU procedures use plain English prompting, consisting of words and phrases that are readily understood. Figure 5.02 shows an example of a prompt for "Class of Service Number" after the user has inputted the action and command "CHANGE COSASSN" (to change a class of service definition).

```
> CLASS OF SERVICE NUMBER (0-31)=
```

Figure 5.02   Example of Plain English Prompt

5.05 Actions and Commands. The system provides complete flexibility for the display, addition, change, and deletion of data (actions) within the customer memory, plus a number of other functions. These actions are associated with specific CMU procedure names (commands). Each command may allow one or more of these actions. The actions allowed in the system are shown in Table 5.01. The commands are listed in Appendix D.

Not all of these actions are appropriate for each CMU command; however, those actions which are appropriate for a given command are specified within the procedure at the end of this practice. Note that either the first three characters of the action may be entered, or the complete action name. The system is arranged to accept either entry.

5.06 System Help File. The system also includes a "help" file to aid the user. With this file, the user need only enter the action "HELP" followed by a space and the appropriate command name, and the system outputs all of the actions, parameter types, and ranges of data requested as input for that particular command. This arrangement is useful when a user is familiar with the system, but has not used a particular command for some time. For example, to obtain general information pertaining to the CMU procedure for System Timers, the user enters "HELP SYSTIMER", and the system responds appropriately, as shown in Figure 5.03.

```
> HELP SYSTIMER

ACTION = DISPLAY
            *** PROMPT ***                 PARAMETER MIN/ MAX VALID RESPONSES

   VARIABLE SYSTEM TIMER                          1/ 10 MNEMONICS

ACTION = CHANGE
            *** PROMPT ***                 PARAMETER MIN/ MAX VALID RESPONSES

   VARIABLE SYSTEM TIMER                    REQUIRED 1/ 1 MNEMONICS
   TIMER VALUE (0-65535 TENTH SECS)         REQUIRED 1/ 0-65535 NUMERIC VAL

ACTION = SAVE

ACTION = CANCEL

>
```

Figure 5.03   Example of Help File – Without Parameter Variables

Table 5.00   Service Terminal Functions

FUNCTION	NAME		ASCII CODE (HEX)
CONTROL			
Cancel session (logoff)	CONTROL + C	(ETX)	03
Cancel previous character	BACKSPACE	(BS)	08
Enter contents of input line	CARRIAGE RETURN	(CR)	0D
Return to start of procedure	ESCAPE	(ESC)	1B
Request next portion of output	ENTER or RETURN	(LF)	0A
Reprint last entry (all data inputted since last prompt)	CONTROL + E	(ENQ)	05
Cancel current input line (must be used prior to depressing the RETURN key)	CONTROL + U	(NAK)	15
DATA			
Numeric digits	0 - 9		30 - 39
Alphabetic characters	A - Z		41 - 5A

Table 5.01   Actions for CMU Procedures

INPUT CHARACTERS	DESCRIPTION
DIS -or- DISPLAY	DISPLAY. Prints out the existing values contained in the system data base. If the command is followed by a specific value, the system displays the data for that value. NOTE: The majority of CMU procedures allow a carriage return ⟨CR⟩, or RETURN key, to represent "display all."
ADD	ADD. Adds one or more values to data base. If the value(s) should be unique and already exists, the user is alerted via an appropriate output message.
DEL -or- DELETE	DELETE. Removes a value from the system data base. (Certain resources must be placed out of service prior to being deleted.)
CHA -or- CHANGE	CHANGE. Substitutes one or more new values for existing value(s).
INS -or- INSERT	INSERT. Adds one or more values to data base following specified position(s); used when necessary to maintain a strict order of values in data base.
SAV -or- SAVE	SAVE. "Saves" the changes made to this point during this CMU session, by making it impossible to do a "Cancel." NOTE: The SAV CUSTDATA CMU procedure must still be performed to save these changes to disk.
CAN -or- CANCEL	CANCEL. Ignores all changes performed during the current CMU command session since the last SAVE command was used. NOTE: the CANCEL function is not applicable after leaving a CMU command.
HEL -or- HELP	HELP. Provides a printout of the various parameters and their value ranges within the particular CMU procedure code.
BEG -or- BEGIN	BEGIN. Initiates a particular function (e.g. SMDR) within the system that may be activated or deactivated by the user.
END	END. Terminates a particular function within the system that may be activated or deactivated by the user.
STO -or- STOP	STOP. Halts a particular function (e.g. SMDR) within the system that has been activated by the user. Some routines allow the function to be halted temporarily.

As a further enhancement of the Help file, the same procedure as described above, plus the appending of the question mark (?) after the command name, provides the same data as described plus the actual mnemonics (or other symbols, such as Y for Yes, N for No, etc.) that are acceptable for input for each parameter. Figure 5.04 provides an example of the same input as described above (and reflected in Figure 5.03), plus the appending of the question mark, and the resulting output by the system. Note that the system indicates whether parameters are optional (OPT) or required (REQ).

```
>HELP SYSTIMER ?

ACTION = DISPLAY
                  *** PROMPT ***              PARAMETER MIN/ MAX VALID RESPONSES
      VARIABLE SYSTEM TIMER                   OPTIONAL 1/ 10 MNEMONICS
INTRDGT TRKANSPRI DTDELAY CBACT CBRING STANDBYQ LOWTONE FWDNOANS CWTONE DISADELAY
ATTGONE NOANSADV ATTHOLDRCL STNHOLDRCL PARKRCL CAMPRCL NOANSRCL LOCKOUT ANSUPV
VOICEREJ OVRDAUTO SERIAL TRKDISC INCPTREC UCDREC DATASPEED DATACONN STNHFMIN MODEMRESP
DATACODE IGNOREHF CBDELRNG SZACKFAIL TRKRLS LCRONHKQ LCRONHKQTN LCRONHKFIL LCRRETRY
LCREXTCB TRKTRBL STNONHK CALLWAITON CALLWAITOFF RNGBURST RLTNOANS NOANSOUTG CODECALL
DIALTONE T1WTNOALM LPSDISC AUDMSG

ACTION = CHANGE
                  *** PROMPT ***              PARAMETER MIN/ MAX VALID RESPONSES
      REQ VARIABLE SYSTEM TIMER               REQUIRED 1/ 1 MNEMONICS
INTRDGT TRKANSPRI DTDELAY CBACT CBRING STANDBYQ LOWTONE FWDNOANS CWTONE DISADELAY
ATTGONE NOANSADV ATTHOLDRCL STNHOLDRCL PARKRCL CAMPRCL NOANSRCL LOCKOUT ANSUPV
VOICEREJ OVRDAUTO SERIAL TRKDISC INCPTREC UCDREC DATASPEED DATACONN STNHFMIN MODEMRESP
DATACODE IGNOREHF CBDELRNG SZACKFAIL TRKRLS LCRONHKQ LCRONHKQTN LCRONHKFIL LCRRETRY
LCREXTCB TRKTRBL STNONHK CALLWAITON CALLWAITOFF RNGBURST RLTNOANS NOANSOUTG CODECALL
DIALTONE T1WTNOALM LPSDISC AUDMSG

   TIMER VALUE (0-65535 TENTH SECS) REQUIRED                1/ 1 0-65535 NUMERIC VAL

ACTION = SAVE

ACTION = CANCEL

>
```

Figure 5.04 Example of Help File - With Parameter Variables

Table 5.02 Error Messages and Recommended User Action

NO.	ERROR MESSAGE RECEIVED	RECOMMENDED USER ACTION
1	INVALID PASSWORD ENTERED	Reenter PASSWORD; no spaces or characters are allowed.
2	INVALID ACTION ENTERED	User entered an ACTION which was not valid for the COMMAND specified. Check and reenter ACTION and COMMAND.
3	OVERLAY FILE NOT AVAILABLE	File is unreadable from disk, either because the file is not present, or it cannot physically be read from disk.
4	OVERLAY MEMORY NOT AVAILABLE	Another overlay is currently active, and resides in the overlay memory area. Perform an "END" on the current active overlay in order to load in the new command.
5	INVALID COMMAND NAME	User entered a COMMAND that is not supported for this system. Check and reenter ACTION and COMMAND.
6	INVALID / UNKNOWN KEYWORD	User made an entry that is inappropriate or is not recognized for this COMMAND. Check and reenter.
7	INVALID PARAMETER VALUE	User entered value for a parameter that is not valid; check and reenter parameter value.
8	EXCESS PARAMETER VALUES	User entered too many values for a parameter; check and reenter allowed value(s) only.
9	MISSING PARAMETER VALUES	User has not entered a value, or too few values when a range is specified.
10	CONFLICTING COMMAND EXECUTING	User has entered a COMMAND to the system while the system is currently acting upon another COMMAND.
11	COMMAND EXECUTION UNAUTHORIZED	User password level does not allow execution of command; only a higher-level password may execute the command.
12	"SAVE" INVOKED DUE TO "DISK ERROR"	The CMU procedure was unable to retain a "CANCEL" record of the changes and has therefore "SAVED" the changes in system memory. These changes cannot be cancelled by performing the CANCEL action. The SAVE CUSTDATA CMU procedure must still be performed to save these changes to disk.

5.07 Inputting Changes. Inputting CMU changes makes extensive use of alphameric actions and commands. This format has been arranged for both the novice and the experienced user, who will find the routines easier to remember, providing significant reductions in CMU entry time. The input instruction is entered sequentially, using prompting, followed by the depression of the RETURN key. The system states that the operation was successful or an error condition occurred, after each input. The general input form is:

a. Key in the procedure action and command, and depress the RETURN key.

b. Key in the appropriate parameters requested by each prompt, separating the multiple parameters, when appropriate, with spaces.

c. Following the entry of data for each required parameter, depress the RETURN key.

NOTE: When inputting data that represents a PEN of the form WXYZ, all leading zeroes must be keyed in, as appropriate. Leading zeroes are not required for other types of entries. For example, PEN 0007 (WXYZ = 0007) requires the keying of digits 0, 0, 0, and 7, whereas station number 37 (AAAA = 0037) requires the keying of digits 3 and 7 only.

Additional guidance is found in the Data Base Preparation Tables.

5.08 User Shortcuts. The software provides some "shortcuts" to aid the user during lengthy CMU sessions. Special use is made of the semicolon (";") during the entering of data, and, in some cases, just the RETURN key. For example, if the user is in the middle of a routine that includes many optional parameters (e.g., STNCOS), and the user requires to make only a few changes near the beginning of the CMU procedure, the semicolon is appended to the last inputted character prior to depressing the RETURN key. If there are no more additional required parameters, the user is returned to the initial prompting point within that CMU procedure, indicated by the ")." However, if the additional parameters are required, the system outputs an error message and reprompts the user for the proper input.

Upon completion of all data entries within a CMU procedure, the user may wish to perform additional entries within that same CMU action and command. For example, if the user is inputting a number of Station Assignments (using ADD STNASSN) as each complete station assignment is complete, the user may reinitiate prompting at the beginning of that same action (e.g., ADD STNASSN) by just depressing the RETURN key. Prompting begins at the same point with the procedure as after the inputting of the action and CMU command.

The use of the question mark (?) within the "Help" file has already been noted.

5.09 Error Messages. Most errors during message entry do not cause an exit from the CMU procedure. If an exit does not occur, the system provides a Plain English Format (PEF) error message and expects a retry of the user action just attempted. If an exit does occur, the system reverts the user back to the command prompt level, indicated by the character ")". Figures 5.05 through 5.07 show typical examples of error messages. Other command level error messages may also occur, and are shown in Table 5.02. The table also provides recommended user action in response to the error message received.

In addition to the error messages at this level, error messages pertaining to the individual inputs within a CMU procedure may occur at any time during a CMU procedure. These error messages indicate such items as incorrect parameters, invalid ranges of data, improper parameter input sequences, etc. Error messages within a CMU procedure usually require the user to reinput the correct data.

```
PER ERROR # 1
INVALID PASSWORD ENTERED

PLEASE ENTER PASSWORD >
```

**Figure 5.05 Error Message Example
Invalid Password**

This message indicates that the security key entered contained an error, or is not authorized. The correct security key may be reentered on the line following the symbol ")".

```
PER ERROR # 2
INVALID ACTION ENTERED

>
```

**Figure 5.06 Error Message Example
Invalid Action Specified**

This message indicates that the ACTION entered is not valid with respect to the command entered. The correct value may be reentered on the line following the symbol ")".

```
PER ERROR # 6
INVALID COMMAND NAME

>
```

**Figure 5.07 Error Message Example
Invalid Command Name**

This message indicates an incorrect COMMAND name has been entered. The correct action and command name may be entered on the line beginning with the symbol ")".

In most cases, correct parameters and parameter values that were entered for the command are retained by the system, therefore only the value(s) in error need be reentered. The error message reflects the current entry, thus any successful entries made during the procedure are still valid; if desired, these changes can be ignored by use of the CANCEL action (refer to Table 5.01).

5.10 Input Examples. Appendix B provides examples of inputting CMU changes and the corresponding results. These examples show the prompting of the user, the input actions, commands and associated parameters and parameter values, and the response of the system to these entries.

During the initial prompting, the system prints out a string of characters as shown in Figure 5.08. These are defined as follows:

```
pp-AOS vv. rr-DB vv. rr-PL:nnn -SITE:sss
PLEASE ENTER PASSWORD >
```

Figure 5.08 Initial Prompt with System-Level Designators

The characters printed on the first line are defined as follows:

pp   – Processor status with which the user is
in communication:
AC – Active
C S – Cold Standby (dual-processor systems only)
H S – Hot Standby (dual-processor systems only)
N R – Not Ready (dual-processor systems only)

AOS vv.rr – SATURN System designator, system Version (vv)
and Release (rr) numbers.

The numbers (vv.rr) denote the generic software
version and release, as supplied by Siemens.

DB vv.rr – Customer Data Base designator and related
system version and release.

The numbers (vv.rr) denote the generic software
version and release, as supplied by Siemens,

upon which the initial customer data base was
programmed. This number does not change,
even if the site is loaded with a subsequent
higher-level generic data base. It changes only
in the event that the customer elects to reprogram
the entire initial data base for the site.

PL: nnn – Patch Level designator and related patch level
release.

The numbers (nnn) denote the specific patch
level to which minor programming changes have
been inserted into the generic system data base.
This number is used by Siemens' field service
personnel only as a guide to the updated level
of the system.

SITE:sss – Site designation as assigned via the SYSOPT
procedure. Up to 16 characters may be assigned.

APPENDIX A. Glossary of CMU Procedure Terms

TERM	DEFINITION
ACTION	That which the user wishes to perform (e.g., to place additional information in memory, the action "ADD" is commonly used).
ALPHAMERIC	A string of both alphabetic and numeric characters (e.g., the alphameric string "CONF4P" to denote a four-port conference circuit).
CMU SESSION	The period of time between the logon and logoff of a user for the purposes of making CMU changes.
COMMAND	The name of an individual CMU procedure in which certain actions may be performed (e.g., the command pertaining to class-of-service information is COSASSN).
LOGOFF	The action of terminating an operating session.
LOGON	The action of entering a proper security code and initiating an operating session.
MMLP	Man-Machine Language Processor. The interface software that converts the user's input to machine-readable codes.
MNEMONIC	An abbreviation, acronym, or other combination of letters, numbers, and/or symbols to aid the user in remembering the codes required to make CMU procedural changes.
OVERLAY	A software program that is user-accessible, but not on an interactive basis. That is, the user makes entries into the system, but the entries are not checked for validity until the user depresses the ENTER or RETURN key on the data entry terminal.
PARAMETER	Any variable for which the user must input data to the system (e.g., equipment quantities, feature classmarks, number assignments, etc.).
PEF	Plain English Format. All prompting and system responses are in plain English. User inputs consist of "yes" or "no" type instructions, numbers for numeric parameters, and alphamerics relating to the item being programmed.

APPENDIX B. Procedures for Logon and Logoff and Examples of CMU Input

LOGON PROCEDURES
PROMPT:

```
AC-AOS 8.06-DB 8.01-PL:056 -SITE: ES9-CHICAGO
PLEASE ENTER PASSWORD >
```

User is requested to enter the appropriate (authorized) security key. Refer to the appropriate site documentation or administrator for correct security key; enter after the symbol ")".

RESPONSE:

```
YY-MM-DD HH:MM:SS
```

System responds with the calendar date (year-month-date) and the current time (hour-minute-seconds).

PROMPT:

```
>
```

User is requested to input an ACTION and a COMMAND. Refer to the appropriate CMU procedure for correct command and list of allowed actions.

LOGOFF PROCEDURES
PROMPT:

```
>
```

User is prompted for next input. If the user wishes to LOGOFF (terminate the session) at this time, the END OF TRANSMISSION (ETX) key may be depressed. On other commonly-used keyboard printer/terminals, this is accomplished by the simultaneous depression of the CONTROL (CNTL) key and the "C" key. Some printer/terminals may include a separate key for this function.

RESPONSE:

```
PEF SESSION TERMINATED AT YY-MM-DD HH:MM:SS
```

System acknowledges termination of the session, indicating the calendar date (year-month-date) and the current time (hour-minute-seconds). The next line printed by the printer/terminal indicates the LOGON prompt for the next user.

EXAMPLE USING CMU PROCEDURE

An example CMU procedure is presented on the following pages. The action performed is the addition of a new station class of service (COS). This COS is being assigned as COS 3, and allows the features Call Pickup - Group, Call Forwarding to Public Network, and Call Park to those stations that may be assigned this COS later. It further identifies that stations with this COS are allowed access to four trunk groups, 5, 6, 8, and 9, and that calls are affected by eight-digit toll restriction lists 2 and 7, and fifteen-digit toll restriction list 16. (The toll restriction lists may be either "allow only" or "deny only" for numbers in the list, depending on the assignment made via CMU procedure TCRLIST.) When all the data is correctly entered, the system responds with an acknowledgement that the COS has been added.

INPUT METHODS

NOTE: The examples herein refer to the "RETURN" key, which may carry some other designation (e.g., "ENTER"), depending upon the particular terminal/printer used.

The system prompts by means of a plain English prompt, indicating the parameter for which input is required, followed by an equals ("=") sign.

The user enters the required alphameric data after the equals sign, followed by the RETURN key; the system responds with either the next prompt or an acknowledgement, as appropriate.

APPENDIX B. Procedures for Logon and Logoff and Examples of CMU Input (Continued)

EXAMPLE CMU PROCEDURE FOR ADDING STATION CLASS OF SERVICE

PROMPT:

> PLEASE ENTER PASSWORD >

User is requested to enter appropriate security key.

INPUT:

> PLEASE ENTER PASSWORD >**12345**

User enters security key followed by RETURN key.

NOTE: Security key (12345) is not printed out, to prevent unauthorized observation and use.

RESPONSE:

> YY-MM-DD HH:MM:SS

System responds with the calendar date and current time.

PROMPT:

> >

User is requested to input an ACTION and a COMMAND.

INPUT:

> >**ADD COSASSN**

User inputs the input action ("ADD") and command ("COSASSN") for adding a new station class of service, followed by the RETURN key.

PROMPT:

> CLASS OF SERVICE NUMBER (0-31)=

System prompts the user to enter the first parameter value for the new class of service.

INPUT:

> CLASS OF SERVICE NUMBER (0-31)=**3**

User inputs the number of the new class of service; in this example, "3", followed by the RETURN key.

PROMPT:

> CLASSMARK ASSIGNMENTS=

System prompts the user to enter the second parameter value(s) for the classmarks to apply to this class of service.

INPUT:

> CLASSMARK ASSIGNMENTS=**HKFLSH PUGRP FWDTONTWK PARK**

User inputs the mnemonics of the classmarks; in this example, HKFLSH for Hookflash (required to be assigned for certain features, including Call Park), PUGRP for Call Pickup - Group, FWDTONTWK for Call Forwarding to Public Network, and PARK for Call Park, followed by the RETURN key. (Refer to CMU procedure COSASSN for a table of classmark mnemonics.)

PROMPT:

> ALLOWED TRUNK GROUPS (0-31)=

System prompts the user to enter the third parameter value(s) for the trunk group(s) authorized for access by this class of service, followed by the RETURN key.

APPENDIX B. Procedures for Logon and Logoff and Examples of CMU Input (Continued)

EXAMPLE CMU PROCEDURE FOR ADDING STATION CLASS OF SERVICE

INPUT:

ALLOWED TRUNK GROUPS (0-31)=5 6 8 9

User inputs the number(s) of the allowed trunk group(s); in this example, "5, 6, 8, and 9," followed by the RETURN key.

PROMPT:

TOLL CODE REST LIST NUMS (0-19)=

System prompts the user to enter the fourth parameter value(s) for the toll code restriction list(s) authorized for access by this class of service.

INPUT:

TOLL CODE REST LIST NUMS (0-19)= 2 7 16

User inputs the number(s) of the member toll code restriction list(s); in this example, eight-digit toll code restriction lists "2 and 7," and fifteen-digit toll code restriction list "16," followed by the RETURN key.

RESPONSE:

COSASSN YY-MM-DD HH:MM:SS CLASS OF SERVICE ADDED

System acknowledges addition of the new class of service, followed by the calendar date and the current time. The next line prompts the user for the next ACTION and COMMAND, or the user may LOGOFF as outlined previously.

APPENDIX C. Customer Memory Update Procedure Cross-Reference – By Title

CUSTOMER MEMORY UPDATE PROCEDURE TITLE	COMMAND
Alarm Failure History	ALMDATA
Attendant Console Assignments	ATTASSN
Attendant Console Map Assignments	ATTMAP
Audit Trail	AUDIT
Authorization Code Assignments	AUTHCODE
Call Trace Data	TRACE
Class-of-Service Assignments (Station)	COSASSN
CMU Command Name (Change)	COMMAND
CMU Security Code Assignments	SECURITY
Conference Assignments	CONFASSN
Customer Data Base Backup	CUSTDATA
Data Device Assignments	DATAASSN
Data Device Class-of-Service Assignments	DATACOS
DID Digit Conversion Tables	DIDCONV
DPI Assignments (Add)	DPIASSN
DPI Assignments (Change)	DPICHGE
DPI Assignments (Display)	DPIDISP
DPI Button Map Assignments	DPIMAP
DTMF Receiver Assignments	DTMFASSN
Duplex Processor Assignments	DUPLEX
External Station Assignments	EXTRN
Feature Access Code Assignments	FEATACC
Hotline Station Assignments	HOTLINE
Hunt Group Assignments	HUNTGRP
LCR Class-of-Service Assignments	LCRCOS
LCR Dialing Plan	LCRDPLN
LCR Outdialing Rules	LCRODR
LCR Route Assignments	LCRROUTE
LCR Schedules	LCRSCHD
LCR Special Common Carrier Data	LCRSCC
Modem Assignments	MODMASSN
Modem Pool Assigments	MODMPOOL
Modem Pool Routing Baud Rate Assignments	MODMRTE
Nailed-Up Connection Assignments	NAILUP
Office Record Data	OFFRCRD
Pickup Group Assignments	PICKGRP
Protocol Assignments	PROTOCOL
Service State Assignments	SERVICE
SMDR Account Code Assignments	SMDRACCT
SMDR Assignments and Control	SMDRASSN
Special Equipment Assignments	SPCLEQPT
Speed Calling Group Assignments	SPEEDGRP
Station Assignments	STNASSN
Station Data (Display)	STNDATA
Station Extension Assignments	STNEXT
System Options	SYSOPT
System Sizing Assignments	SYSSIZE
System Time/Date Change	TIMEDATE
System Timer Assignments	SYSTIMER
Toll Code Restriction Lists	TCRLIST
Traffic Metering Assignments and Control	TRAFASSN
Traffic Metering Counter Assignments	TRAFCTR
Trunk Assignments	TRKASSN
Trunk Group Assignments	TRKGRP
UCD Group Assignments	UCDGRP
UCD Scan	UCDSCAN

APPENDIX D. Customer Memory Update Procedure Cross-Reference – By Command

COMMAND	CUSTOMER MEMORY UPDATE PROCEDURE TITLE
ALMDATA	Alarm Failure History
ATTASSN	Attendant Console Assignments
ATTMAP	Attendant Console Map Assignments
AUDIT	Audit Trail
AUTHCODE	Authorization Code Assignments
COMMAND	CMU Command Name (Change)
CONFASSN	Conference Assignments
COSASSN	Class-of-Service Assignments (Station)
CUSTDATA	Customer Data Base Backup
DATAASSN	Data Device Assignments
DATACOS	Data Device Class-of-Service Assignments
DIDCONV	DID Digit Conversion Tables
DPIASSN	DPI Assignments (Add)
DPICHGE	DPI Assignments (Change)
DPIDISP	DPI Assignments (Display)
DPIMAP	DPI Button Map Assignments
DTMFASSN	DTMF Receiver Assignments
DUPLEX	Duplex Processor Assignments
EXTRN	External Station Assignments
FEATACC	Feature Access Code Assignments
HOTLINE	Hotline Station Assignments
HUNTGRP	Hunt Group Assignments
LCRCOS	LCR Class-of-Service Assignments
LCRDPLN	LCR Dialing Plan
LCRODR	LCR Outdialing Rules
LCRROUTE	LCR Route Assignments
LCRSCC	LCR Special Common Carrier Data
LCRSCHD	LCR Schedules
MODMASSN	Modem Assignments
MODMPOOL	Modem Pool Assigments
MODMRTE	Modem Pool Routing Baud Rate Assignments
NAILUP	Nailed-Up Connection Assignments
OFFRCRD	Office Record Data
PICKGRP	Pickup Group Assignments
PROTOCOL	Protocol Assignments
SECURITY	CMU Security Code Assignments
SERVICE	Service State Assignments
SMDRACCT	SMDR Account Code Assignments
SMDRASSN	SMDR Assignments and Control
SPCLEQPT	Special Equipment Assignments
SPEEDGRP	Speed Calling Group Assignments
STNASSN	Station Assignments
STNDATA	Station Data (Display)
STNEXT	Station Extension Assignments
SYSOPT	System Options
SYSSIZE	System Sizing Assignments
SYSTIMER	System Timer Assignments
TCRLIST	Toll Code Restriction Lists
TIMEDATE	System Time/Date Change
TRACE	Call Trace Data
TRAFASSN	Traffic Metering Assignments and Control
TRAFCTR	Traffic Metering Counter Assignments
TRKASSN	Trunk Assignments
TRKGRP	Trunk Group Assignments
UCDGRP	UCD Group Assignments
UCDSCAN	UCD Scan

APPENDIX E. Customer Memory Update Procedures

The Customer Memory Update (CMU) procedures for all user-alterable areas of the system are contained in the succeeding pages. For the user's convenience, the procedures are arranged alphabetically by COMMAND name in the upper right-hand corner of each individual procedure.

The security access level for each CMU procedure is shown on the first page of each individual procedure.

Note that all **user inputs** are shown in **boldface** type. This applies to the initial action and command, and for each parameter within that action. The ACTIONs shown in the CMU procedures are presented in the shorter, three-character form (e.g., DIS for DISPLAY, etc.). The user may, however, use either form presented previously in this document.

A brief explanation of each system prompt is provided in the left-hand half of the CMU procedure, immediately below that prompt. The actual digit(s) that may be inputted by the user

in response to that prompt are shown in the right-hand half of the CMU procedure, immediately below that prompt.

Parameters that require a numeric input are indicated by one or more lower-case "n's," depending on the number of digits to be specified by the user. Parameters that require an alpha-meric input are indicated by one or more lower-case "a's," depending on the number of digits to be specified by the user.

Some parameters allow the user a wide choice of input selections. In such cases, one or more tables are provided at the rear of the individual CMU procedure. These are referenced in the right-hand half of the procedure, immediately after the corresponding prompt. The table numbers have no significance to the user.

The mnemonics found within the prompts and explanations are also referenced at the rear of each CMU procedure.

CUSTOMER MEMORY UPDATE PROCEDURE: ACDSCAN
TITLE: ACD Scan Assignments
Access Level: 3, 4

ACDSCAN

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS ACDSCAN
2.	DISPLAY REPORT OR PARMS ? (R, P) = **a**
	Requests type of display.

a = R = Report;
a = P = Parameters.

1.	⟩ BEG ACDSCAN
2.	OUTPUT DEVICE (TTY, TTY0, TTY1, MODEM) = **aaaaa**
	Requests the designation of the output device.

aaaaa = TTY, TTY0, TTY1, MODEM.

3.	INTER REPORT TIME (30-360) SEC = **nnn**
	Requests the inter-report time to be used.

nnn = 30 – 360 seconds.

1.	⟩ CHA ACDSCAN
2.	OUTPUT DEVICE (TTY, TTY0, TTY1, MODEM) = **aaaaa**
	Requests the new designation of the output device.

aaaaa = TTY, TTY0, TTY1, MODEM.

3.	ASCII CODES TO CLEAR CRT SCREEN (@@) = **aa**
	Requests the new ASCII codes to clear the CRT screen.

aa = ASCII codes.

4.	INTER REPORT TIME (30-360) SEC = **nnn**
	Requests the new inter-report time to be used.

nnn = 30 – 360 seconds.

CUSTOMER MEMORY UPDATE PROCEDURE: ALMDATA
TITLE: Alarm Failure History
Access Level: 3, 4

| ALMDATA |

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	> DIS ALMDATA

2.	DISPLAY TYPE (ALL/NEW) = aaa

Requests type of alarm data to be displayed.　　　　　aaa = type: ALL or NEW.

NOTE: Entering ⟨CR⟩ is the same as entering ALL for displaying all alarm data.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ALL	All Recorded Alarms
NEW	New Alarms Since Last Display from the Service Terminal

```
                                                                    ┌─────────────────┐
CUSTOMER MEMORY UPDATE PROCEDURE: ATTASSN                           │     ATTASSN     │
TITLE: Attendant Assignments                                        └─────────────────┘
Access Level: 3, 4                                                         Page 1 of 2
```

STEP NO.	PROMPT/EXPLANATION

1. ⟩ **DIS ATTASSN**

2. ATTENDANT CONSOLE NUMBER (1-12) = **nn ... nn**

Requests attendant console number(s) for which data is to be dis-   nn = console number (1-12).
played. If more than one, separate each by spaces. Enter ⟨CR⟩
to display all attendant assignments.

3. DISPLAY ASSIGNABLE KEYS? (Y/N) = **a**

Requests whether key assignment data is to be shown for selected   a = Y = Yes, a = N = No.
console(s).
NOTE: Entering ⟨CR⟩ is the same as entering N for No.

---

1. ⟩ **ADD ATTASSN**

2. PORT EQUIPMENT NUMBER (WXYZ) = **nnnn**

Requests PEN for new console assignment.   nnnn = valid PEN.

3. ATTENDANT EXT # = **nnnn**

Requests station number to be assigned to added console.   nnnn = extension number (0-9999).
NOTE: Assignment of an attendant station number is required.

4. EXCLUSIONS (CAS,INC,OPR,RCL) = **aaa ... aaa**

Requests call type exclusions to be permanently assigned to the   aaa = exclusion type (0 to 3 types sepa-
console; the attendant is not alerted for calls of these types. Enter   rated by spaces); see Table 303.1.
⟨CR⟩ for no exclusions.

---

1. ⟩ **DEL ATTASSN**

2. ATTENDANT CONSOLE NUMBER (1-12) = **nn**

Requests attendant console number which is to be deleted.   nn = console number (1-12).
NOTE: The attendant console must be placed out of service before the console can be deleted.

---

1. ⟩ **CHA ATTASSN**

NOTE: The console must be placed out of service before the console can be changed.

2. ATTENDANT CONSOLE NUMBER (1-12) = **nn**

Requests attendant console number for which data is to be changed. nn = console number (1-12).

3. ATTENDANT EXT # = **nnnn**

Requests station number to be assigned to console. Enter ⟨CR⟩   nnnn = new extension number (0-9999).
for no change.

4. EXCLUSIONS (CAS,INC,OPR,RCL) = **aaa ... aaa**

Requests type of call exclusions to be changed at this console. If   aaa = exclusion type (0 to 3 types);
more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   see Table 303.1.

CUSTOMER MEMORY UPDATE PROCEDURE: ATTASSN
TITLE: Attendant Assignments

STEP NO.	PROMPT/EXPLANATION

5.	CALL EXCLUSION STATE (ON / OFF) = **aaa ... aaa**

Requests new state for each exclusion type specified above. If more than one, separate each by spaces. (Enter in same sequence.)   aaa = exclusion state: ON or OFF.

Table 303.1   Call Exclusion Types

ALPHANUMERIC INPUT	DESCRIPTION
CAS	Centralized Attendant Calls
INC	Incoming Calls
OPR	Dialing 0 (Operator) Calls
RCL	Recalls

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic | **Definition**
PEN | Port Equipment Number

CUSTOMER MEMORY UPDATE PROCEDURE: ATTMAP
TITLE: Attendant Console Map Assignments
Access Level: 3, 4

ATTMAP

Page 1 of 3

STEP NO.	PROMPT/EXPLANATION

1. >DIS ATTMAP

2. ATTENDANT CONSOLE NUMBER (1-12) = nn ... nn

Requests attendant console number(s) for which data is to be displayed. If more than one, separate each by spaces. Enter ⟨CR⟩ to display key assignment data for all consoles.

nn = console number(s) (1-12).

---

1. >CHA ATTMAP

NOTE: The attendant console must be placed out of service before map assignments can be changed.

2. ATTENDANT CONSOLE NUMBER (1-12) = nn

Requests attendant console number for which assignments are to be changed.

nn = console number (1-12).

3. ATTENDANT KEY NUMBER(S) (1-34) = nn ... nn

Requests key number(s) to have assignment(s) changed. If more than one, separate each by spaces.

nn = key number(s); see Figure 304.1.

4. OLD KEY FEATURE ASSIGNMENT(S) = aaaaaaaa ... aaaaaaaa

Requests old feature assigned to key(s) specified above. If more than one, separate each by spaces.

aaaaaaaa = feature; see Table 304.1.

5. NEW KEY FEATURE ASSIGNMENT(S) = aaaaaaaa ... aaaaaaaa

Requests new feature to be assigned to key(s) specified. If more than one, separate each by spaces.

aaaaaaaa = feature; see Table 304.1.

6. ACCESS CODE FOR FEATURE = nnnn ... nnnn

Requests access code(s) to be assigned to feature(s) assigned to key(s). If more than one, separate each by spaces. Enter ⟨CR⟩ if none.
NOTE: An access code must have been previously assigned before it can be inputted.

nnnn = access code(s).

7. TRUNK GROUP NUMBER (0-31) = nn ... nn

Requests trunk group number(s) to be assigned for ACOFTG fea-. ture. If more than one, separate each by spaces. Enter ⟨CR⟩ if none.

nn = trunk group number (0-31).

CUSTOMER MEMORY UPDATE PROCEDURE: ATTMAP
TITLE: Attendant Console Map Assignments
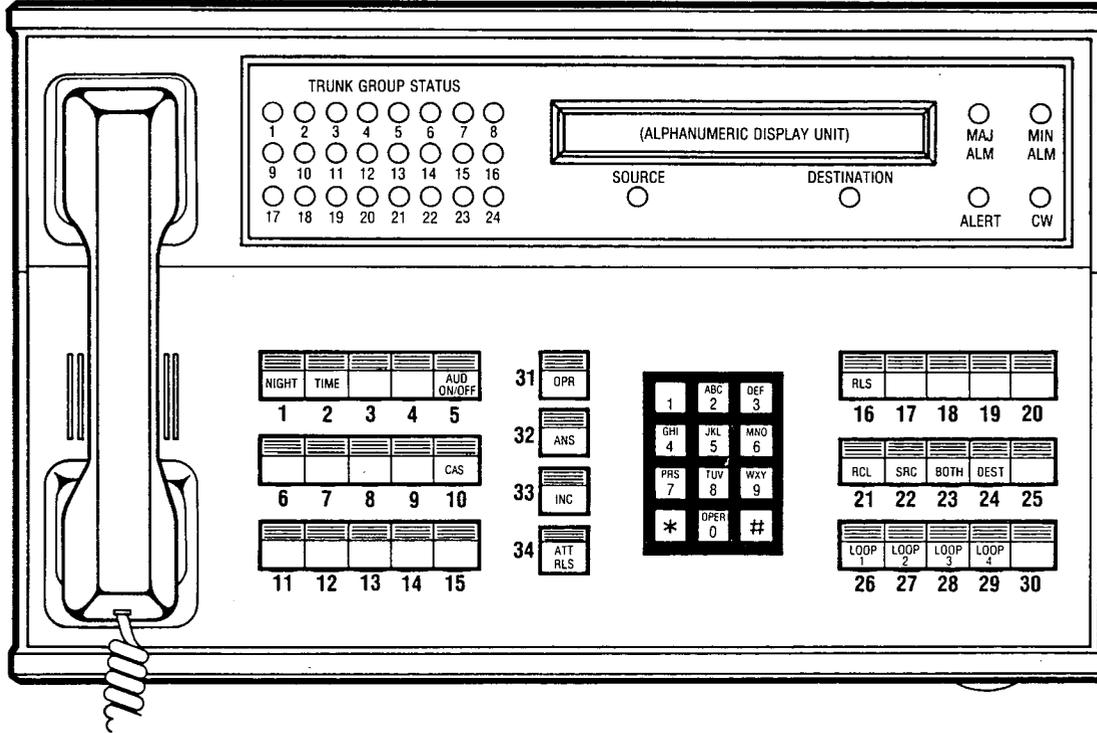
Console Assignable Keys	Console Preassigned Keys
3	1
4	2
6	5
7	10 (see Note 2)
8	16
9	21
11	22
12	23
13	24
14	26
15 (see Note 1)	27
17	28
18	29
19	31
20	32
25	33
30	34

NOTES: 1. The "FLASH" key must be assigned to key number 15 at a CAS Main.

2. The "CAS" key is automatically assigned in a CAS System. This key is not used in non-CAS Systems.

A3449-1-6/25/85

Figure 304.1 Console Key Assignments

CUSTOMER MEMORY UPDATE PROCEDURE: ATTMAP
TITLE: Attendant Console Map Assignments

Table 304.1 Attendant Console Key Features

ALPHAMERIC INPUT	DESCRIPTION	SEE NOTE
NASN	Not Assigned	
SMDR	Attendant-Activated SMDR	1
CONF	Attendant Conference	
ACOFACC	ACOF: Feature Access Codes (See Table 304.2)	2,4
ACOFTG	ACOF: Trunk Group Access	3
ACCT	Attendant-Entered SMDR Account Code	
OVERFLOW	Attendant Overflow Facility	
OVERRIDE	Attendant Override	
FLASH	Attendant Trunk Flash Capability	
TRKGRP	Attendant Trunk Group Access	2
PAGE	Attendant Voice Paging	2
EXCCAS	Call Exclusion: CAS Calls	
EXCINC	Call Exclusion: Incoming Trunk Calls	
EXCOPR	Call Exclusion: Operator (Dial 0) Calls	
EXCRCL	Call Exclusion: Recalls	
PARK	Call Park	
MSGSET	Message Waiting Activation	2
MSGCAN	Message Waiting Cancellation	2
MINALM	Minor Alarm Identification	
VOLUME	Volume Control - Attendant	

NOTES: 1. Not applicable to domestic (U.S.) systems.
2. Access code (ACC) required if this feature assigned.
3. Trunk group number required if this feature assigned.
4. Each ACOFACC Key controls only one feature access code. Refer to Table 304.2.

Table 304.2 Feature Access Codes Which Can Be Controlled Via the ACOFACC Key

Code Call Access Dictation Access and Control Meet-Me Conference	Paging Station-Controlled Conference

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ACOF	Attendant Control of Facilities
CAS	Centralized Attendant Service
SMDR	Station Message Detail Recording

CUSTOMER MEMORY UPDATE PROCEDURE: AUDIT
TITLE: Audit Control
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	> **DIS AUDIT**

2.	TYPE (TSTLIST, DMND) = **aaaa**

Requests type of audit data to be displayed. If TSTLIST, go to step 3; otherwise, procedure is completed.   aaaa = type of data; TSTLIST OR DMND.

NOTE: Enter TSTLIST to display the status (enabled, disabled or standby) of the automatic test list shown in Table 524.1; enter DMND to list the identity of any automatic test currently waiting to run as the result of a user demand (see BEG AUDIT).

3.	DISPLAY TEST TYPE = **aaaaaaa**

Requests test type to be displayed. Enter ⟨CR⟩ to display the contents of all the automatic tests shown in Table 524.1.   aaaaaaa = test type; see Table 524.1.

NOTE: Audits which are enabled in the automatic test list are periodically run by the system, without manual intervention.

1.	> **BEG AUDIT**

2.	TEST TYPE = **aaaaaaa**

Requests type of audit test to be initiated.   aaaaaaa = test type; see Table 524.1.

3.	NUMBER OF TEST RUNS (1-9) = **n**

Requests number of test runs.   n = test quantity (1-9).

NOTES: 1. A demand audit is a test initiated by a "BEG AUDIT" command. A demand audit is started immediately, unless execution is blocked because another test is already running. Only one demand audit can be waiting to run at any given time. An attempt to queue up a second demand audit will be rejected.

2. The execution of an audit test (demand or automatic) may result in the processor idle-time indicator lights to stop, indicating that all processor idle time is being consumed by the test.

3. A display of alarm data will contain specific information regarding test failures from audit tests (demand or automatic).

1.	> **CHA AUDIT**

2.	CHANGE TEST TYPE = **aaaaaaa**

Requests type of audit test change to be made.   aaaaaaa = test type; see Table 524.1.

3.	STATUS (ENABLED, DISABLED, STANDBY) = **aaaaaaa**

Requests status of audit test.   aaaaaaa = test status:

ENABLED – will run periodically on active processor.
DISABLED – will not run periodically.
STANDBY – will run periodically on standby processor only.

CUSTOMER MEMORY UPDATE PROCEDURE: AUDIT
TITLE: Audit Control

Page 2 of 2

Table 524.1 Audit Test Types

ALPHAMERIC INPUT	DESCRIPTION	CAN RUN ON STANDBY
DIGAPPR	Digital Data Apparatus (OC II Only)	NO
DTMF	Dual-Tone Multifrequency Receiver and Tone Generator	NO
IOPLOOP	Input/Output Processor Loop-Around	YES
MEMCONT	Memory Contents	YES
MEMMIS	Memory Mismatch (Duplex Systems Only)	NO
MEMPAR	Memory Parity	YES
MTSMEM	Memory Time Switch Memory Control	NO
SPEECH	Speech Highway Control	NO

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DMND	Demand Test Type
TSTLIST	Test Listing

CUSTOMER MEMORY UPDATE PROCEDURE: AUTHCODE
TITLE: Authorization Code Assignments
Access Level: 4

STEP NO.	PROMPT/EXPLANATION

---

1. **) DIS AUTHCODE**

2. AUTH CODE OR INDEX? (A/I) = **a**

   Requests whether authorization code or index range is to be displayed. If A is entered go to Setp 3. If I is entered go to step 4.

   a = A = authorization code
   a = I = index range.

3. AUTHORIZATION CODE = **nnnnnn**

   Requests authorization code to be displayed. Enter ⟨CR⟩ for none. Procedure is completed.

   nnnnnn = Authorization code (00-999999)

4. INDEX RANGE = **nn . . . nn**

   Requests index range for which authorization codes are to be displayed. Separate index numbers by spaces. Enter ⟨CR⟩ for all. Procedure is completed.

   nn = index numbers (0-9999)

---

1. **) ADD AUTHCODE**

2. NEW AUTHORIZATION CODE = **nnnnnn**

   Requests new two- to six-digit authorization code.

   nnnnnn = code (00-999999).

   NOTE: For proper operataion of this feature, all authorization codes must be of the same length.

3. DISPLAY CODE ON SMDR? (Y/N) = **a**

   Requests whether to display authorization code on SMDR.
   NOTE: Entering ⟨CR⟩ is the same as entering Y for Yes.

   a = Y = Yes; a = N = No.

4. CLASS OF SERVICE NUMBER (0-31) = **nn**

   Requests COS to apply to added authorization code.

   nn = COS (0-31).

5. DATA CLASS OF SERVICE NUM (0-31) = **nn**

   Requests data COS to apply to added authorization code. (Needed for OC II feature package only.)

   nn = data COS (0-31).

   NOTE: Enter ⟨CR⟩ to indicate no data class of service.

---

1. **) DEL AUTHCODE**

2. AUTHORIZATION CODE TO BE DELETED = **nnnnnn**

   Requests authorization code to be deleted.

   nnnnnn = code (00-999999).

CUSTOMER MEMORY UPDATE PROCEDURE: AUTHCODE
TITLE: Authorization Code Assignments

Page 2 of 2

STEP NO.	PROMPT/EXPLANATION

1.	**〉 CHA AUTHCODE**
2.	AUTHORIZATION CODE TO BE CHANGED = **nnnnnn**
	Requests authorization code to be changed. nnnnnn = code (00-999999).
3.	NEW AUTHORIZATION CODE = **nnnnnn**
	Requests new two- to six-digit authorization code. Enter 〈CR〉 for nnnnnn = code (00-999999). no change.
4.	DISPLAY CODE ON SMDR? (Y/N) = **a**
	Request whether to display authorization code on SMDR. a = Y = Yes; a = N = No. NOTE: Enter 〈CR〉 for no change.
5.	CLASS OF SERVICE NUMBER (0-31) = **nn**
	Requests COS to apply to new authorization code. nn = COS (0-31). NOTE: Enter 〈CR〉 for no change.
6.	DATA CLASS OF SERVICE NUM (0-31) = **nn**
	Requests data COS to apply to new authorization code. (Needed nn = data COS (0-31). for OC II feature package only.) NOTE: Enter 〈CR〉 for no change.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
COS	Class of Service
DISA	Direct Inward System Access

COMMAND

CUSTOMER MEMORY UPDATE PROCEDURE: COMMAND
TITLE: CMU Command Name (Change)
Access Level: 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS COMMAND
	NOTE: This action displays all CMU procedures that can be accessed at the access level of the current user. Note, however, that the DIS (Display) operation is allowed by many CMU procedures, even if the user is blocked from Adds, Deletes, or Changes.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
CMU	Customer Memory Update

CUSTOMER MEMORY UPDATE PROCEDURE: CONFASSN
TITLE: Conference Assignments
Access Level: 3, 4

CONFASSN

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	> DIS CONFASSN

1.	> ADD CONFASSN

2.	TYPE (ATTCONF, MMCONF, CONFPCB) = aaaaaaa

Requests type of conference, ATTCONF or MMCONF, for which circuit(s) are to be reserved, or the assignment of the optional conference board (CONFPCB) (new board adds 4 circuits – SATURN III only).
If ATTCONF or MMCONF, go to step 3; if CONFPCB, procedure is completed.
NOTE: CONFPCB does not apply to SATURN II.

aaaaaaa = ATTCONF, MMCONF, or CONFPCB.

3.	CONFERENCE COUNT (1-8) = n

Requests number of conference circuits to be reserved for this type of conference.

NOTE: SATURN II conference count = 1 – 3 circuits.
SATURN III conference count = 1 – 3 circuits (without optional conference board)
1 – 8 circuits (with optional conference board)

n = count.

1.	> DEL CONFASSN

2.	TYPE (ATTCONF, MMCONF, CONFPCB) = aaaaaaa

Requests type of conference circuit (ATTCONF or MMCONF) to be released to general pool, or if second conference board (CONFPCB) is to be unassigned.
If ATTCONF, go to step 3; if MMCONF, go to step 4; if CONFPCB, procedure is completed.
NOTE: CONFPCB does not apply to SATURN II.

aaaaaaa = ATTCONF, MMCONF or CONFPCB

3.	RESERVED CONFERENCE COUNT (1 - 8) = n

Requests number of conference circuits reserved for attendant conference to be released to the general conference circuit pool; procedure is completed.

n = count (1-3): SATURN II;
n = count (1-8): SATURN III.

4.	CONFERENCE CIRCUIT NUMBER (0-7) = n ... n

Requests the unique single digit defining the particular Meet-Me Conference(s) to be released to the general conference circuit pool. If more than one, separate each by spaces. Enter ⟨CR⟩ to delete no Meet-Me Conference circuits. Procedure is completed.
NOTE: The circuit number corresponds to the Meet-Me Conference code (e.g. Meet-Me code 0 is circuit 0. Meet-Me code 1 is circuit 1, etc.). Perform the DIS CONFASSN procedure to display all assigned Meet-Me Conference codes.

n ... n = conference number(s) =
0-2: SATURN II;
0-7: SATURN III.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ATTCONF	Attendant Conference
CONFPCB	Conference Circuit Printed Circuit Board
MMCONF	Meet-Me Conference

CUSTOMER MEMORY UPDATE PROCEDURE: COSASSN
TITLE: Class of Service Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. > DIS COSASSN

---

2. CLASS OF SERVICE NO(S). (0-31)=**nn**

Requests class of service (COS) number(s) for which definition is   nn = COS number (0-31).
to be displayed. One entry displays single COS; two entries specify
range (from nn to nn).

NOTE: Enter ⟨CR⟩ to display all.

---

3. DISPLAY ALL MEMBER STNS? (Y,N)=**a**

Requests whether station numbers having the specified COS(s) are   a = Y = Yes, a = N = No.
to be displayed. If a = N (No), only the COS definition is displayed.
If a = Y (Yes), the stations assigned to each COS are also displayed.

NOTE: The allowed trunk group list is used only during direct trunk group access. Least Cost Routing (LCR) does
        not use this information.

---

1. > ADD COSASSN

---

2. CLASS OF SERVICE NUMBER (0-31)=**nn**

Requests new class of service (COS) number to be assigned.   nn = COS number (0-31).

---

3. CLASSMARK ASSIGNMENTS = **aaaaaaaaaa...aaaaaaaaaa**

Requests new classmarks to be assigned to specified COS. If more   aaaaa = classmarks; see Table 402.1.
than one, separate each by spaces.

---

4. ALLOWED TRUNK GROUPS (0-31)=**nn ... nn**

Requests member trunk group(s) authorized for specified COS. If   nn = trunk group(s) (0-31).
more than one, separate each by spaces.

NOTE: Not required for systems using Least Cost Routing.

---

5. TOLL CODE REST LIST NUMS (0-19)=**nn ... nn**

Requests member toll code restriction list(s) authorized for specified   nn = tolll code restriction list;
COS. If more than one, separate each with spaces.   see Table 402.2

NOTE: Toll Code Restriction lists are not used by LCR, which uses its own restriction tables.

---

6. RESTRICTED ACD GROUP NUMS (0-63)=**nn ... nn**

Requests number of ACD group(s) from which this COS is to be re-   nn = restricted ACD group(s).
stricted from accessing. If more than one, separate each by spaces.

---

7. RESTRICTED STATION COS'S (0-31)=**nn ... nn**

Requests class(es) of service from which this COS is to be restrict-   nn = restricted COS number(s).
ed from accessing. If more than one, separate each by spaces.

CUSTOMER MEMORY UPDATE PROCEDURE: COSASSN
TITLE: Class of Service Assignments

STEP NO.	PROMPT/EXPLANATION

---

1. |) DEL COSASSN

NOTE: Stations and trunks assigned to a Class of Service must be deleted or reassigned prior to deleting the Class of Service.

2. | CLASS OF SERVICE NUMBER (0-31)=nn

Requests old class of service (COS) number to be deleted.　　nn = COS number (0-31).

---

1. |) CHA COSASSN

2. | CLASS OF SERVICE NUMBER (0-31)=nn

Requests old class of service (COS) number to be changed.　　nn COS number (0-31).

3. | DISABLE CLASSMARKS = aaaaaaaaaaa ...aaaaaaaaaaa

Requests classmarks to be disabled, i.e., removed from this COS.　　aaaaa = classmark (s); see Table 402.1.
If more than one, separate each by spaces.

NOTE: Limit the number of classmark assignments to ten; additional classmarks may be entered using the CHANGE action.

4. | ENABLE CLASSMARKS = aaaaaaaaaaa ... aaaaaaaaaaa

Requests classmarks to be enabled, i.e., assigned to this COS. If　　aaaaa = classmark(s); see Table 402.1.
more than one, separate each by spaces.

5. | DISABLE TRUNK GROUPS (0-31)=nn ... nn

Requests trunk group(s) to be disabled, i.e., unauthorized by users　　nn = trunk group(s) denied access by
of this COS. If more than one, separate each by spaces.　　this COS (0-31).

NOTE: Not required for systems using Least Cost Routing.

6. | ENABLE TRUNK GROUPS (0-31)=nn ... nn

Requests trunk group(s) to be enabled, i.e., authorized by users of　　nn = trunk group(s) allowed access by
this COS. If more than one, separate each by spaces.　　this COS (0-31).

NOTE: Not required for systems using Least Cost Routing.

7. | DISABLE RESTRICTION LISTS (0-19)=nn ... nn

Requests toll code restriction lists(s) to be removed from this COS.　　nn = toll code restriction list(s) not
If more than one, separate each by spaces.　　authorized for access by this COS;
　　see Table 402.2.
NOTE: Not required for systems using Least Cost Routing.

8. | ENABLE RESTRICTION LISTS (0-19)=nn ... nn

Requests toll code restriction lists(s) to be assigned to this COS. If　　nn = toll code restriction list(s) not
more than one, separate each by spaces.　　authorized for access by this COS;
　　see Table 402.2.
NOTE: Not required for systems using Least Cost Routing.

9. | DISABLE ACD GROUP NUMBERS (0-63)=nn ... nn

Requests restricted ACD group(s) to be removed from this COS. If　　nn = ACD group number(s) (0-63).
more than one, separate each by spaces.

CUSTOMER MEMORY UPDATE PROCEDURE: COSASSN
TITLE: Class of Service Assignments

STEP NO.	PROMPT/EXPLANATION

10.	ENABLE ACD GROUP NUMBERS (0-63)=nn ... nn

Requests restricted ACD group(s) to be assigned to this COS. If more than one, separate each by spaces. nn = ACD group number(s) (0-63).

11.	DISABLE RESTRICTED COS'S (0-31)=nn ... nn

Requests restricted COSs to be removed from this COS. If more than one, separate each by spaces. nn = COS number(s) (0-31).

12.	ENABLE RESTRICTED COS'S (0-31)=nn ... nn

Requests restricted COSs to be assigned to this COS. If more than one, separate each by spaces. nn = COS number(s) (0-31).

Table 402.1 Station Classmarks

ALPHAMERIC INPUT	DESCRIPTION	REQUIRED FEATURE
TSTAPP	Apparatus Test (COS Basis; for System-Wide Basis, set TSTDIAG Flag in SYSOPT)	HKFLSH
ATTHOLDRTV	Attendant Hold Retrieve	
ATTOVRDSEC	Attendant Override Security	
AUTOANSICOM	Automatic Answer – Intercom Calls	
AUTOANSPRIME	Automatic Answer – Prime Line Calls	
FWDALL	Call Forwarding – All Calls (See Note 1)	
FWDTOFIXED	Call Forwarding – Fixed	
FWDTONTWK	Call Forwarding to Public Network	
CALLHOLD	Call Hold	HKFLSH
SPLIT	Call Hold – Flip Flop (Broker)	HKFLSH
PARK	Call Park	HKFLSH
PUDIR	Call Pickup – Directed	
PUGRP	Call Pickup – Group	
TRACE	Call Trace	HKFLSH
CWORIG	Call Waiting Originating	
CWTERM	Call Waiting Terminating	
CASACT	CAS Activate/Deactivate Feature	
CODE	Code Call	
DATASEC	Data Line Security	
DICT	Dictation Access	
DND	Do Not Disturb	
EMERGENCY	Emergency – Health Care	
OVERRIDE	Executive Override	HKFLSH
OVRDAUTO	Executive Override – Automatic	
OVRDENOTN	Override – No Tone	
OVRDENOTNSEC	Override – No Tone Security	
EXECOVRDSEC	Executive Override Security	HKFLSH
HKFLSH	Hookflash	
HUNTBUSY	Hunting for Busy Condition Only	
HUNTNOANS	Hunting for No-Answer Condition Only	
LASTNO	Last Number Redial	
LCR	Least Cost Routing	
TESTDIAG	Maintenance Diagnostic Tests (From Maintenance Telephone)	
MMCONF	Meet-Me Conference	
MSGCB	Message Callback	
MSGSET	Message Waiting – Activate	HKFLSH

CUSTOMER MEMORY UPDATE PROCEDURE: COSASSN
TITLE: Class of Service Assignments

Table 402.1 Station Classmarks (Continued)

ALPHAMERIC INPUT	DESCRIPTION	REQUIRED FEATURE
OFFHOOK	Off-Hook Alarm – Health Care	
PAGE1	Paging Access – Zone 1	
PAGE2	Paging Access – Zone 2	
PAGE3	Paging Access – Zone 3	
PAGE4	Paging Access – Zone 4	
PATIENT	Patient – Health Care	
FORCEDRLS	Provides One Second Open – Circuit Upon Disconnect	
SLUMBER	Slumber Time Service – Health Care	
SCG1	Speed Calling – Group – Group 1	
SCG2	Speed Calling – Group – Group 2	
SCG3	Speed Calling – Group – Group 3	
SCG4	Speed Calling – Group – Group 4	
SCIND	Speed Calling – Individual	
TRKSBYQ	Standby Trunk Queuing	TRKCBQ
STNCBQ	Station Camp-On with Automatic Callback	
STNCONF	Station-Controlled Conference	HKFLSH
STOPHUNT	Stop Hunt	
TOLLDIV	Toll Diversion	
TRKCBQ	Trunk Queuing	
RINGBACK	Normal Ringback Tone (See Note 2)	
TRKTOTRK	Trunk-to-Trunk Station Connection	HKFLSH
ZUNA1	Zoned UNA – Pickup Zone 1	
ZUNA2	Zoned UNA – Pickup Zone 2	
ZUNA3	Zoned UNA – Pickup Zone 3	
ZUNA4	Zoned UNA – Pickup Zone 4	

Notes: 1. Includes "Call Forward – Busy," "Call Forward – All Calls," and "Call Forward Return," which also requires Hookflash.
2. When this flag is set in the trunk group class of service, an incoming trunk call which camps on a busy station will receive normal ringback tone rather than special audible ringback tone.

IMPORTANT:
This flag should be set in the COS for all DID trunk groups to comply with FCC regulations.

Table 402.2 Toll Code Restriction Lists

ALPHAMERIC INPUT	DESCRIPTION
0	Eight-Digit Restriction List 0
1	Eight-Digit Restriction List 1
2	Eight-Digit Restriction List 2
3	Eight-Digit Restriction List 3
4	Eight-Digit Restriction List 4
5	Eight-Digit Restriction List 5
6	Eight-Digit Restriction List 6
7	Eight-Digit Restriction List 7
8	Eight-Digit Restriction List 8
9	Eight-Digit Restriction List 9
10	Eight-Digit Restriction List 10
11	Eight-Digit Restriction List 11
12	Eight-Digit Restriction List 12
13	Eight-Digit Restriction List 13
14	Eight-Digit Restriction List 14
15	Eight-Digit Restriction List 15
16	Fifteen-Digit Restriction List 0
17	Fifteen-Digit Restriction List 1
18	Fifteen-Digit Restriction List 2
19	Fifteen-Digit Restriction List 3

CUSTOMER MEMORY UPDATE PROCEDURE: COSASSN
TITLE: Class of Service Assignments

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DID	Direct Inward Dialing
FCC	Federal Communications Commission
LCR	Least Cost Routing
ACD	Automatic Call Distribution
UNA	Universal Night Answer

CUSTDATA

CUSTOMER MEMORY UPDATE PROCEDURE: CUSTDATA
TITLE: Customer Data Base Backup
Access Level: 2, 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	〉 **DIS CUSTDATA**

Requests display of time and date of:
(a) last save to disk, and
(b) last data base change.

1.	〉 **SAV CUSTDATA**

2.	SAVE TO (ACTIVE, STANDBY, BOTH) = **aaaaaaa**

Requests to which floppy disk drive the data is to be saved.   aaaaaaa = ACTIVE, STANDBY, or BOTH.

NOTES: 1. Entering 〈CR〉 is the same as entering ACTIVE.
2. STANDBY and BOTH apply to SATURN III duplex systems only.
3. Customer data base saves to floppy disk will be prohibited if a checksum error exists in system memory, in order to prevent corruption of disk customer memory data.

CUSTOMER MEMORY UPDATE PROCEDURE: DATAASSN
TITLE: Data Device Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	) DIS DATAASSN

2.	DATA DEVICE EXTENSION NUMBER = nnnn nnnn
	Requests station number(s) of data device(s) for which data are to be displayed. If range desired, enter two numbers separated by space. Enter ⟨CR⟩ to display all.	nnnn = station number(s) (0-9999).

3.	DISPLAY TYPE (SLT,DCI,ALL) = aaa
	Enter the type(s) of devices to be displayed. If both range (step 2) and type are entered, all devices of the specified type(s) within the specified extension number range are printed. NOTE: Entering ⟨CR⟩ is the same as entering ALL.	aaa = type: SLT, DCI, or ALL.

1.	) ADD DATAASSN
	This procedure is used to add a digital data device (DCI) or to give data call priviledges to an existing analog station (SLT) which is to operate in the Alternate Voice/Data mode.

2.	DATA DEVICE EXTENSION NUMBER = nnnn
	Requests station number of data device to be added.	nnnn = station number (0-9999).

3.	DATA CLASS OF SERVICE (0-31) = nn
	Requests data COS of device to be added.	nn = data COS (0-31).

4.	DATA DEVICE TYPE (SLT,DCI) = aaa
	Specify device to be added (DCI) or existing device to be given data call priviledges (SLT). If DCI, go to step 5; if SLT, go to step 11.	aaa = data device: SLT or DCI.

5.	PORT EQUIPMENT NUMBER (WXYZ) = nnnn
	Requests PEN of data device to be added.	nnnn = valid PEN.

6.	DATA PROTOCOL NUMBER (0-31) = nn
	Requests number of protocol that is applicable to this data device. NOTE: Protocol number must have been previously assigned.	nn = data protocol number (0-31).

7.	DATA DEVICE CONNECTION TYPE = aaaaaaaa
	Requests type of connection for this data device. If ASSOC, go to step 8; if HOTLINE or WARMLINE, go to step 9; if DIAL, go to step 10; if NAILUP, procedure is completed.	aaaaaaaa = connection type; see Table 261.1.

8.	ASSOCIATED STATION EXTENSION NUM = nnnn
	Requests station number of station with which the data device is associated. Go to step 10.	nnnn = station number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: DATAASSN
TITLE: Data Device Assignments

STEP NO.	PROMPT/EXPLANATION

9.	HOT/WARM LINE DEST TABLE IDX = **nn**
	Requests hotline or warmline destination index for this data device. (Refer to the procedure HOTLINE.)	nn = index into HOTLINE table (0-31).

10.	DATA DEVICE ATTRIBUTES = **aaaaaaaaaa**
	Requests attributes of data device (7 maximum). Enter ⟨CR⟩ for none.	aaaaaaaaaa = attributes; see Table 261.2.

11.	DMDR ENABLED? (Y,N) = **a**
	Requests whether data message detail recording applies to this data device.
NOTE: Entering ⟨CR⟩ is the same as entering N for No.	a = Y = Yes, a = N = No.

12.	DMDR ACCOUNT NUMBER IDX (0-254) = **nnn**
	Requests DMDR account index number. (Refer to the SMDRACCT procedure.) Enter ⟨CR⟩ for none. Procedure is completed.	nnn = index into SMDR table (0-254).

1.	⟩ **DEL DATAASSN**

2.	DATA DEVICE EXTENSION NUMBER = **nnnn**
	Requests station number of data device which is to be deleted.	nnnn = station number (0-9999).

1.	⟩ **CHA DATAASSN**

2.	CURRENT EXTENSION NUMBER = **nnnn**
	Requests station number of data device which is to be changed.	nnnn = station number (0-9999).

3.	DATA CLASS OF SERVICE (0-31) = **nn**
	Enter new data COS, or ⟨CR⟩ for no change.	nn = data COS (0-31).

4.	CURRENT DEVICE TYPE (SLT,DCI) = **aaa**
	Requests the existing data device type. If existing type is SLT, go to step 12; otherwise, go to step 5.	aaa = data device: SLT or DCI.

5.	NEW EXTENSION NUMBER = **nnnn**
	Enter new extension number, or ⟨CR⟩ for no change.	nnnn = station number (0-9999).

6.	NEW DATA PROTOCOL NUM (0-31) = **nn**
	Enter new data protocol number or ⟨CR⟩ for no change.	nn = protocol number (0-31).

7.	DATA DEVICE CONNECTION TYPE = **aaaaaaaa**
	Enter new or existing data device connection type. If ASSOC, go to step 8; if HOTLINE or WARMLINE, go to step 9; if DIAL, go to step 10; if NAILUP, procedure is completed.
NOTE: Entering ⟨CR⟩ for no change, go to step 10.	aaaaaaaa = connection type; see Table 261.1.

CUSTOMER MEMORY UPDATE PROCEDURE: DATAASSN
TITLE: Data Device Assignments

STEP NO.	PROMPT/EXPLANATION

8.	ASSOCIATED STATION EXTENSION NUM = **nnnn**	
	Enter extension number of new associated station. Go to step 10.	nnnn = station number (0-9999).

9.	HOT/WARM LINE DEST TABLE IDX = **nn**	
	Enter new hotline or delayed hotline destination (see HOTLINE procedure).	nn = index into HOTLINE table (0-31).

10.	ENABLE DATA DEVICE ATTRIBUTES = **aaaaaaaaaa ...aaaaaaaaaa**	
	Enter data device attributes which are to be changed to the enabled state (0 to 7 attributes separated by spaces). Enter ⟨CR⟩ for no change.	aaaaaaaaaa = attribute(s); see Table 261.2.

11.	DISABLE DATA DEVICE ATTRIBUTES = **aaaaaaaaaa ... aaaaaaaaaa**	
	Enter data device attributes which are to be changed to the disabled state (0 to 7 attributes separated by spaces). Enter ⟨CR⟩ for no change.	aaaaaaaaaa = attribute(s); see Table 261.2.

12.	DMDR ENABLE/DISABLE (E/D) = **a**	
	Enter new state of the data message detail recording feature for this device. Enter ⟨CR⟩ for no change.	a = E = enable, a = D = disable.

13.	CHANGE DMDR ACCOUNT INDEX (Y/N) = **a**	
	Enter whether the DMDR account index is to be changed for this device. If Y (Yes), go to step 14; if N (No), procedure is complete. Enter ⟨CR⟩ for no change.	a = Y = Yes, a = N = No.

14.	NEW DMDR ACCOUNT INDEX (0-254) = **nnn**	
	Enter new DMDR account index number. (Refer to the SMDRACCT procedure.) Enter ⟨CR⟩ to delete the account index.	nnn = index into SMDR account table (0-254).

Table 261.1 Data Device Connection Types

ALPHAMERIC INPUT	DESCRIPTION
ASSOC	User must dial all calls from the associated telephone (SLT or DPI).
DIAL	User must terminal dial destination number for each data call origination.
HOTLINE	Device is connected to a predefined destination number upon initiating a call request.
NAILUP	Device is connected to a predefined destination as long as both are in-service and enabled.
WARMLINE	If user fails to terminal dial a destination number within a specified time after origination, the call is routed to a predefined destination number.

CUSTOMER MEMORY UPDATE PROCEDURE: DATACOS
TITLE: Data Device Class-of-Service Assignments

| DATACOS |

Page 1 of 4

STEP NO.	PROMPT/EXPLANATION

---

1. | > DIS DATACOS

2. | DATA COS NUMBER(S) (0-31) = nn ... nn

Requests data class-of-service (COS) number(s) for which definition is to be displayed. One entry displays single COS; two entries specify range (from nn to nn).
NOTE: Enter ⟨CR⟩ to display all.

nn = COS number (0-31).

3. | DISPLAY ALL MEMBER STNS? (Y,N) = a

Requests whether station numbers having the specified data COS(s) are to be displayed. If N (No), only the data COS definition is displayed; if Y (Yes), the stations and data devices assigned to each data COS are also displayed.

a = Y = Yes, a = N = No.

---

1. | > ADD DATACOS

2. | DATA COS NUMBER (0-31) = nn

Requests new data class-of-service (COS) number to be assigned.

nn = COS number (0-31).

3. | CLASSMARK ASSIGNMENTS = aaaaaaa ... aaaaaaa

Requests new data classmarks to be assigned to specified data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.

aaaaaaa = data classmarks;
see Table 460.1

4. | ALLOWED AUTO MODEM POOLS (0-15)= nn ... nn

Requests which modem pools are authorized for the specified data COS during automatic modem selection. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.

nn = automatic modem pools (0-15).

5. | ALLOWED MAN MODEM POOLS (0-15) = nn ... nn

Requests which modem pools are authorized for the specified data COS when the user dials a modem group access code. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.

nn = manual modem pools (0-15).

6. | RESTRICTED ACD GROUP NUMS (0-63) = nn ... nn

Requests number of ACD group(s) from which this data COS is to be restricted from accessing. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.

nn = ACD groups number(s) (0-63).

NOTE: Restricted ACD group assignments only restrict access to ACD groups pilot number. The individual member extensions can still be accessed directly unless their COS is also restricted.

7. | RESTRICTED DATA COS (0-31) = nn ... nn

Requests number of data COS(s) from which this data COS is to be restricted from accessing. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.

nn = restricted data COS(s)

NOTE: This information can be used to prevent incompatible data devices from communicating erroneously.

SATURN EPABX
CMU Procedures

A30808-X5051-E120-2-B919
Issue 2, January 1986

CUSTOMER MEMORY UPDATE PROCEDURE: DATACOS
TITLE: Data Device Class-of-Service Assignments

Page 2 of 4

STEP NO.	PROMPT/EXPLANATION

8. | ALLOWED TRUNK GROUPS (0-31) = nn ... nn

Requests number of trunk group(s) which this data COS is allowed to access. If more than one, separate each by spaces.   nn = trunk group numer(s) (1-31).

NOTE: Not required for systems using Least Cost Routing

9. | TOLL CODE REST LIST NUMS (0-19)= nn ... nn

Requests member toll code restriction list(s) authorized for specified data COS. If more than one, separate each by spaces.   nn = toll code restriction list; see Table 460.2.

NOTE: Not required for systems using Least Cost Routing

1. | ⟩ DEL DATACOS

2. | DATA COS NUMBER (0-31) = nn

Requests data class-of-service (COS) number to be deleted.   nn = COS number(s) (0-31).

1. | ⟩ CHA DATACOS

2. | DATA COS NUMBER (0-31) = nn

Requests data class-of-service (COS) number to be changed.   nn = COS number(s) (0-31).

3. | DISABLE CLASSMARKS = aaaaa ... aaaaa

Requests data classmarks to be disabled in specified data COS (8 maximum). If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   aaaaa = data classmarks; see Table 460.1.

4. | ENABLE CLASSMARKS = aaaaa ... aaaaa

Requests data classmarks to be enabled in specified data COS (8 maximum). If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   aaaaa = data classmarks; see Table 460.1.

5. | DISABLE AUTO MODEM POOLS (0-15) = nn ... nn

Requests which automatic modem pools are to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   nn = automatic modem pools (0-15).

6. | ENABLE AUTO MODEM POOLS (0-15) = nn ... nn

Requests which automatic modem pools are to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   nn = automatic modem pools (0-15).

7. | DISABLE MAN MODEM POOLS (0-15) = nn ... nn

Requests which manual modem pools are to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.   nn = manual modem pools (0-15).

CUSTOMER MEMORY UPDATE PROCEDURE: DATACOS
TITLE: Data Device Class-of-Service Assignments

Page 3 of 4

STEP NO.	PROMPT/EXPLANATION

8.	ENABLE MAN MODEM POOLS (0-15) = nn ... nn
	Requests which manual modem pools are to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change nn = manual modem pools (0-15).
9.	DISABLE ACD GROUP NUMBERS (0-63) = nn ... nn
	Requests ACD group numbers to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = ACD group numbers (0-63).
10.	ENABLE ACD GROUP NUMBERS (0-63) = nn ... nn
	Requests ACD group numbers to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = ACD group numbers (0-63).
11.	DISABLE RESTRICTED COS'S (0-31) = nn ... nn
	Requests restricted data COSs to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = COS number(s) (0-31).
12.	ENABLE RESTRICTED COS'S (0-31) = nn ... nn
	Requests restricted data COSs to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = COS number(s) (0-31).
13.	DISABLE TRUNK GROUPS (0-31) = nn ... nn
	Requests trunk groups which are to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = COS number (s) (0-31). NOTE: Not required for systems using Least Cost Routing.
14.	ENABLE TRUNK GROUPS (0-31) = nn ... nn
	Requests trunk groups which are to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = COS number(s) (0-31). NOTE: Not required for systems using Least Cost Routing.
15.	DISABLE RESTRICTION LISTS (0-19) = nn ... nn
	Requests toll code restriction list(s) to be removed from this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = toll code restriction list(s); see Table 460.2. NOTE: Not required for systems using Least Cost Routing.
16.	ENABLE RESTRICTION LISTS (0-19) = nn ... nn
	Requests toll code restriction list(s) to be assigned to this data COS. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change. nn = toll code restriction list(s); see Table 460.2 NOTE: Not required for systems using Least Cost Routing.

CUSTOMER MEMORY UPDATE PROCEDURE: DATACOS
TITLE: Data Device Class-of-Service Assignments

Table 460.1   Data Classmarks

ALPHAMERIC INPUT	DESCRIPTION
LCR	Access to Least Cost Routing for Data Calls.
DEVSBYQ	Device Standby Queuing.
LASTNO	Last Number Redial.
SCG1	Speed Calling – Group – Group 1.
SCG2	Speed Calling – Group – Group 2.
SCG3	Speed Calling – Group – Group 3.
SCG4	Speed Calling – Group – Group 4.
SCIND	Speed Calling – Individual.
TRKSBYQ	Trunk Standby Queuing.

Table 460.2   Toll Code Restriction Lists

ALPHAMERIC INPUT	DESCRIPTION
0	Eight-Digit Restriction List 0.
1	Eight-Digit Restriction List 1.
2	Eight-Digit Restriction List 2.
3	Eight-Digit Restriction List 3.
4	Eight-Digit Restriction List 4.
5	Eight-Digit Restriction List 5.
6	Eight-Digit Restriction List 6.
7	Eight-Digit Restriction List 7.
8	Eight-Digit Restriction List 8.
9	Eight-Digit Restriction List 9.
10	Eight-Digit Restriction List 10.
11	Eight-Digit Restriction List 11.
12	Eight-Digit Restriction List 12.
13	Eight-Digit Restriction List 13.
14	Eight-Digit Restriction List 14.
15	Eight-Digit Restriction List 15.
16	Fifteen-Digit Restriction List 0.
17	Fifteen-Digit Restriction List 1.
18	Fifteen-Digit Restriction List 2.
19	Fifteen-Digit Restriction List 3.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ACD	Automatic Call Distribution
AUTO	Automatic
COS	Class-of-Service
MAN	Manual

CUSTOMER MEMORY UPDATE PROCEDURE: DIDCONV
TITLE: DID Digit Conversion Tables
Access Level: 3, 4

| DIDCONV |

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

| 1. | ⟩ **DIS DIDCONV** |

| 2. | DID CONVERSION TABLE INDEX (0-3) = **n** |
| | Requests DID digit conversion table number to be displayed.   n = table number (0-3). |

1.	⟩ **CHA DIDCONV**
	NOTE: The digits extracted from the conversion table can be used in either of two ways:
	1. The digit(s) can replace the leading two digits of the dialed number (e.g., **7282** translated to **8082**), or
	2. The digit(s) can be prefixed in front of the dialed number (e.g., **480** changes to **8480**).
	The second option is enabled by setting the DIDPREFIX flag in the trunk group definition.

| 2. | DID CONVERSION TABLE INDEX (0-3) = **n** |
| | Requests DID digit conversion table number to be changed.   n = table number (0-3). |

3.	DGTS TO BE XLATED FROM (00-99) = **nn**
	Requests incoming DID digits that are to be changed. Enter ⟨CR⟩ nn = leading two incoming digits (00-99).
	for none.

4.	DGTS TO BE XLATED TO (00-99) = **nn**
	Requests digit or digits that are to replace incoming digit(s) (00-99) nn = new DID digit(s) (00-99).
	specified above. Enter ⟨CR⟩ for none.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic   **Definition**

DID   Direct Inward Dialing

CUSTOMER MEMORY UPDATE PROCEDURE: DPIASSN
TITLE: DPI Assignments (Add)
Access Level: 2, 3, 4

DPIASSN

Page 1 of 4

STEP NO.	PROMPT/EXPLANATION

1. | > **ADD DPIASSN** |

2. | **DPI EXTENSION NUMBER = nnnn** |

Requests station number of DPI for which characteristics are to be specified.

nnnn = ext number (0-9999).

3. | **DPI BUTTON MAP NUMBER (1-32) = nn** |

Requests button map index number to be assigned.

nn = button map (1-32).

4. | **CALL FWD - SECRETARIAL EXT NUM = nnnn** |

Requests station number to which calls will be forwarded for this DPI. Enter ⟨CR⟩ for no assignment.

nnnn = ext number (0-9999).

NOTES: 1. If DPIMAP for this station includes FWDFORCE and
    a. If COSASSN includes FWDTOSECR, this parameter may not be entered here. If the destination is required to be changed, use either CHA DPICHGE or CHA STNASSN procedure.
    b. If COSASSN does not include FWDTOSECR, this parameter is required to be entered here.
  2. If DPIMAP for this station does not include FWDFORCE: This parameter may not be entered, regardless of whether or not COSASSN includes FWDTOSECR.

5. | **SINGLE BUTTON OPERATION? (Y,N) = a** |

Requests whether this DPI operates in either the single-button or preselection operation mode. In single-button mode, depressing certain buttons on the DPI automatically enables Hands-Free or On-Hook Dialing (whichever is applicable to the station); that is, the user is not required to manually go off-hook.

a = N = No, a = Y = Yes.

6. | **PRIME LINE BUTTON NUMBER (1-26) = nn** |

Requests line button to be assigned as the prime line for this DPI.

nn = button number (1-26).

7. | **DICTATION BUTTON NUMBER (1-26) = nn** |

Requests button number on this DPI to be assigned for the dictation access and control feature. Enter ⟨CR⟩ for no assignment.

nn = button number (1-26).

8. | **DSS BUTTON NUMBER(S) (1-26) = nn ... nn** |

Requests button number(s) to be assigned as DSS buttons. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = button number (1-26).

9. | **DSS EXTENSION NUMBER(S) = nnnn ... nnnn** |

Requests station number(s) to be assigned to corresponding DSS button(s). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nnnn = ext number(s) (0-9999).

10. | **DSS STATUS LAMP REQUIRED? (Y,N) = a ... a** |

Requests whether a DSS status lamp is to be assigned to the corresponding DSS button(s). If more than one, separate each by spaces.
NOTE: Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes; a = N = No.

CUSTOMER MEMORY UPDATE PROCEDURE: DPIASSN
TITLE: DPI Assignments (Add)
Access Level: 2, 3, 4

Page 2 of 4

STEP NO.	PROMPT/EXPLANATION

11. VOICE CALL-DSS BUTTON NUMBER(S) = **nn ... nn**

Requests button number(s) to be assigned for DSS voice. If more than one, separate by spaces. Enter ⟨CR⟩ for no assignment.
NOTE: Voice calling-DSS applies to two channel DPI only.

nn = button number(s) (1-26).

12. VOICE CALL-DSS EXTENSION NUM(S) = **nnnn ... nnnn**

Requests extension number(s) to be assigned to the corresponding voice button(s). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assingment.
NOTE: Voice calling-DSS applies to two channel DPI only.

nnnn = ext number(s).

13. TRK GRP (TERM) BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned as terminating trunk group selection line(s) (4 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

14. TRK GRP (TERM) GROUP NUMBER(S) = **nn ... nn**

Requests trunk group number(s) to be assigned to the corresponding button(s) in the preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = trunk group(s) (0-31).

15. TRK GRP RING ON INCOMING? (Y,N) = **a ... a**

Requests whether incoming calls on trunk group line(s) are to ring the DPI. If more than one, separate each by spaces.
NOTE: Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes, a = N = No.

16. TRK GRP (ORIG) BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned as originating trunk group selection line(s) (4 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

17. TRK GRP (ORIG) GROUP NUMBER(S) = **nn ... nn**

Requests trunk group number(s) to be assigned to the corresponding button(s) in preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = trunk group(s) (0-31).

18. AUTOMATIC ICOM BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned to automatic intercom (15 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

19. AUTOMATIC ICOM EXTENSION NUM(S) = **nnnn ... nnnn**

Requests extension number(s) to be assigned to the corresponding automatic intercom button(s). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nnnn = ext number(s) (0-9999).

20. EXECUTIVE ICOM BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned to executive intercom (15 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

CUSTOMER MEMORY UPDATE PROCEDURE: DPIASSN
TITLE: DPI Assignments (Add)
Access Level: 2, 3, 4

Page 3 of 4

STEP NO.	PROMPT/EXPLANATION

---

21. | EXECUTIVE ICOM GRP NUM(S) (0-15) = **nn ... nn** |

Requests executive intercom group number(s) to be assigned to the corresponding button(s) in the preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = intercom group(s) (0-15).

---

22. | EXECUTIVE ICOM DIGIT(S) (0-9) = **n ... n** |

Requests executive intercom digit (0-9) to be assigned to group(s) assigned in preceding step (15 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

n = exec intercom digit (0-9).

---

23. | MANUAL INTERCOM BUTTON NUMBER(S) = **nn ... nn** |

Requests line button(s) to be assigned to manual intercom (15 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

---

24. | MANUAL ICOM GROUP NUM(S) (0-15) = **nn ... nn** |

Requests manual intercom group number(s) to be assigned to the corresponding button(s) in the preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = intercom group(s) (0-15).

---

25. | LINE EXTENSION BUTTON NUMBER(S) = **nn ... nn** |

Requests line button(s) to be assigned as station lines (8 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

---

26. | LINE EXTENSION NUMBER(S) = **nnnn ... nnnn** |

Requests extension number(s) to be assigned to button(s) assigned in preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nnnn = ext number(s) (0-9999).

---

27. | LINE RING ON INCOMING? (Y,N)= **a ... a** |

Requests whether incoming calls on the corresponding station line(s) are to ring the DPI. If more than one, separate each by spaces. NOTE: Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes, a = N = No.

---

28. | PAGING BUTTON NUMBER(S) (1-26) = **nn ... nn** |

Requests line button(s) to be assigned for paging (4 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

---

29. | PAGING ZONES (Z1, Z2, ..., Z1234) = **Znnnn ... Znnnn** |

Requests paging zone(s) to be assigned to button(s) assigned in preceding step. Enter "Z" plus the zone number(s) that apply to button. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

Znnnn = paging zone(s) Z1 through Z1234).

---

30. | DIRECT DIAL BUTTON NUMBER(S) = **nn ... nn** |

Requests button number(s) to be assigned for direct dialing (15 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

CUSTOMER MEMORY UPDATE PROCEDURE: DPIASSN
TITLE: DPI Assignments (Add)

STEP NO.	PROMPT/EXPLANATION

31. DIRECT DIAL DIGITS = n ... n

Requests the dialed digits to be assigned to the corresponding button(s) in the preceding step. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

n ... n = enter the dialed digits to be assigned to each DDS button (1 to 4 digits for each button).

NOTE: This number may be an external station number, feature access code, or combination of feature access code and identity number (such as a Speed Calling – Group access code and index number).

32. TRUNK BUTTON NUMBER(S) = nn ... nn

Requests line button(s) for trunks (8 max.). If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

33. TRUNK PEN(S) (WXYZ) = nnnn ... nnnn

Requests PEN assigned to trunk(s) assigned to line button(s) in preceding step. If more than one, separate each by spaces.

nnnn = valid PEN(s).

34. TRUNK RING ON INCOMING? (Y,N) = a ... a

Requests whether trunk is to ring set on incoming button(s) assigned above. If more than one, separate each by spaces. Enter ⟨CR⟩ for no assignment.

a = Y = Yes, a = N = No.

35. VOICE CALL BUTTON NUMBER (1-26) = nn ... nn

Requests line button to be assigned to voice calling. Enter ⟨CR⟩ for no assignment.

nn = line button(s) (1-26).

NOTE: Voice calling applies to two channel DPI only.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DDS	Station-Defined Direct Dial
DPI	Digital Premium Instrument (Siemens)
DSS	Direct Station Selection
EXT	Extension
GRP	Group
ICOM	Intercom
IDX	Index
IND	Individual
ORIG	Originating
PEN	Port Equipment Number
SPD	Speed (Calling)
TERM	Terminating
TRK	Trunk

DPICHGE

CUSTOMER MEMORY UPDATE PROCEDURE: DPICHGE
TITLE: DPI Assignments (Change)
Access Level: 2, 3, 4

Page 1 of 5

STEP NO.	PROMPT/EXPLANATION

1. > **CHA DPICHGE**

2. DPI EXTENSION NUMBER = **nnnn**

Requests station number of DPI for which characteristics are to be changed.   nnnn = ext number (0-9999).

3. TYPE OF CHANGE = **aaaaaaaaa**

Requests type of DPI map change to be made.   aaaaaaaaa = type of change (select one
Enter one type: from list below).
MAP   – to change DPI map number; go to step 4.
SECRETARY – to change Secretarial extension number; go to step 6.
BTNOPR   – to change line button operation; go to step 7.
DELBTN   – to delete one or more station-defined buttons; go to step 8.
ADDBTN   – to add one or more station-defined buttons; go to step 9.

4. NEW DPI BUTTON MAP NUMBER (1-32) = **nn**

Requests button map index number to be changed.   nn = button map (1-32).

NOTE: If the user enters a value for this prompt specifying a new button map index, all current line definitions
   are lost and the user is required to reenter the line definitions for the new map.

5. PRIME LINE BUTTON NUMBER = **nn**

Requests line button to be assigned as the prime line for this DPI.   nn = button number (1-26).
Procedure is completed.

6. CALL FWD — SECRETARIAL EXT NUM = **nnnn**

Requests station number to which calls are forwarded for this DPI.   nnnn = ext number (0-9999).
Procedure is completed.

7. SINGLE BUTTON OPERATION? (Y,N) = **a**

Requests whether this DPI operates in either the single-button or   a = N = No, a = Y = Yes.
preselection operation mode. In single-button mode, depressing cer-
tain buttons on the DPI automatically enables Hands-Free or On-
Hook Dialing (whichever is applicable to the station); that is, the
user is not required to manually go off-hook. Procedure is com-
pleted.

8. BUTTON NUMBERS TO DELETE (1-26) = **nn ... nn**

Requests which buttons assigned to lines are to be deleted (unas-   nn = line button number(s).
signed) from this DPI (8 max.). If more than one, separate each by
spaces. Procedure is completed.

CUSTOMER MEMORY UPDATE PROCEDURE: DPICHGE
TITLE: DPI Assignments (Change)
Access Level: 2, 3, 4   **Page 2 of 5**

STEP NO.	PROMPT/EXPLANATION

---

9. | BUTTON TYPE TO ADD = **aaaaaaaa**

Requests button type to add to this DPI map.   aaaaaaaa = button type (select one from
Enter one type: list below).
DICT   – go to step 10.
DSS   – go to step 11.
VCDSS   – go to step 14.
TGTERM   – go to step 16.
TGORIG   – go to step 19.
AUTOICOM – go to step 21.
EXECICOM – go to step 23.
MANICOM   – go to step 26.
LINE   – go to step 28.
PAGE   – go to step 31.
DDS   – go to step 33.
TRK   – go to step 35.
VC   – go to step 38.

---

10. | DICTATION BUTTON NUMBER (1-26) = **nn**

Requests button number on this DPI to be assigned for the dicta-   nn = button number (1-26).
tion access and control feature. Procedure is completed.

---

11. | DSS BUTTON NUMBER(S) (1-26) = **nn   nn**

Requests button number(s) to be assigned as DSS button(s) (2   nn = button number(s) (1-26).
max.). If two assigned, separate each by space.

---

12. | DSS EXTENSION NUMBER(S) = **nnnn   nnnn**

Requests station number(s) to be assigned to corresponding DSS   nnnn = ext number(s) (0-9999).
button(s) above. If two assigned, separate each by space.

---

13. | DSS STATUS LAMP REQUIRED? (Y,N) = **a**

Requests whether a DSS status lamp is to be assigned to the DSS   a = Y = Yes, a = N = No.
button(s) above. If more than one, separate each by spaces. Proce-
dure is completed.

---

14. | VOICE CALL-DSS BUTTON NUMBER(S) = **nn   nn**

Requests button number(s) to be assigned for DSS voice (2 max.).   nn = button number(s).
If two assigned, separate each by space.

NOTE: Applies to two channel DPI only.

---

15. | VOICE CALL-DSS EXTENSION NUM(S) = **nnnn   nnnn**

Requests extension number(s) to be assigned to the correspond-   nnnn = ext number(s).
ing voice button(s) above. If two assigned, separate each by space.
Procedure is completed.

NOTE: Applies to two channel DPI only.

---

16. | TRK GRP (TERM) BUTTON NUMBER(S) = **nn   nn**

Requests line button(s) to be assigned as terminating trunk group   nn = line button(s) (1-26).
selection line(s) (4 max.). If more than one, separate each by spaces.

CUSTOMER MEMORY UPDATE PROCEDURE: DPICHGE
TITLE: DPI Assignments (Change)

Page 3 of 5

STEP NO.	PROMPT/EXPLANATION

---

17. | TRK GRP (TERM) GROUP NUMBER(S) = **nn   nn** |

Requests trunk group number(s) to be assigned to the button(s) assigned above. If more than one, separate each by spaces.

nn = trunk group(s) (0-31).

---

18. | TRK GRP RING ON INCOMING? (Y,N) = **a   a** |

Requests whether incoming calls on trunk group line(s) above are to ring the DPI. If more than one, separate each by spaces. Procedure is completed.

a = Y = Yes, ⌐ = N = No.

---

19. | TRK GRP (ORIG) BUTTON NUMBER(S) = **nn ... nn** |

Requests line button(s) to be assigned as originating trunk group selection line(s) (4 max.). If more than one, separate each by spaces.

nn = line button(s) (1-26).

---

20. | TRK GRP (ORIG) GROUP NUMBER(S) = **nn   nn** |

Requests trunk group number(s) to be assigned to the button(s) assigned above. If more than one, separate each by spaces. Procedure is completed.

nn = trunk group(s) (0-31).

---

21. | AUTOMATIC ICOM BUTTON NUMBER(S) = **nn   nn** |

Requests line button(s) to be assigned to automatic intercom (2 max.). If two assigned, separate each by space.

nn = line button(s) (1-26).

---

22. | AUTOMATIC ICOM EXTENSION NUM(S) = **nnnn   nnnn** |

Requests extension number(s) to be assigned to the corresponding automatic intercom button(s) above. If more than one, separate each by spaces. Procedure is completed.

nnnn = ext number(s) (0-9999).

---

23. | EXECUTIVE ICOM BUTTON NUMBER(S) = **nn   nn** |

Requests line buttons to be assigned to executive intercom (2 max.). If two assigned, separate each by space.

nn = line button(s) (1-26).

---

24. | EXECUTIVE ICOM GRP NUM(S) (0-15) = **nn   nn** |

Requests executive intercom group number(s) to be assigned to the corresponding button(s) above. If more than one, separate each by spaces.

nn = intercom group(s) (0-15).

---

25. | EXECUTIVE ICOM DIGIT(S) (0-9) = **n   n** |

Requests executive intercom digit (0-9) to be assigned to group(s) assigned in preceding step (2 max.). If two assigned, separate each by space. Procedure is completed.

n = exec intercom digit(s) (0-9).

---

26. | MANUAL INTERCOM BUTTON NUMBER(S) = **nn   nn** |

Requests line button(s) to be assigned to manual intercom (2 max.). If two assigned, separate each by space.

nn = line button(s) (1-26).

CUSTOMER MEMORY UPDATE PROCEDURE: DPICHGE
TITLE: DPI Assignments (Change)   **Page 4 of 5**

STEP NO.	PROMPT/EXPLANATION

---

27. | MANUAL ICOM GROUP NUM(S) (0-15) = **nn   nn**

Requests manual intercom group number(s) to be assigned to the   nn = intercom group(s) (0-15).
corresponding button(s) in the preceding step. If more than two as-
signed, separate each by space. Procedure is completed.

28. | LINE EXTENSION BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned as station lines (4 max.).   nn = line button(s) (1-26).
If more than one, separate each by spaces.

29. | LINE EXTENSION NUMBER(S) = **nnnn ... nnnn**

Requests extension number(s) to be assigned to button(s) assigned   nnnn = ext number(s) (0-9999).
in preceding step. If more than one, separate each by spaces.

30. | LINE RING ON INCOMING? (Y,N) = **a ... a**

Requests whether incoming calls on the corresponding station   a = N = No, a = Y = Yes.
line(s) are to ring the DPI. If more than one, separate each by spaces.
Procedure is completed.

31. | PAGING BUTTON NUMBER(S) (1-26) = **nn ... nn**

Requests line button(s) to be assigned for paging (2 max.). If more   nn = line button(s) (1-26).
than one, separate each by spaces.

32. | PAGING ZONES (Z1,Z2,...,Z1234) = **Znnnn ... Znnnn**

Requests paging zone(s) to be assigned to button(s) assigned in   Znnnn = paging zone(s) (Z1 through
preceding step. Enter "Z" plus the zone number(s) that apply to   Z1234).
button. If more than one, separate each by spaces. Procedure is
completed.

33. | DIRECT DIAL BUTTON NUMBER(S) = **nn   nn**

Requests button number(s) to be assigned for direct dialing. If more   nn = line button(s) (1-26).
than one assigned, separate each by space.

NOTE: Direct Dial button must be assigned as a STNDEFDD button in associated button map.

34. | DIRECT DIAL DIGITS = **n ... n**

Requests the dialed digits to be assigned to the corresponding but-   n ... n = enter dialed digits (1 to 4 digits
ton(s) in the preceding step. If more than one, separate each by   for each button).
spaces. Procedure is completed.

NOTE: This number may be an external station number, feature access code, or combination of feature access
      code and identity number (such as a Speed Calling – Group access code and index number).

35. | TRUNK BUTTON NUMBER(S) = **nn ... nn**

Requests line button(s) to be assigned for trunks (4 max.). If more   nn = line button(s) (1-26).
than one, separate each by spaces.

36. | TRUNK PEN(S) (WXYZ) = **nnnn ... nnnn**

Requests PEN assigned to trunk(s) assigned to line button(s) in   nnnn = valid PEN(s).
preceding step. If more than one, separate each by spaces.

CUSTOMER MEMORY UPDATE PROCEDURE: DPICHGE
TITLE: DPI Assignments (Change)

STEP NO.	PROMPT/EXPLANATION

37.	TRUNK RING INCOMING? (Y,N) = a ... a

Requests whether trunk is to ring set on incoming button(s) assigned above. If more than one, separate each by spaces. Procedure is complete.

a = Y = Yes, a = N = No.

38.	VOICE CALL BUTTON NUMBER (1-26) = nn

Requests line button to be assigned to voice calling. Procedure is completed.

nn = line button (1-26).

NOTE: Voice calling applies to two channel DPI only.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DDS	Station - Defined Direct Dial
DPI	Digital Premium Instrument (Siemens)
DSS	Direct Station Selection
EXT	Extension
GRP	Group
ICOM	Intercom
ORIG	Originating
PEN	Port Equipment Number
TERM	Terminating
TRK	Trunk

CUSTOMER MEMORY UPDATE PROCEDURE: DPIDISP
TITLE: DPI Assignments (Display)
Access Level: 1, 2, 3, 4

DPIDISP

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.) DIS DPIDISP

2. STATION EXTENSION NUMBER (DPI) = **nnnn ... nnnn**

Requests extension number of DPI for which data is to be displayed. nnnn = extension (0-9999).
If two numbers are entered, data is displayed for the range of DPIs
between those numbers, inclusive. (Separate range of DPIs by
spaces). Enter 〈CR〉 for all DPI extensions.

3. STATION TYPE (DPI/PICKUP) = **aaaaaa aaaaaa**

Requests DPI type information to be displayed (2 max.). Enter 〈CR〉 aaaaaa = type; see Table 217.1.
for all.

4. TYPE (GEN,ALL,STNDEF,APPEAR,BTN) = **aaaaaa ... aaaaaa**

Requests option information to be displayed for DPIs (5 max.). aaaaaa = option; see Table 217.2.

NOTE: Entering 〈CR〉 is the same as entering GEN for displaying general information about the DPI.

Table 217.1   Station Types to be Displayed

ALPHAMERIC INPUT	DESCRIPTION
DPI	Displays information for the specified DPI.
PICKUP	Displays information for specific extensions on the DPI. 1. Single-line telephones having appearances on one or more DPIs. 2. Lines appearing on DPIs, but having no physical port number (assigned under CMU procedure STNASSN as Type = NONE).

Table 217.2   Option Levels to be Displayed

ALPHAMERIC INPUT	DESCRIPTION
ALL	Causes all of the following option levels to be displayed.
APPEAR	Displays line appearances at other DPIs for selected DPIs.
BTN	Displays button map information for selected DPIs.
GEN	Displays general information about the DPI, including extension number, class of service, button map index, PEN, baud rate, answer type, line preferences, pickup and privacy information. This general information appears on all option levels.
STNDEF	Displays station-defined lines for selected DPIs.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic   Definition

DPI   Digital Premium Instrument
PEN   Port Equipment Number

DPIMAP

CUSTOMER MEMORY UPDATE PROCEDURE: DPIMAP
TITLE: DPI Button Maps
Access Level: 2, 3, 4

Page 1 of 2

STEP NO.	PROMPT/EXPLANATION

1. 〉 DIS DPIMAP

2. DPI BUTTON MAP NUMBER (1-32) = **nn ... nn**

Requests button map number(s) for which data is to be displayed.   nn = button map(s) (1-32).
If more than one, separate each by spaces. Enter ⟨CR⟩ to display
all button maps starting with button map 0.

NOTE: Button Map 0 is the default assignment for DPIs. This map consists of two assigned buttons: Button
Number 1 is assigned as STNDEF (for assignment of the Prime Line); Button Number 2 is assigned
as XFER. Button map 0 may not be changed via the CMU procedures.

1. 〉 CHA DPIMAP

2. DPI BUTTON MAP NUMBER (1-32) = **nn**

Requests button map number for which data is to be changed.   nn = button map (1-32).

3. DPI BUTTON NUMBER (1-26) = **nn ... nn**

Requests button number(s) to have assignment(s) changed. If more   nn = button number(s) (1-26).
than one, separate each by spaces.

NOTE: Multiple button assignments may be made as a single entry; however, it is recommended that the user
limit the number of button assignments to 5 to 10 at a time.

4. OLD FEATURE BUTTON(S) (DPI) = **aaaaaaaa ... aaaaaaaa**

Requests old feature(s) assigned to corresponding button(s) above.   aaaaaaaa = features; see Table 215.1.
If more than one, separate each by spaces.

5. NEW FEATURE BUTTON(S) (DPI) = **aaaaaaaa ... aaaaaaaa**

Requests new feature(s) assigned to corresponding button(s) above.   aaaaaaaa = features; see Table 215.1.
If more than one, separate each by spaces.

Table 215.1   DPI Button Features

ALPHAMERIC INPUT	DESCRIPTION
NASN	Not Assigned
ACCT	Account Code Capability
NITESVD	ACD Night Service
XFER0	Attendant Call Transfer
AUTOANS	Automatic Answer
FWDTO	Call Forwarding - Secretarial
FWDALL	Call Forwarding - All Calls
FWDBUSY	Call Forwarding - Busy
FWDNOANS	Call Forwarding - Don't Answer
PARKPRIV	Call Hold
SPLIT	Call Hold - Flip-Flop (Broker)
PARK	Call Park
PICKUPDIR	Call Pickup - Directed
PICKUPGRP	Call Pickup - Group
DND	Do Not Disturb
CALLTIMER	Duration of Call
HOLDEXCL	Exclusive Hold
OVERRIDE	Executive Override

CUSTOMER MEMORY UPDATE PROCEDURE: DPIMAP

Table 215.1 DPI Button Features (Continued)

ALPHAMERIC INPUT	DESCRIPTION
FWDFORCE	Forced Call Forwarding
HANDSFREE	Hands-Free
MUTE	Hands-Free. Mute
IUSE	I-Use
LASTNO	Last Number Redial
HOLD	Manual Hold
BUZZ	Manual Signaling
MEETME	Meet-Me Conference
MSGSET	Message Waiting Activate
MSGCALLBK	Message Waiting Callback
MSGCANCEL	Message Waiting Cancellation
ONHKDIAL	On-Hook Dialing
PATT	PAD Analog Tie Trunk 3dB
PRIV	Privacy
TALK	Push-to-Talk
RLS	Release
SAVENO	Save Number Redial
SETALARM	Set Timed Reminder Service
SPEEDGRP1	Speed Calling - Group - Group 1
SPEEDGRP2	Speed Calling - Group - Group 2
SPEEDGRP3	Speed Calling - Group - Group 3
SPEEDGRP4	Speed Calling - Group - Group 4
SPEEDIND	Speed Calling - Individual
STNDEF	Station-Defined
STNDEFDD	Station-Defined Direct Dial Button (via DPIASSN)
TIME	Time-of-Day Display
RINGEROFF	Tone Ringer Cutoff
XFER	Transfer / Hookflash
VOICEANN	Voice Announce
VOICEREJ	Voice Call Reject (Two channel DPI only)
WRAPUP	Wrap-Up
ZUNA1	Zoned Universal Night Answer - Area 1
ZUNA2	Zoned Universal Night Answer - Area 2
ZUNA3	Zoned Universal Night Answer - Area 3
ZUNA4	Zoned Universal Night Answer - Area 4

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DPI	Digital Premium Instrument (Siemens)

DTMFASSN

CUSTOMER MEMORY UPDATE PROCEDURE: DTMFASSN
TITLE: DTMF Receiver Assignments
Access Level: 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DIS DTMFASSN**

1.	⟩ **ADD DTMFASSN**

2.	PORT EQUIPMENT NUMBER (WXYZ)= **nnnn**

Requests PEN of DTMF receiver to be added.   nnnn = valid PEN.

1.	⟩ **DEL DTMFASSN**

2.	PORT EQUIPMENT NUMBER (WXYZ) = **nnnn**

Requests PEN of DTMF receiver to be deleted.   nnnn = valid PEN.

NOTE: The DTMF receiver must be placed out of service before deleting.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DTMF	Dual-Tone Multifrequency
PEN	Port Equipment Number

CUSTOMER MEMORY UPDATE PROCEDURE: DUPLEX
TITLE: Duplex Processor Assignments
Access Level: 4

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ **DIS DUPLEX**

NOTE: This procedure is provided for use on duplex (Hot Standby) systems only.

---

2. DISPLAY TYPE = **aaaaaa**

Requests the type of duplex data which is to be displayed.   aaaaaa = display type: STATUS, ALMDATA or TRACE.

NOTE: Enter ALMDATA to display alarms from the standby processor. Enter STATUS to display the current status of the standby processor. Enter TRACE to display trace information of the standby processor.

If ALMDATA, go to step 3; if TRACE, go to step 4; if STATUS, procedure is completed.

---

3. ALARM TYPES (ALL, NEW) = **aaa**

Requests the types of alarms to be displayed, either ALL or NEW   aaa = alarm type: ALL or NEW.
alarms since last reset. Procedure is completed.

NOTE: Entering ⟨CR⟩ is the same as entering ALL.

---

4. LINES TO SEARCH FOR = **aaaaaaaa ... aaaaaaaa**

Requests the LST(s) stored in the trace buffer which is (are) to be   aaaaaaa = lines (5 max.).
displayed. If no value is entered, (i.e., by entering ⟨CR⟩) the trace
buffer entries are not screened for matching LST(s). If more than
one, separate each by spaces.

NOTE: Line numbers are in hexadecimal format.

---

5. NUM OF ENTRIES TO PRINT (1-500) = **nnn**

Requests the number of entries to print matching the Lines to Search   nnn = number of entries (1-500).
For and the Process IDs to Search For, if any. If no value entered,
(i.e., by entering ⟨CR⟩) all matching entries in the trace buffer are
printed.

---

6. PROCESS IDS TO SEARCH FOR = **aaaaaaaa ... aaaaaaaa**

Requests the identification numbers of the resident process(es)   aaaaaaaa = process IDs (3 max.).
creating entries in the trace buffer which are to be printed. If no
value is entered (i.e., by entering ⟨CR⟩) the trace buffer entries are
not screened for matching process IDs. If more than one, separate
each by spaces.

---

1. ⟩ **BEG DUPLEX**

NOTE: This procedure is provided for use in duplex (Hot Standby) systems only.

---

2. DUPLEX ACTION = **aaaaaaaaa**

Requests type of duplex action to be taken by system. If DBXFER,   aaaaaaaaa = action; see Table 610.1.
go to step 3; if TRACE, go to step 4; if other, procedure is completed.

---

3. TRANSFER TYPE = **aaaaaaaa**

Request type of transfer to be performed by system. Procedure is   aaaaaaa = type; see Table 610.2.
completed.

CUSTOMER MEMORY UPDATE PROCEDURE: DUPLEX
TITLE: Duplex Processor Assignments
Access Level: 4

Page 2 of 2

STEP NO.	PROMPT/EXPLANATION

4.	TRACE STATE (ON/OFF/RESET) = aaaaa

Requests whether the trace routine is to be turned on or off, or reset. aaaaa = ON, OFF, or RESET.
If trace is turned on, the trace buffer is cleared and the trace begins
based on the following data. If the trace is turned off, the trace buffer
is not cleared. Resetting the trace buffer causes the trace buffer
pointer to be reset, but the status remains the same (either on or off).

5.	DATA TO BE COLLECTED (0-5) = n ... n

Requests which trace routines are to be activated (3 max.). If none n = data; see Table 602.3.
are specified (by entering)CR⟨), the following are turned on: 4
- Inpug Signaling, and 5 - Call Processing. If more than one,
separate each by spaces.

Table 610.1   Duplex Processor Action

ALPHAMERIC INPUT	DESCRIPTION
ALMDATA	Displays Alarm Messages of the Standby Processor.
DBXFER	Transfer copy of user data base from active processor to standby processor (takes approximately 10 minutes). Should only be used if a data base mismatch is detected.
GOHOT	Bring standby processor into hot standby state.
GOCOLD	Drop standby processor into cold standby state.
HOTSWITCH	Switch processors if standby is ready (hot).
SWITCH	Switch processors, regarldess of status of the standby processor.
TRACE	Analysis of this output requires the assistance of Siemens personnel.
RESTART	Restart the standby processor.

Table 610.2   Transfer Types

ALPHAMERIC INPUT	DESCRIPTION
ALL	All Transfer Types.
CUSTATIC	Transfers Customer Data Base Including Speed Calling Data to the Standby Processor.
RECOVERY	Transfers System Recovery Data Base to Standby Processor.
SPEEDCALL	Transfers Speed Calling Data to the Standby Processor.

Table 610.3   Call Trace Data

ALPHAMERIC INPUT	DESCRIPTION
0	Unused.
1	All events.
2	Unused.
3	Digit collection routines.
4	Input signaling
5	Call Processing

MNEMONICS USED IN THIS PROCEDURE:

Mnemonic   Definition

LST   Line Status Table Index

EXTRN

CUSTOMER MEMORY UPDATE PROCEDURE: EXTRN
TITLE: External Assignments
Access Level: 2, 3, 4

Page 1 of 2

STEP NO.	PROMPT/EXPLANATION

1. **>DIS EXTRN**

   NOTE: This action is used to display the numbering plan entries which are routed to another PABX in the Main-Satellite network (Main-Satellite systems only).

2. **DISP BY RANGE, TYPE OR TRKGRP? aaaaaa**

   Requests how numbering plan entries are to be displayed. If RANGE, go to step 3; if TYPE, go to step 4; if TRKGRP, go to step 5.

   aaaaaa = type of display.

   NOTE: Entering ⟨CR⟩ is the same as entering RANGE.

3. **CODE RANGE = aa ... aa**

   Requests code or code range for which all external code assignments are to be displayed. If range desired, enter two numbers separated by space. Procedure is completed.

   aa ... aa = access code(s).

   NOTE: Enter ⟨CR⟩ for all.

4. **CODE TYPE (STN, ATT, FEAT) = aaaa**

   Requests external code type. The procedure will display codes of this type. Procedure is completed.

   aaaa = external code type; see Table 270.1.

5. **MSL TRUNK GROUP NUMBER (0-31) = nn**

   Requests MSL trunk group number. System will display all codes or code blocks which are routed to this trunk group. Procedure is completed.

   nn = MSL trunk group number (0-31).

---

1. **> ADD EXTRN**

2. **EXTERNAL CODE OR CODE BLK = aa ... aa**

   Requests external code or code block which is to be added.

   aa ... aa = external code or code block (16 digits maximum).

   NOTE: A code is a 1-, 2-, 3-, or 4-digit code (e.g., "1", "*2", 333, 7890). A code block is a range of codes specified by appending one or more "X" characters (e.g., "1X", "2XXX").

3. **CODE TYPE (STN, ATT, FEAT) = aaaa**

   Requests the usage of the added code or code block.

   aaaa = external code type; see Table 270.1.

4. **MSL TRUNK GROUP NUMBER (0-31) = nn**

   Requests MSL trunk group number to which the code or code block is to be routed. The trunk group must have been defined previously as an MSL trunk group.

   nn = MSL trunk group number (0-31).

CUSTOMER MEMORY UPDATE PROCEDURE: EXTRN
TITLE: External Assignments

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DEL EXTRN

2.	EXTERNAL CODE OR CODE BLK = a ... a

Requests external code or code block which is to be deleted.   a ... a = external code or code block.

3.	CODE TYPE (STN, ATT, FEAT) = aaaa

Requests code type which is assigned to external number being deleted.   aaaa = code type; see Table 270.1.

1.	⟩ CHA EXTRN

2.	CURRENT EXTRN CODE = aa ... aa

Requests external code which is to be changed.   aa ... aa = external code.

3.	NEW EXTERNAL CODE = aa ... aa

Requests replacement code for current code.   aa ... aa = external code.

NOTE: Enter ⟨CR⟩ for No ACC code exchange.

4.	NEW CODE TYPE (STN, ATT, FEAT) = aaaa

Requests the new usage of the external code.   aaaa = external code type.

NOTE: Enter ⟨CR⟩ for No code type change.

5.	NEW MSL TRUNK GROUP NUMBER (0-31) = nn

Requests the MSL trunk group number to which the code is to be routed. The trunk group must have been defined previously as an MSL trunk group. Procedure is completed.   nn = MSL trunk group number (0-31).

NOTE: Enter ⟨CR⟩ for No TRKGRP change.

Table 270.1   External Station Device Types

ALPHAMERIC INPUT	DESCRIPTION
ATT	Attendant – Identifies a code, or code block, used to reach an external attendant.
FEAT	Feature – Identifies a code, or code block, used to reach external features (features at another PABX, such as remote paging or dictation equipment).
STN	Station – Identifies a code, or code block, used to reach external stations (stations on another SATURN PABX in the MS network).

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
MSL	Main-Satellite Link
PABX	Private Automatic Branch Exchange

FEATACC

CUSTOMER MEMORY UPDATE PROCEDURE: FEATACC
TITLE: Feature Access Code Assignments
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ DIS FEATACC

2. ACCESS CODE OR FEATURE? (A,F)=a

Requests whether access code or feature data is to be displayed. For list of features assigned to access code range, enter A, then go to step 3. For access code assigned to a feature, enter F, then go to step 4.

a = A = access code assignments;
a = F = feature assigned to access code.

3. ACCESS CODE RANGE=aaaa ... aaaa

Requests range of access codes for which features are to be displayed. Separate access codes by spaces. Enter ⟨CR⟩ to display all access codes. Procedure is completed.

aaaa = Access code (see Note 1 to Table 420.1 at the end of this CMU procedure.

4. FEATURE TO BE DISPLAYED=aaaaaaaaaa

Requests feature for which access code is to be displayed.

aaaaaaaaaa = feature; see Table 420.1.

---

1. ⟩ ADD FEATACC

2. NEW ACCESS CODE=aaaa

Requests access code to beassigned to new feature.

aaaa = access code (see Note 1 to Table 420.1 at the end of this CMU procedure.

3. FEATURE ASSIGNED TO ACCESS CODE=aaaaaaaaaa

Requests new feature to be assigned to above access code; if TRKGRP, go to step 4; if PAGE, go to step 5; if LCR, go to step 6; if CASATT, go to step 7; if TNTLDN, go to step 8; if MODEMSEL, go to step 9; if DATAACC, go to step 10; if other, procedure is completed.

aaaaaaaaaa = feature; see Table 420.1.

4. TRUNK GROUP NUMBER (0-31)=nn

Requests trunk group number to be assigned to this access code; procedure is completed.

nn = trunk grouup (0-31).

5. PAGING ZONE(S) (1-4)=n ... n

Requests paging zone(s) to be assigned to this access code. If more than one, separate by spaces; procedure is completed.

n = paging zone(s) 1-4 (4 max.).

6. LCR WITH DIAL TONE ?(Y,N)=a

Requests whether dial tone is to be given after the LCR access code is dialed. Procedure is completed.

a = Y = Yes, a = N = No.

7. RLT TRUNK GROUP NUMBER (0-31)=nn

Requests RLT trunk group number to be assigned; procedure is completed.

nn = RLT trunk group(0-31). Enter RLT trunk group to be used to reach the central attendant (CASATT). Only valid for CAS operation.

CUSTOMER MEMORY UPDATE PROCEDURE: FEATACC
TITLE: Feature Access Code Assignments

STEP NO.	PROMPT/EXPLANATION

8.	TENANT GROUP NUMBER (0-254) = **nnn**
	Requests the user to enter the Group number which the Tenant LDN Feature is being assigned. nnn = Tenant Group Number (0-254)

9.	MODEM POOL NUMBER (0-15)=**nn**
	Requests modem pool number to be assigned to this access code. nn = modem pool number (0-15).

10.	DATA TRANSMISSION SPEED=**nnnnn**
	Requests speed rate required for data transmission. nnnnn = speed rate; see Table 420.2 for acceptable values.
	NOTE: To define a data call access code which does not affect data transmission parameters, enter ⟨CR⟩ in response to the prompts in steps 9 through 12.

11.	PARITY=**aaaaa**
	Requests parity required for data transmission. aaaaa = parity; NONE, ODD, MARK, SPACE or EVEN.

12.	STOP BITS (1, 1.5, 2)=**aaa**
	Requests number of stop bits required for data transmission. aaa = 1, 1.5, or 2.

13.	DATA BITS (5-8)=**n**
	Requests number of data bits required for data transmission; procedure is completed. n = 5, 6, 7, or 8.

1.	⟩ **DEL FEATACC**

2.	ACCESS CODE TO BE DELETED=**aaaa**
	Requests old access code to be deleted. aaaa = access code (see Note 1 at end of this CMU procedure).

3.	FEATURE ASSIGNED TO ACCESS CODE=**aaaaaaaaaaa**
	Requests old feature to be deleted. aaaaaaaaaaa = feature; see Table 420.1.

Table 420.1 Features

ALPHAMERIC INPUT	DESCRIPTION
ATT	Attendant Access (Local).
ATTHOLDRTV	Attendant Hold Retrieve.
FWDALL	Call Forwarding – All Calls.
FWDBUSY	Call Forwarding – Busy Line.
FWDCAN	Call Forwarding – Cancel.
FWDFIXEDCAN	Call Forwarding – Fixed Number – Cancel
FWDNOANS	Call Forwarding – No Answer.
FWDTONTWK	Call Forwarding – Public Network.
FWDTOFIXED	Call Forwarding – Fixed Number.
FWDRTN	Call Forwarding – Return.

CUSTOMER MEMORY UPDATE PROCEDURE: FEATACC
TITLE: Feature Access Code Assignments

Table 420.1 Features (Continued)

ALPHAMERIC INPUT	DESCRIPTION
CALLHOLD	Call Hold.
SPLIT	Call Hold – Flip Flop (Broker).
PARK	Call Park.
PUDIR	Call Pickup – Directed.
PUGRP	Call Pickup – Group.
TRACE	Call Trace.
CBQCAN	Callback Queue Cancel.
CASACT	CAS – Activate.
CASDEACT	CAS – Deactivate.
CASATT	CAS Attendant Access.
CODEACC	Code Calling – Access.
CODEANS	Code Calling – Answerback.
CONFRMVLM	Conference – Remove Last Member.
CONFRMVM	Conference – Remove Member.
DATAACC	Data Call Originate/Data Transmission Parameter Control.
XCVRTEST	Data Device Transceiver Test.
DICT	Dictation Access.
DIRTRK	Direct (Specific) Trunk Access.
SMDRD	Disable SMDR for Trunk Group.
SMDRE	Enable SMDR for Trunk Group.
OVERRIDE	Executive Override.
OVRDENOTN	Executive Override No Warning Tone
EXTATT	External Attendant Access Code (Note 2).
EXTFEAT	External Feature Access Code.
DNDACT	Forced Busy – Activate.
DNDCAN	Forced Busy – Cancel.
LASTNO	Last Number Redial.
LCR	Least Cost Routing.
MMCONF	Meet-Me Conference.
MSGSET	Message Waiting Activate.
MSGCB	Message Waiting Automatic Callback.
MSGRCVCAN	Message Waiting Receive Cancel.
MSGSENDCAN	Message Waiting Send Cancel.
MOBILEAUTH	Mobile Authorization Code.
MODEMSEL	Modem Select Access.
PAGE	Paging Access.
REMOTEHLD	Remote Hold.
SCCE	Specialized Common Carrier – Enable.
SCCD	Specialized Common Carrier – Disable.
SCPROG	Speed Call – Individual Programming.
SCG1	Speed Calling – Group 1.
SCG2	Speed Calling – Group 2.
SCG3	Speed Calling – Group 3.
SCG4	Speed Calling – Group 4.
SCIND	Speed Calling – Individual.
STNCONF	Station-Controlled Conference.
SDRACT	Station Dial Restrictions – Activate.
SDRCAN	Station Dial Restrictions – Cancel.
STOPHUNTACT	Stop Hunt – Activate.
STOPHUNTCAN	Stop Hunt – Cancel.
TNTLDN	Tenant Listed Directory Number
TSTATT	Test Attendant Console.
TSTDDBTN	Test Data Device – Button.
TSTDDL1	Test Data Device – Loopback 1.
TSTDDL2	Test Data Device – Loopback 2.
TSTDDL3	Test Data Device – Loopback 3.

CUSTOMER MEMORY UPDATE PROCEDURE: FEATACC
Feature Access Code Assignments

Table 420.1 Features (Continued)

ALPHAMERIC INPUT	DESCRIPTION
TSTDDL4	Test Data Device – Loopback 4.
TSTDPIBTN	Test DPI – Button.
TSTDPIDIS	Test DPI – Display.
TSTDTMFSTN	Test DTMF Station (Keypad Test).
TSTDIAG	Test Maintenance Diagnostics.
TSTSTN	Test Station.
TSTTONE	Test Tone Access.
TIMEPROG	Time Programming.
TRKGRP	Trunk Group Access.
ZUNA1	Zoned Universal Night Answer – Zone 1.
ZUNA2	Zoned Universal Night Answer – Zone 2.
ZUNA3	Zoned Universal Night Answer – Zone 3.
ZUNA4	Zoned Universal Night Answer – Zone 4.
TMBCR	NOT APPLICABLE TO DOMESTIC SYSTEMS

NOTES: 1. Access codes assigned may be in the following ranges:
0 – 9999, plus *, 0 – *999, plus #, #0 – #999, plus A, B, C, and D digits (for 16-button telephones).
2. Only DISPLAY is allowed via FEATACC; see EXTRN procedure.

Table 420.2 Allowable Data Speed Rates

ALPHAMERIC INPUT	DESCRIPTION	ALPHAMERIC INPUT	DESCRIPTION
50	50 bps	1200	1 200 bps
75	75 bps	1800	1 800 bps
100	100 bps	2000	2 000 bps
110	110 bps	2400	2 400 bps
134.5	134.5 bps	3600	3 600 bps
150	150 bps	4800	4 800 bps
200	200 bps	7200	7 200 bps
300	300 bps	9600	9 600 bps
600	600 bps	14400	14 400 bps
900	900 bps	19200	19 200 bps

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
CAS	Centralized Attendant Service
LCR	Least Cost Routing
RLT	Release Link Trunk

CUSTOMER MEMORY UPDATE PROCEDURE: HOTLINE
TITLE: Hotline Station Assignments
Access Level: 2, 3, 4

HOTLINE

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS HOTLINE

2.	HOT LINE INDEX NUMBER = **nn** **nn**

Requests the hot line index number to be displayed. If range desired,   nn = index number(s) (0-31).
enter two numbers separated by space.

NOTE: Enter ⟨CR⟩ for all.

1.	⟩ CHA HOTLINE

2.	HOT LINE INDEX NUMBER = **nn**

Requests the hot line index number to be changed.   n = index number (0-31).

3.	DIGIT SEQUENCE (1-16 DIGITS) = **aa ... aa**

Requests the new hot line index digit sequence.   aa ... aa = digit sequence (16 digits
                                                                   maximum).

NOTE: Only the digits 0-9 may be used. Entering ⟨CR⟩ will delete current digit string.

CUSTOMER MEMORY UPDATE PROCEDURE: HUNTGRP
TITLE: Hunt Group Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. > DIS HUNTGRP

2. DISP TYPE (CIRC,TERM,PILOT,MEM) = aaaaa

Requests type of hunt group for which data is to be displayed. If PILOT, go to step 3; if MEM, go to step 4; if CIRC or TERM, procedure is completed.

aaaaa = CIRC, TERM, PILOT, or MEM. See Table 203.1.

3. PILOT ACCESS NUMBER = nnnn

Requests pilot number for group to be displayed; procedure is completed.

NOTE: The allowed range for Pilot Access Numbers is 0-9999.

nnnn = pilot access number; see NOTE.

4. GROUP MEMBER EXTENSION NUMBER = nnnn

Requests extension number of group member.

nnnn = ext number (0-9999).

---

1. > ADD HUNTGRP

2. ASSIGN GROUP OR MEMBER? (G,M) = a

Requests assignment type for new hunt group. If G (Group), go to step 3; if M (member), go to step 6.

a = G = Group,
a = M = Member.

3. NEW MEMBER EXTENSION NUMBERS = nnnn ... nnnn

Requests members to be assigned to the new hunt group (minimum two required). Up to 30 members may be assigned to a hunt group. If more than one, separate each by spaces.

nnnn = ext numbers (0-9999).

NOTE: All hunt group members must be in the same node for CAS/MS applications.

4. HUNT GRP TYPE (CIRC,TERM,PILOT) = aaaaa

Requests type of hunt group to be assigned. If PILOT, go to step 5; if CIRC or TERM, procedure is completed.

aaaaa = CIRC, TERM, or PILOT.

5. PILOT ACCESS NUMBER = nnnn

Requests pilot number for pilot type hunt group; procedure is completed.

nnnn = pilot access number (0-9999).

6. INSERT AFTER EXISTING GRP MEMBER = nnnn

Requests station number of hunt group member that precedes added member in list.

nnnn = ext number (0-9999).

7. NEW MEMBER EXTENSION NUMBER = nnnn

Requests station number of member to be added to hunt group.

nnnn = ext number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: HUNTGRP
TITLE: Hunt Group Assignments

Page 2 of 3

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DEL HUNTGRP**

2.	DELETE TYPE (PILOT,MEM) = **aaaaa**

Requests whether member or pilot number is to be deleted. If MEM, go to step 3; if PILOT, go to step 4.

aaaaa = MEM or PILOT.

3.	MEMBER EXTENSION TO BE DELETED = **nnnn**

Requests station number of member to be deleted; procedure is completed.

nnnn = ext number (0-9999).

NOTE: If two extensions exist in a hunt group and one is deleted, the other is automatically deleted. There must be at least two extensions in a hunt group.

4.	PILOT ACCESS NUMBER = **nnnn**

Requests pilot number of group to be deleted.

nnnn = pilot access number (0-9999).

NOTE: Deleting a pilot number automatically deletes all members of the hunt group.

1.	⟩ **CHA HUNTGRP**

2.	CHANGE TYPE (PILOT, MEM) = **aaaaa**

Requests whether member or pilot number is to be changed. If MEM, go to step 3; if PILOT, go to step 5.

aaaaa = MEM or PILOT.

3.	OLD MEMBER EXTENSION NUMBER = **nnnn**

Requests station number of hunt group member to be changed.

nnnn = ext number (0-9999).

4.	NEW MEMBER EXTENSION NUMBER = **nnnn**

Requests station number of new hunt group member; procedure is completed.

nnnn = ext number (0-9999).

5.	OLD PILOT ACCESS NUMBER = **nnnn**

Requests pilot number of group to be changed.

nnnn = pilot access number (0-9999).

6.	NEW PILOT ACCESS NUMBER = **nnnn**

Requests new pilot number to be assigned to hunt group.

nnnn = pilot access number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: HUNTGRP
TITLE: Hunt Group Assignments

Table 203.1 Hunt Group Types

ALPHAMERIC INPUT	DESCRIPTION
CIRC	Circular Hunt Group
MEM	Hunt Group Member
PILOT	Pilot Number Hunt Group
TERM	Terminal Hunt Group

CUSTOMER MEMORY UPDATE PROCEDURE: LCRCOS
TITLE: LCR COS Assignments
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	〉 **DIS LCRCOS**

2.	DISPLAY LCR DATA COS? (Y,N) = **a**
	Requests whether LCR data COS information is to be displayed. a = Y = Yes, a = N = No. (OC II only.)

3.	ENTER RANGE TO DISPLAY = **nn** **nn**
	Requests LCR class of service for which data is to be displayed. For range, enter two COSs, separated by space. Enter 〈CR〉 to display all. nn = LCR class(es) of service (0-32).

1.	〉 **DEL LCRCOS**

2.	DELETE LCR DATA COS? (Y,N) = **a**
	Requests whether LCR data COS is to be unassigned. (OC II only.) a = Y = Yes, a = N = No.

3.	ENTER COS # TO DE-ASSIGN = **nn**
	Requests LCR class of service number to be unassigned. nn = LCR class of service (0-32).

1.	〉 **CHA LCRCOS**

2.	CHANGE LCR DATA COS? (Y,N) = **a**
	Requests whether the LCR data COS is to be changed. (OC II only.) a = Y = Yes, a = N = No.
	NOTE: Entering 〈CR〉 is the same as entering N for No.

3.	ENTER COS # TO CHANGE = **nn**
	Requests COS number for LCR for which data is to be changed. nn = LCR class of service (0-32).

4.	PROGRAM CALL PRIORITIES (0-15) = **nn** **nn**
	Requests programmed call priorities to be established for this COS. If more than one, separate each by spaces. Enter 〈CR〉 for no change. nn = priority(ies) (0-15) (16 max.).

5.	ALT ADV TIME (TENTHS OF SECS) = **nnn**
	Requests time before alternate route is attempted during search for facility, for this COS. Enter 〈CR〉 for no change. nnn = advance time (in tenths of a second 0-255).

6.	# OF CALLBACK RETRIES REQUIRED = **n**
	Requests number of callback attempts that should be made, if callback feature is used. Enter 〈CR〉 for no change. n = number of callbacks (0-9).

CUSTOMER MEMORY UPDATE PROCEDURE: LCRCOS
TITLE: LCR COS Assignments

STEP NO.	PROMPT/EXPLANATION

7.	DISABLE FLAGS = **aaaaaaaa ... aaaaaaaa**
	Requests list of flags which should be changed from the enabled state to the disabled state. If more than one, separate each by space. Enter ⟨CR⟩ for no change. aaaaaaaa = flag(s); see Table 901.1.
8.	ENABLE FLAGS = **aaaaaaaa ... aaaaaaaa**
	Requests list of flags which should be changed from the disabled state to the enabled state. If more than one, separate each by space. Enter ⟨CR⟩ for no change. aaaaaaaa = flag(s); see Table 901.1.

Table 901.1 Least Cost Routing Class-of-Service Flags

ALPHAMERIC INPUT	DESCRIPTION
ADVTONE	Tone required when alternate trunk advance occurs.
ALTADV	Alternate trunk group selection (advance) allowed.
EXPTONE	Expensive route tone required when LCR selects an expensive trunk. (Assignment of Expensive Route Tone to an LCR route element (trunk group) is performed via CMU procedure LCRROUTE.
OFHK	Off-Hook (Standby) Queuing for trunks allowed.
ONHK	On-Hook (Callback) Queuing for trunks allowed.
SPCLACCT	User must dial a Special Account Code if special accounting trunk group selected by LCR.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
COS	Class of Service
LCR	Least Cost Routing

CUSTOMER MEMORY UPDATE PROCEDURE: LCRDPLN
TITLE: LCR Dialing Plan
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ **DIS LCRDPLN**

---

2. RANGE, DGTS, OR ROUTE? (R,D,RT) = **aa**

Requests whether LCR dialing plan data is to be displayed by range, digits, or route data.
    aa = R = Range; aa = D = Digits; or aa = RT = Route.

NOTE: Enter "R" (or ⟨CR⟩) to display a range of dialing plan entries (patterns); enter "D" to display the dialing pattern that will be selected for a particular dialed number; enter "RT" to display all entries which send calls to a particular route.

If R (Range), go to step 3; if D (Digits), go to step 4; if RT (Route), go to step 5.

---

3. ENTER RANGE TO DISPLAY = **nnn**   **nnn**

Requests range of dialing plan numbers for which data is to be displayed (from to); separate by space; procedure is completed.
    nnn = dialing plan number(s), (0-299). Enter ⟨CR⟩ to display all dialing patterns.

---

4. ENTER DIGIT PATTERN = **a ... a**   **a ... a**

Requests dialed digit string to be analyzed. Spaces may be inserted between fields of the number, if desired. Procedure is completed.
    a ... a = digit pattern.

---

5. ENTER ROUTE # (⟨CR⟩=NULL) = **nn**

Requests route number for which data are to be displayed. If none, enter ⟨CR⟩.
    nn = route number; ⟨CR⟩ = null = none.

---

1. ⟩ **ADD LCRDPLN**

NOTE: Before entering a new dialing pattern, user must determine if LCR access codes are to be included in the dialing plan for specialized routing purposes (for example, tie trunk networks). See system option flags (CMU procedure SYSOPT).

---

2. ENTER DIGIT PATTERN = **a ... a**   **a ... a**

Requests digit pattern to be assigned to new dialing plan.
    a ... a = digit pattern.

NOTE: The digit pattern consists of two or more characters, with spaces as field delimiters (for example, between the area code field and office code field). Legal characters are digits 0 through 9, plus the special characters A, N, S, T, X, and Z. (See Table 900.1).

---

3. ENTER ROUTE # (⟨CR⟩=NULL) = **nn**

Requests route number to be assigned to above digit pattern. If none, enter ⟨CR⟩.
    nn = route number (0-99); ⟨CR⟩=null=none. If route number is null, call will be blocked.

---

4. ENTER PLAN # OR ⟨CR⟩ = **nnn**

Requests plan number for which data are to be added. If none, enter ⟨CR⟩.
    nnn = plan number (0-299); ⟨CR⟩=null=none.

NOTE: If ⟨CR⟩ is entered, the CMU procedure will automatically select a position and insert the new dialing pattern. If the user enters a plan number, the CMU procedure will insert the new pattern at the specified position, moving the existing rules down one position if necessary.

CUSTOMER MEMORY UPDATE PROCEDURE: LCRDPLN
TITLE: LCR Dialing Plan

Page 2 of 2

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DEL LCRDPLN**

NOTE: Before deleting a Dial Plan, it is recommended that the user do a "DISPLAY LCRDPLN" to verify the plan number about to be deleted. This is recommended because existing plan numbers may change as plans are added or deleted.

2.	ENTER PLAN # TO DELETE = **nnn**

Requests number of dialing plan which is to be deleted.　　　nnn = dialing plan number (0-299).

1.	⟩ **CHA LCRDPLN**

2.	ENTER PLAN # TO CHANGE = **nnn**

Requests dialing plan number for which LCR data is to be changed.　　　nnn = dialing plan number (0-299).

3.	NEW ROUTE # (⟨CR⟩=NULL) = **nn**

Requests new route number to be assigned. If none, enter ⟨CR⟩.　　　nn = route number (0-99);
　　　⟨CR⟩=null=none.

Table 900.1　Special Characters for use in LCR Dialing Plans

SPECIAL CHARACTER	DESCRIPTION
A	This character represents digits 0 or 1.
N	This character represents digits 2 through 9.
S	This character, when placed as the last digit of an office code field, instructs LCR to consult the SCC tables before routing the call to the specified route.
T	This character represents an interdigit timeout.
X	This character represents any digit, 0 through 9.
Z	This character represents one or more digits, 0 through 9, followed by a timeout.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic　　**Definition**
⟨CR⟩　　Carriage Return (RETURN key)
LCR　　Least Cost Routing

CUSTOMER MEMORY UPDATE PROCEDURE: LCRODR
TITLE: LCR Outdialing Rules
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ **DIS LCRODR**

2. ENTER RULE # OR RANGE = nn   nn

Requests outdial rule number for which data is to be displayed. For range, enter two ODRs, separated by space. Enter ⟨CR⟩ to display all.

nn = ODR number(s) (0-49).

---

1. ⟩ **ADD LCRODR**

2. ENTER RULE # TO ADD = nn

Requests outdial rule number for which data is to be added.

nn = ODR number (0-49).

3. ENTER COMMAND = aaaaaaaa

Requests command applicable for this ODR number. If OUTPULSE, go to step 4; if ECHO, go to step 5; if APPEND, go to step 6; if PAUSE, DETECT, or DETECT2, go to step 7; if ECHOALL, or TOGGLE, repeat step 3; if END procedure is completed.

aaaaaaaa = command; see Table 903.1.

4. ENTER DIGITS (1-18 DIGITS) = a . . . a   a . . . a

Requests digits to be outpulsed by system (18 digits per string max., maximum 2 strings).

a . . . a = outpulse digit string(s).

NOTE: Do not separate digits in strings by spaces; do separate strings by spaces.

Return to step 3.

5. ENTER FIELD # = n

Requests number of field in the dialing plan that is to be outpulsed. Return to step 3.

n = field number (0-9).

6. ENTER ODR # TO APPEND = nn

Requests outdial rule number that is to be appended to this ODR.

nn = ODR number (0-49).

7. ENTER TIME (TENTHS OF SECONDS) = nnn

Requests amount of time (in tenths of seconds) that is required for pause between digits or detection of dial tone, as required. Return to step 3.

nnn = time in tenths of seconds (e.g., 15=1.5 seconds). Range: 0-255.

---

1. ⟩ **DEL LCRODR**

2. ENTER ODR RULE # TO DELETE = nn

Requests outdial rule number for which data is to be deleted.

nn = ODR number (0-49).

CUSTOMER MEMORY UPDATE PROCEDURE: LCRODR
TITLE: LCR Outdialing Rules

Table 903.1 Outdial Rule Commands

ALPHAMERIC INPUT	DESCRIPTION
APPEND	Allows linkage of ODRs.
DETECT	Dial tone detection required.
DETECT2	Causes a wait for secondary dial tone from the intermediate office (2.2 seconds of continuous dial tone). Use to interface with dial access SCCs. (See note.)
ECHO	Allows specific fields in the dialing plan to be outpulsed.
ECHOALL	Outpulses all remaining fields in the dialing plan.
END	Marks the end of the ODR.
OUTPULSE	Outpulse digits required.
PAUSE	Pause required between digits.
TOGGLE	Switches outpulsing modes between DP and DTMF.

NOTE: See timer DIALTONE in the SYSTIMER procedure.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DP	Dial Pulse (Loop Pulsing)
DTMF	Dual-Tone Multifrequency
LCR	Least Cost Routing
ODR	Outdial Rule Number
SCC	Specialized Common Carrier

CUSTOMER MEMORY UPDATE PROCEDURE: LCRROUTE
TITLE: LCR Route Assignments
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION	

1.	> DIS LCRROUTE	
2.	ENTER RANGE TO DISPLAY = nn nn	
	Requests LCR routes for which data is to be displayed. For range, enter two route numbers, separated by space. Enter ⟨CR⟩ to display all.	nn = LCR route(s) (0-99).

1.	> ADD LCRROUTE	
2.	ENTER ROUTE NUMBER = nn	
	Requests LCR route number to be added.	nn = LCR route number (0-99).
3.	ENTER NUMBER OF ELEMENTS (1-8) = n	
	Requests number of element(s) that are to be established for this route.	n = number of elements (1-8).
4.	ENTER TRUNK GROUP (0-31) = nn	
	Requests trunk group number that corresponds to this LCR route element.	nn = trunk group number (0-31).
5.	ENTER OUTDIAL RULE = nn	
	Requests the outdial rule number that is to apply to this LCR route element.	nn = outdial rule number (0-49).
6.	ENTER SCHEDULES (A-H, AE-HE) = aa ... aa	
	Requests time schedules that apply to this LCR route element. If more than one, separate each by spaces. Refer to appropriate data base form for assigned time schedules corresponding to schedule codes.	aa = time schedule(s) (A-H, AE-HE).
	NOTE: Schedules A through H are defined by the CMU procedure LCRSCHD. The "E" is appended to indicate that expensive route tone should be given during this period.	
7.	ENTER PROG. CALL PRIORITY (0-15) = nn ... nn	
	Requests the programmed call priority assigned to this LCR route element.	nn = programmed call priority (0-15).
8.	ENTER ELEMENT FLAGS = aaaaaaaa ... aaaaaaaa	
	Requests the flags to apply to this LCR route element.	aaaaaaaa = element flag(s); see Table 902.1.

1.	> DEL LCRROUTE	
2.	ENTER ROUTE TO DELETE = nn	
	Requests LCR route number to be deleted.	nn = LCR route number (0-99).

CUSTOMER MEMORY UPDATE PROCEDURE: LCRROUTE
TITLE: LCR Route Assignments

STEP NO.	PROMPT/EXPLANATION

3.	ENTER ELEMENT OR RANGE (0-7) = n n
	Requests element (or range of elements) number that is (are) to be deleted within the specified LCR route(s). NOTE: Enter ⟨CR⟩ to delete all elements of LCR route.	n = element(s) (0-7).

1.	⟩ INS LCRROUTE
	NOTE: This procedure allows a route element to be inserted.

2.	ENTER ROUTE NUMBER = nn
	Requests LCR route number to be added.	nn = LCR route number (0-99).

3.	ENTER ELEMENT NUMBER (0-7) = n
	Requests element number to be inserted.	n = number of element (0-7).

4.	ENTER TRUNK GROUP (0-31) = nn
	Requests number of trunk group that corresponds to this LCR route element.	nn = trunk group number (0-31)

5.	ENTER OUTDIAL RULE = nn
	Requests number of outdial rule that applies to this LCR route element.	nn = outdial rule number (0-49).

6.	ENTER SCHEDULES (A-H,AE-HE) = aa ... aa
	Requests time schedules that apply to this LCR route element. If more than one, separate each by spaces. Refer to appropriate data base form for assigned time schedules corresponding to schedule codes.	aa = time schedule(s) (A-H, AE-HE).

7.	ENTER PROG. CALL PRIORITY (0-15) = nn
	Requests the programmed call priority assigned to this LCR route element.	nn = programmed call priority (0-15).

8.	ENTER ELEMENT FLAGS = aaaaaaaa ... aaaaaaaa
	Requests the flags to apply to this LCR route element. Enter ⟨CR⟩ for none.	aaaaaaaa = element flag(s); see Table 902.1.

1.	⟩ CHA LCRROUTE

2.	ENTER ROUTE TO CHANGE = nn
	Requests LCR route number to be changed.	nn = LCR route number (0-99).

3.	ELEMENT TO CHANGE (0-7) = n
	Requests whether element number or flags are to be changed for this route.	a = number of element to be changed (0-7).

CUSTOMER MEMORY UPDATE PROCEDURE: LCRROUTE
TITLE: LCR Route Assignments

Page 3 of 3

STEP NO.	PROMPT/EXPLANATION

---

4. | NEW TRUNK GROUP, IF NEEDED = **nn**

Requests new trunk group number to be assigned to this LCR route element, if required. Enter ⟨CR⟩ for no change.

nn = trunk group number (0-31).

---

5. | NEW OUTDIAL RULE, IF NEEDED = **nn**

Requests new outdial rule to be assigned to this LCR route element, if required. Enter ⟨CR⟩ for no change.

nn = outdial rule number (0-49).

---

6. | NEW SCHEDULES, IF NEEDED = **aa**

Requests new time schedules to be assigned to this LCR route element, if required. If more than one, separate each by spaces. Refer to appropriate data base form for assigned time schedules corresponding to schedule codes. Enter ⟨CR⟩ for no change.

aa = time schedule(s) (A-H, AE-HE).

---

7. | NEW PRIORITY, IF NEEDED = **nn**

Requests new programmed call priority to be assigned to this LCR route element, if required. Procedure is completed. Enter ⟨CR⟩ for no change.

nn = programmed call priority (0-15).

---

8. | DISABLE FLAGS = **aaaaaaaa ... aaaaaaaa**

Requests which flags are to be disabled for this LCR route element. Enter ⟨CR⟩ for no change.

aaaaaaaa = element flag(s); see Table 902.1.

---

9. | ENABLE FLAGS = **aaaaaaaa ... aaaaaaaa**

Requests which flags are to be enabled for this LCR route element. Enter ⟨CR⟩ for no change.

aaaaaaaa = element flag(s); see Table 902.1.

Table 902.1   Least Cost Routing Route Flags

ALPHAMERIC INPUT	DESCRIPTION	SEE NOTE
DMDR	Data Message Detail Recording Required (OC II only).	
NOCONFTN	No Confirmation Tone Required	1
SPCLACCT	Special Account Code Required	2
SCC0	Specialized Common Carrier – 0	3
SCC1	Specialized Common Carrier – 1	3
SCC2	Specialized Common Carrier – 2	3
SMDR	Station Message Detail Recording Required	

NOTES: 1. Eliminates the three-burst tone when a trunk is selected. May be desirable when LCR is used to implement station-to-station calling in a tandem network.
2. Special Account Code is required if the flag is set in both the route element and the LCR Class of Service.
3. This flag is set to indicate that this trunk group and Outdial Rule are used to reach the corresponding SCC. The element will be used only if an area code/office code match is found in the corresponding SCC table.

MNEMONICS USED IN THIS CMU PROCEDURE: .

Mnemonic   **Definition**

LCR   Least Cost Routing
SCC   Specialized Common Carrier

CUSTOMER MEMORY UPDATE PROCEDURE: LCRSCC
TITLE: LCR Special Common Carrier Data
Access Level: 3, 4

LCRSCC

STEP NO.	PROMPT/EXPLANATION

1. 〉 **DIS LCRSCC**

2. ENTER OPTION (SCCN OR HNPA) = **aaaa**

   Requests whether SCC(n) or HNPA data are to be displayed. If SCCN,   aaaa = SCCN = SCC data;
   go to step 3; if HNPA, procedure is completed.   aaaa = HNPA = HNPA data.

   NOTE: Entering 〈CR〉 is the same as entering HNPA.

3. ENTER RANGE OF SCCS = **n ... n**

   Requests range of SCC numbers for which data is to be displayed.   n = SCC number (0-2).
   Enter 〈CR〉 to display data for all assigned SCCs.

4. ENTER RANGE OF NPAS = **nnn ... nnn**

   Requests range of NPAs for which data is to be displayed. Enter 〈CR〉   nnn = NPA (200 - 919).
   to display data for all assigned area codes.

   NOTE: The display will include all area codes which are reachable via the specified SCC.

5. DISPLAY OFFICE CODES? (Y,N) = **a**

   Requests whether office codes for above SCCs are to be displayed.   a = Y = Yes; a = N = No.
   If Y (Yes), the procedure will display the reachable office codes within
   each displayed area code.

---

1. 〉 **ADD LCRSCC**

2. ENTER SCC# TO MODIFY (0-2) = **n**

   Requests SCC number for which data is to be added.   n = SCC number (0-2).

3. ENTER NPA TO ADD OR ADD TO = **nnn**

   Requests NPA number to be added or added to.   nnn = NPA number (200-919).

4. ENTER OFFICE CODES TO ENABLE = **nnn ... nnn**

   Requests office codes which are to be added to the NPA specified   nnn ... nnn = office code(s) (200-999).
   in step 3 (20 max.). If more than one, spearate each by spaces.

   NOTE: The CANCEL action does not work on SCC data base change.

---

1. 〉 **CHA LCRSCC**

   NOTE: This procedure is used for adding and changing the HNPA code.

2. ENTER HOME NPA (200-919) = **nnn**

   Requests home NPA which is to be changed.   nnn = home NPA (200-919).

   NOTE: The HNPA information allows the system to use SCC routing tables on seven-digit toll calls within the caller's
   own area code. For example: the following dialing pattern will cause LCR to consult the SCC tables using
   the HNPA and the dialed office code: 1-NXS-XXXX.

CUSTOMER MEMORY UPDATE PROCEDURE: LCRSCC
TITLE: LCR Special Common Carrier Data

Page 2 of 2

STEP NO.	PROMPT/EXPLANATION
1.	) **DEL LCRSCC**
2.	ENTER SCC# TO MODIFY (0-2) = **n**
	Requests SCC number for which data is to be deleted. n = SCC number (0-2).
3.	ENTER NPA TO DELETE FROM = **nnn**
	Requests NPA number to be deleted. nnn = NPA number (200-919).
4.	ENTER OFFICE CODES TO DISABLE = **nnn**
	Requests office codes which are to be deleted from above NPA (20 nnn = office code(s) (200-999). max.). Enter ⟨CR⟩ to delete all office codes.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
⟨CR⟩	Carriage Return (RETURN key)
HNPA	Home Numbering Plan Area (Area Code)
LCR	Least Cost Routing
NPA	Numbering Plan Area (Area Code)
SCC	Special Common Carrier

CUSTOMER MEMORY UPDATE PROCEDURE: LCRSCHD
TITLE: LCR Schedules
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

1.) **DIS LCRSCHD**

NOTE: Each hour of the week (168 hours) can be assigned to one of 8 LCR schedules, providing trunking control by time-of-day and day-of-week. The LCRROUTE procedure allows trunk groups to be enabled or blocked according to which schedule (A through H) is currently operative.

Because calling party class of service is also consulted during the routing process, the use of LCR schedules can provide a temporary class of service alteration (by time of day), as far as external trunk access is concerned.

1.) **CHA LCRSCHD**

2. ENTER DAY(S) TO CHANGE = **aaa ... aaa**

Requests day(s) of the week for which the LCR schedule is to be changed (7 max). If more than one, separate each by spaces.
aaa = day(s) of week (SUN, MON, TUE, WED, THU, FRI, or SAT).

3. ENTER HOUR(S) TO CHANGE = **nn ... nn**

Requests which hours for day(s) specified above for which the schedule is to change (24 max.). If more than one, separate each by spaces.
nn = hour(s) (0-23).

4. ENTER SCHEDULE: = **a**

Requests schedule to apply to the day(s) and hour(s) specified above. Refer to the appropriate data base form for the assigned schedules for this site. Enter ⟨CR⟩ for no change.
a = schedule (A - H).

5. ENTER DEFERRED MINUTES = **nn**

Allows a new schedule to be implemented on other than on an hour boundary; i.e., indicates how many minutes into the hour a schedule change is to be implemented. Enter ⟨CR⟩ for no change.
nn = number of minutes (0-59).

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
LCR	Least Cost Routing

CUSTOMER MEMORY UPDATE PROCEDURE: MODMASSN
TITLE: Modem Assignments
Access Level: 2, 3, 4

MODMASSN

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS MODMASSN

2.	PORT EQUIPMENT NUMBER (WXYZ) = **nnnn**
	Requests PEN of modem for which data is to be displayed. nnnn = valid PEN.

1.	⟩ ADD MODMASSN

2.	DIGITAL PEN (WXYZ) = **nnnn**
	Requests digital PEN to be assigned to modem specified. nnnn = valid PEN.
	NOTE: The digital end of the pooled modem is connected to an SLMD port.

3.	ANALOG PEN (WXYZ) = **nnnn**
	Requests analog PEN to be assigned to modem specified. nnnn = valid PEN.
	NOTE: The analog end of the pooled modem is connected to an SLMA port.

4.	MODEM POOL NUMBER (0-15) = **nn**
	Requests modem pool number to which modem is to be assigned. nn = modem pool number (0-15).

1.	⟩ DEL MODMASSN

2.	DIGITAL PEN (WXYZ) = **nnnn**
	Requests digital PEN assigned to modem to be deleted. nnnn = valid PEN.

3.	ANALOG PEN (WXYZ) = **nnnn**
	Requests analog PEN assigned to modem to be deleted. nnnn = valid PEN.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
PEN	Port Equipment Number
SLMA	Subscriber Line Module – Analog
SLMD	Subscriber Line Module – Digital

CUSTOMER MEMORY UPDATE PROCEDURE: MODMPOOL
TITLE: Modem Pool Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION	

1.	) DIS MODMPOOL	
2.	MODEM POOL NUMBER(S) (0-15) = **nn** **nn**	
	Requests modem pool number(s) for which data is to be displayed. If more than one, separate each by spaces. Enter ⟨CR⟩ for all modem pool assignments.	nn = modem pool number (0-15).
3.	DISPLAY ALL MODEMS? (Y,N) = **a**	
	Requests whether data is to be displayed for all modems in specified pool(s). NOTE: Entering ⟨CR⟩ is the same as entering Y for Yes.	a = Y = Yes; a = N = No.

1.	) CHA MODMPOOL	
	NOTE: This procedure is used to define the characteristics of a modem pool.	
2.	MODEM POOL GROUP (0-15) = **nn**	
	Requests modem pool number for which data is to be changed.	nn = modem pool number (0-15).
3.	PROTOCOL NUMBER (0-31) = **nn**	
	Requests protocol number to be assigned to this modem pool. Enter ⟨CR⟩ for no change. NOTE: Refer to the CMU procedure, PROTOCOL.	nn = protocol number (0-31).
4.	MODE (ANS, ORIG, BOTH) = **aaaa**	
	Requests mode of modems in modem pool specified. If BOTH or ORIG, go to step 5; if ANS, procedure is completed. NOTE: Entering ⟨CR⟩ is the same as entering BOTH.	aaaa = mode; see Table 560.1.
5.	TRANSFER CONTROL SEQUENCE = **aaaaaaaaa**	
	Requests transfer control sequence to be applied to this modem pool. if ENDDIAL, go to step 7; otherwise, proceed to step 6. Enter ⟨CR⟩ for no change.	aaaaaaaaa = transfer control sequence; see Table 560.2.
6.	TONE FILTER MSEC (100, 500, 1500) = **nnnn**	
	Requests the filter time to be applied when Called Party Tone is initially detected until the time the tone is considered valid. Enter ⟨CR⟩ for no change.	nnnn = tone filter timer setting: 100, 500, or 1500 msec..
7.	MI/MIC CONTROL FOR DATA MODE = **aaaaa**	
	Specify whether the DCI relay connecting the modem's MI and MIC leads is to be opened or closed to initiate data operation on the established connection. If OPEN, procedure is completed. Enter ⟨CR⟩ for no change.	aaaaa = OPEN or CLOSE.
8.	TRANSFER CONTROL TYPE (CONT, MOM) = **aaaa**	
	Specify whether the pooled modem MI and MIC leads are to receive a continuous (CONT) or a momentary (MOM) change to the state specified in the previous prompt. Enter ⟨CR⟩ for no change.	aaaa = CONT = Continuous, aaaa = MOM = Momentary.

CUSTOMER MEMORY UPDATE PROCEDURE: MODMPOOL
TITLE: Modem Pool Assignments

Table 560.1   Modem Pool Modes

ALPHAMERIC INPUT	DESCRIPTION
ANS BOTH ORIG	Answer Mode Only (see Note 1). Answer and Originate Modes. Originate Mode Only (see Note 1).

Table 560.2   Transfer Control Sequence

ALPHAMERIC INPUT	DESCRIPTION
ENDDIAL ENDTONE STARTTONE	Transfer to the Data Mode at End of Dialing. Transfer to the Data Mode at End of Called Party Tone (see Note 2). Transfer to the Data Mode at Start of Called Party Tone (see Note 2).

NOTE: 1. A modem which operates in the ANS mode can only be used for analog to digital calls (TRK or SLMA to DCI). A modem which operates in the ORIG mode can only be used for digital to analog calls (DCI to TRK or SLMA).
2. Called Party Tone is the high-pitched tone transmitted by the far end modem when it answers the data call. Transfer to data mode connects the pooled modem to the line so that it can transmit and receive data. Some modem types are confused by called party tone; these should use the ENDTONE sequence. Other modem types must hear called party tone before they will communicate; these should use the STARTTONE or ENDDIAL sequence.

| | MODMRTE |

CUSTOMER MEMORY UPDATE PROCEDURE: MODMRTE
TITLE: Modem Pool Routing Baud Rate Assignments
Access Level: 2, 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1. > **DIS MODMRTE**

NOTE: This procedure is used to indicate, in order of preference, which modem pools should be used for each data rate.

2. ENTER UP TO 20 DATA SPEEDS = **nnnnn ... nnnnn**

Requests up to twenty data speeds be entered for which data is to be displayed. If more than one, separate by spaces.   nnnnn = data speed(s); see Table 562.1.

NOTE: The procedure displays a list of all modem pools which can support this data speed, in order of preference. The first pool listed will be used, if possible, for calls at the specified data speed. The second pool will be used only if all modems in the first pool are busy.

This mechanism allows the user to specify the most efficient match of data speed to modem hardware.

1. > **CHA MODMRTE**

NOTE: This procedure is used to specify, in order of preference, which modem pools can be used for each data speed, during automatic modem selection.

2. DATA SPEED = **nnnnn**

Requests data speed for which a list of eligible modem pools is to be specified.   nnnnn = data speed; see Table 562.1..

3. MODEM POOL NUMBER(S) (0-15) = **nn ... nn**

Requests modem pools which can handle this data speed, in order of preference. If more than one, separate each by space (16 max.). Enter ⟨CR⟩ for no change.   nn = modem pool number (0-15).

Table 562.1 Data Speeds

ALPHAMERIC INPUT	DESCRIPTION	ALPHAMERIC INPUT	DESCRIPTION
50	50 bps	1200	1,200 bps
75	75 bps	1800	1,800 bps
100	100 bps	2000	2,000 bps
110	110 bps	2400	2,400 bps
134.5	134.5 bps	3600	3,600 bps
150	150 bps	4800	4,800 bps
200	200 bps	7200	7,200 bps
300	300 bps	9600	9,600 bps
600	600 bps	14400	14,400 bps
900	900 bps	19200	19,200 bps

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
bps	Bits Per Second

CUSTOMER MEMORY UPDATE PROCEDURE: NAILUP
TITLE: Nailed-Up Connection Assignments
Access Level: 3, 4

```
┌─────────────────────┐
│       NAILUP        │
└─────────────────────┘
```

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ **DIS NAILUP**

2. PEN OF NAIL-UP CONN TO DISPLAY = **nnnn ... nnnn**

   Requests PEN(s) to be displayed which are assigned to the nailed-up connection. If both PENs specified, separate by space.   nnnn = valid PEN.

---

1. ⟩ **ADD NAILUP**

   NOTE: Connection type must be assigned via DATAASSN CMU procedure before assigning first and second PEN of nailed-up connection.

2. FIRST PEN (WXYZ) TO NAIL-UP = **nnnn**

   Requests first PEN of nailed-up connection to be assigned.   nnnn = valid PEN.

3. SECOND PEN (WXYZ) TO NAIL-UP = **nnnn**

   Requests second PEN of nailed-up connection to be assigned.   nnnn = valid PEN.

---

1. ⟩ **DEL NAILUP**

2. PEN OF NAIL-UP CONN TO DELETE = **nnnn**

   Requests either PEN of nailed-up connection which is to be deleted.   nnnn = valid PEN.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
PEN	Port Equipment Number

CUSTOMER MEMORY UPDATE PROCEDURE: OFFRCRD
TITLE: Office Record Data
Access Level: 1, 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	**> DIS OFFRCRD**

2.	DISPLAY DEVICE(S)? (Y,N) = **a**
	Requests whether device data are to be displayed by PEN(s). If Y (Yes), go to step 3; if N (No), go to step 4.	a = Y = Yes, a = N = No.

3.	PORT EQUIPMENT NUMBER(S) (WXYZ) = **nnnn nnnn**
	Requests PEN of device for which office record data is to be displayed. If two PENs are entered, system displays data for that range of PENs (from - to); separate PENs by space. Enter ⟨CR⟩ to display all. Procedure is completed.	nnnn nnnn = valid PEN(s).

4.	DISPLAY NUMBER PLAN (Y,N) = **a**
	Requests whether system number plan is to be displayed. If Y (Yes), go to step 5; if N (No) go to step 6.	a = Y = Yes, a = N = No.

5.	NUMBER(S) = **aaaa aaaa**
	Requests number(s) of device(s) for which office records are to be displayed. If two numbers are entered, system displays data for that range of numbers (from - to); separate numbers by space. Enter ⟨CR⟩ to display all. Procedure is completed.	nnnn = ext number(s) (0-9999).

6.	DISPLAY PCB TABLE (Y,N) = **a**
	Requests whether PCB layout table is to be displayed.	a = Y = Yes, a = N = No.
	NOTE: PCB table reflects assigned hardware only (either in-service or out-of-service).	
	If Y (Yes), go to step 7; if N (No), procedure is completed.	

7.	DISPLAY TYPE (SYSTEM,SHELF,PEN) = **aaaaaa**
	Requests whether card types are to be displayed for system, shelf, or PEN. If SHELF, go to step 8; if PEN, go to step 9; if SYSTEM, procedure is completed.	aaaaaa = Type of card display; SYSTEM, SHELF, or PEN.

8.	SHELF NUMBER (0-7) = **n**
	Requests shelf number for which card type data is to be displayed. Procedure is completed.	n = shelf number (0-7).

9.	PORT EQUIPMENT NUMBER (WXYZ) = **nnnn**
	Requests PEN for which card type data is to be displayed.	nnnn = valid PEN.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
PCB	Printed Circuit Board
PEN	Port Equipment Number

PICKGRP

CUSTOMER MEMORY UPDATE PROCEDURE: PICKGRP
TITLE: Pickup Group Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

1. > DIS PICKGRP

2. GROUP MEMBER EXTENSION NUMBER = **nnnn**

Requests station number of any member of the group to be displayed. Enter ⟨CR⟩ to display all pickup groups.

nnnn = ext number (0-9999).

---

1. > ADD PICKGRP

2. ASSIGN GROUP OR MEMBER? (G,M) = **a**

Requests whether assignmment is to be made for group or member. If G (Group), go to step 3; if M (Member), go to step 4.

a = G = Group,
a = M = Member.

3. NEW MEMBER EXTENSION NUMBERS = **nnnn ... nnnn**

Requests station numbers of members of new pickup group (minimum two required). Up to 30 members may be assigned to each pickup group. If more than one, separate each by spaces. Procedure is complete.

nnnn = ext numbers (0-9999).

4. GROUP MEMBER EXTENSION NUMBER = **nnnn**

Requests station number of member that defines the pickup group.

nnnn = ext number (0-9999).

5. NEW MEMBER EXTENSION NUMBER(S) = **nnnn ... nnnn**

Requests station number(s) of member(s) to be added to pickup group (28 max.). If more than one, separate each by spaces.
NOTE: All pickup group members must be in the same node for CAS/MS applications.

nnnn = ext number(s) (0-9999).

---

1. > DEL PICKGRP

2. MEMBER EXTENSION TO BE DELETED = **nnnn**

Requests station number of member to be deleted from pickup group.

nnnn = ext nummber (0-0000).

3. DELETE PICKUP GROUP? (Y,N) = **a**

Requests whether entire pickup group is to be deleted. Entering ⟨CR⟩ is the same as entering N for No.
NOTE: If two extensions exist in a pickup group and one is deleted, the other is automatically deleted. There must be at least two extensions in a pickup group.

a = Y = Yes, a = N = No.

---

1. > CHA PICKGRP

2. OLD MEMBER EXTENSION NUMBER = **nnnn**

Requests station number of pickup group member to be changed.

nnnn = ext number (0-9999).

3. NEW MEMBER EXTENSION NUMBER = **nnnn**

Requests new station number of pickup group member.

nnnn = ext number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: PROTOCOL
TITLE: Protocol Assignments
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS PROTOCOL

2.	DISPLAY DATA PROTOCOL (0-31) = **nn**
	Requests protocol number(s) for which data is to be displayed. One entry displays single protocol; two entries specify range (from nn to nn). Enter ⟨CR⟩ to display all.	nn = protocol number (0-31).

3.	DISPLAY ALL DEVICES? (Y,N) = **a**
	Requests whether all devices assigned the specified protocol are to be displayed. If N (No), only the protocol definition is displayed; if Y (Yes), the devices assigned to each protocol specified are also displayed. NOTE: Entering ⟨CR⟩ is the same as entering Y for Yes.	a = Y = Yes; a = N = No.

1.	⟩ ADD PROTOCOL
	NOTE: The protocols defined by this procedure are used to define the interface characteristics between the DCI and its connected data device.

2.	DATA PROTOCOL NUMBER (0-31) = **nn**
	Requests new protocol number to be assigned, or existing protocol number to be reassigned.	nn = protocol number (0-31).

3.	DEFAULT DATA SPEED = **nnnnn**
	Requests the default speed rate to be assigned to the specified protocol.	nnnnn = speed rate; see Table 461.1.

4.	OTHER VALID DATA SPEEDS = **nnnnn ... nnnnn**
	Requests the valid data speeds that may be specified by users for the specified protocol. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.	nnnnn = data speed(s); see Table 461.1.

5.	DATABITS (5, 6, 7, 8) = **n**
	Requests the number of data bits which are to apply to the protocol specified. If "8" is entered, go to step 7; parity is forced to "NONE".	n = 5, 6, 7, or 8.

6.	PARITY (EVEN, ODD, SPACE, MARK, NONE) = **aaaaa**
	Requests the parity type which is to apply to the protocol specified.	aaaaa = parity.

7.	STOPBITS (1, 1.5, 2) = **aaa**
	Requests the number of stop bits which are to apply to the protocol specified.	aaa = 1, 1.5, or 2.

8.	DUPLEX (FULL, HALF) = **aaaa**
	Requests whether the protocol specified is to use either full or half duplex operation.	aaaa = FULL or HALF.

CUSTOMER MEMORY UPDATE PROCEDURE: PROTOCOL
TITLE: Protocol Assignments

STEP NO.	PROMPT/EXPLANATION

9. | TIMED DISCONNECT (Y,N) = **a**

Requests whether the specified protocol will use the timed discon- $a = Y = Yes; a = N = No.$
nect option. If Y (Yes), go to step 10; if N (No), go to step 11.

10. | TIMED DISC 5 SEC UNITS (1-254) = **nnn**

Requests the seconds setting of the disconnect timer, in units of 5   nnn = timer setting in 5-second units
seconds (i.e., input 10 for 50 seconds, input 11 for 55 seconds, etc.). (1-254).
NOTE: The system will select an acceptable timer value which is as close as possible to the value specified.

11. | TYPE OF CONNECTED EQUIP (DTE, DCE) = **aaa**

Requests whether the user-provided equipment which will use this   aaa = DTE or DCE.
protocol is DTE or DCE. In general data terminals operate in DTE
mode and modems operate in DCE mode. If DTE, go to step 12; if
DCE, go to step 19.

12. | ACU EQUIPPED (Y,N) = **a**

Requests whether the protocol is to be used by DCIs with an Auto- $a = Y = Yes; a = N = No.$
matic Calling Unit attached.

13. | INTERFACE (RS232, CURRENTLOOP) = **aaaaaaaaaa**

Requests whether the data equipment using this protocol will use   aaaaaaaaaa = RS232 or
the RS-232-C or current loop interface standard. If RS-232-C, go to   CURRENTLOOP.
step 14; if current loop, procedure is complete.

14. | ANS PROTOCOL (DTR,RTS) = **aaa   aaa**

Requests what signal from the connected DTE shall be interpreted   aaa = answer protocol option; see Table
(by the DCI) as a call answer signal. If two types specified, separate   461.2.
by space.
NOTES: 1. Entering ⟨CR⟩ is the same as entering DTR.
       2. The Data Call switch on the DCI can always be used as a call answer request.

15. | ORIG PROTOCOL (DTR,RTS) = **aaa   aaa**

Requests which signal(s) from the connected DTE shall be interpreted   aaa = originate protocol option; see Ta-
(by the DCI) as a call origination request. If two types specified,   ble 461.3.
separate by space. Enter ⟨CR⟩ to assign no signal to serve as a call
origination request from the connected DTE.
NOTE: The Data Call switch on the DCI can always be used as a call origination request.

16. | DISC PROTOCOL (DTR,LBRK) = **aaaa   aaaa**

Requests which signal(s) from the connected DTE shall be interpreted   aaa = disconnect protocol option; see
(by the DCI) as a data call disconnect request: removal of DTR or   Table 461.4.
long break on the transmitted data signal. If two specified, separate
each by space. Enter ⟨CR⟩ to assign no signal to serve as a call
disconnect request from the connected DTE.
NOTE: The Data Call switch on the DCI can always be used as a call disconnect request.

17. | USE DEFAULT RTS-CTS DELAY? (Y,N) = **a**

Enter Y (Yes) if the DCI should respond with the default delay (20 $a = Y = Yes,; a = N = No.$
ms) with CTS signal when the connected DTE asserts RTS; enter
N (No) if a different delay is desired. If N (No), go to step 18; if Y
(Yes), procedure is complete.

CUSTOMER MEMORY UPDATE PROCEDURE: PROTOCOL
TITLE: Protocol Assignments

STEP NO.	PROMPT/EXPLANATION

---

18. CTS DELAY 10 MSEC UNITS (1-254) = **nnn**

Enter the desired delay between RTS and CTS, in 10 millisecond units (i.e., enter 1 for 10 msec, enter 2 for 20 msec, etc.). Procedure is completed.

nnn = timer setting in msec x 10.

19. MODEM CONTROLLER EQUIPPED (Y,N) = **a**

Enter Y (Yes) if the DCIs using this protocol are connected to user-supplied modems, and are equipped with the optional modem control board (internal to the DCI).

a = Y = Yes; a = N = No.

20. INTERFACE (RS232,CURRENTLOOP) = **aaaaaaaaaaa**

Requests interface protocol to be used between the DCI and the user-supplied DCE. If RS-232-C, go to step 21; if current loop, procedure is complete.

aaaaaaaaaaa = interface option.

21. ANS/ORIG PROTOCOL (DCD,RI,DSR) = **aaa ... aaa**

Requests which signals from the connected DCE shall be interpreted (by the DCI) as call answer or origination. If more than one specified, separate each by space. Entering ⟨CR⟩ is the same as entering DSR.

NOTES: 1. When the DCI is alerting the connected DCE, either DCD or DSR may be used to signal answer from the DCE.
2. When the DCI is in an idle state, DCD, DSR, or RI may be used to signal a call origination from the connected DCE.
3. The Data Call switch on the DCI can always be used as a call answer/originate request.

aaa = answer/originate protocol options; see Table 461.5.

22. DISC PROTOCOL (DCD,DSR,LBRK) = **aaaa ... aaaa**

Requests which signal(s) from the connected DCE should be interpreted (by the DCI) as a call disconnect request: removal of DCD, removal of DSR, or long break on the received data signal. If more than one specified, separate each by space. Enter ⟨CR⟩ to assign no signal to serve as a call disconnect request from the connected DCE.

NOTE: The Data Call switch on the DCI can always be used as a call disconnect request.

aaaa = disconnect protocol option; see Table 461.6.

23. RTS ON ANSWER (Y,N) = **a**

Enter Y (Yes) if the DCI should automatically assert RTS when an answer signal is given by the DCE. Enter N (No) if the RTS signal from the DCI to the attached DCE should follow (agree with) RTS from the originating data terminal. Procedure is completed.

a = Y = Yes; a = N = No.

---

1. ⟩ **DEL PROTOCOL**

2. DATA PROTOCOL NUMBER (0-31) = **nn**

Requests protocol number to be deleted.

nn = protocol number (0-31).

---

1. ⟩ **CHA PROTOCOL**

NOTE: CHA protocol should be used when changes to the data speed, data bits, parity, stop bits, and duplex flag are required. When changes to other protocol parameters are required use the ADD PROTOCOL procedure. ADD PROTOCOL can be used to completely overwrite an existing protocol even when DCIs are assigned to the protocol.

CUSTOMER MEMORY UPDATE PROCEDURE: PROTOCOL
TITLE: Protocol Assignments

STEP NO.	PROMPT/EXPLANATION

2. | DATA PROTOCOL NUMBER (0-31) = **nn** |

Requests protocol number to be changed.   nn = protocol number (0-31).

3. | DISABLE VALID DATA SPEED(S) = **nnnnn ... nnnnn** |

Requests the valid data speeds that are to be disabled for the speci-   nnnnn = data speed(s); see Table 461.1.
fied protocol. If more than one, separate each by spaces (20 max.).
Enter ⟨CR⟩ for no change.

4. | DEFAULT DATA SPEED = **nnnnn** |

Requests the default data speed to be assigned to the specified pro-   nnnnn = data speed; see Table 461.1
tocol. Enter ⟨CR⟩ for no change.

5. | ENABLE VALID DATA SPEED(S) = **nnnnn ... nnnnn** |

Requests the valid data speeds that are to be enabled for the speci-   nnnnn = data speed(s); see Table 461.1.
fied protocol. If more than one, separate each by spaces (20 max.).
Enter ⟨CR⟩ for no change.

6. | DATABITS (5,6,7,8) = **n** |

Requests the number of data bits which are to apply to the protocol   n = 5, 6, 7, or 8.
specified. Enter ⟨CR⟩ for no change.

| PARITY (EVEN,ODD,SPACE,MARK,NONE) = **aaaaa** |

Requests the parity type which is to apply to the protocol specified.   aaaa = parity.
Enter ⟨CR⟩ for no change.

8. | STOPBITS (1,1.5,2) = **aaa** |

Request the number of stop bits which are to apply to the protocol   aaa = 1, 1.5, or 2.
specified. Enter ⟨CR⟩ for no change.

9. | DUPLEX FLAG (FULL,HALF) = **aaaa** |

Requests whether the protocol specified is to use either full or half   aaaa = FULL or HALF.
duplex operation. Enter ⟨CR⟩ for no change. Procedure is complete.

Table 461.1   Data Speeds

ALPHAMERIC INPUT	DESCRIPTION	ALPHAMERIC INPUT	DESCRIPTION
50	50 bps	1200	1,200 bps
75	75 bps	1800	1,800 bps
100	100 bps	2000	2,000 bps
110	110 bps	2400	2,400 bps
134.5	134.5 bps	3600	3,600 bps
150	150 bps	4800	4,800 bps
200	200 bps	7200	7,200 bps
300	300 bps	9600	9,600 bps
600	600 bps	14400	14,400 bps
900	900 bps	19200	19,200 bps

CUSTOMER MEMORY UPDATE PROCEDURE: PROTOCOL
TITLE: Protocol Assignments

Table 461.2   Answer Protocol Options for DCIs Connected to DCE

ALPHAMERIC INPUT	DESCRIPTION
DTR RTS	Data Terminal Ready. Request to Send.

Table 461.3   Originate Protocol Options for DCIs Connected to DCE

ALPHAMERIC INPUT	DESCRIPTION
DTR RTS	Data Terminal Ready. Request to Send.

Table 461.4   Disconnect Protocol for DCIs Connected to DTE

ALPHAMERIC INPUT	DESCRIPTION
DTR LBRK	Data Terminal Ready. Long Break on Data Received from DTE.

Table 461.5   Originate Protocol for DCIs Connected to DCE

ALPHAMERIC INPUT	DESCRIPTION
DCD DSR RI	Data Carrier Detect. Data Set Ready. Ringing Indicator.

Table 461.6   Disconnect Protocol for DCIs Connected to DCE

ALPHAMERIC INPUT	DESCRIPTION
DCD DSR LBRK	Removal of Data Carrier Detect. Removal of Data Set Ready. Long Break on Data Received from DCE.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic   Definition

Mnemonic	Definition
ANS	Answer
bps	Bits Per Second
CTS	Clear to Send
DCD	Data Carrier Detect
DCE	Data Circuit-Terminating Equipment
DISC	Disconnect
DTE	Data Terminating Equipment
DTR	Data Terminal Ready
ORIG	Originating
RI	Ringing Indicator
RTS	Request to Send

CUSTOMER MEMORY UPDATE PROCEDURE: SECURITY
TITLE: CMU Security Code Assignments
Access Level: 4

SECURITY

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION	OPERATOR INPUT

| 1. | ⟩ **DIS SECURITY** | |

| 2. | SECURITY LEVEL (1-4) = **n** | |
| | Requests security level for which password is to be displayed. Enter ⟨CR⟩ to printout passwords for levels 1 through 4. | n = security level (1-4). |

| 1. | ⟩ **CHA SECURITY** | |

| 2. | SECURITY LEVEL (1-4) = **n** | |
| | Requests security level for which password is to be changed. | n = security level (1-4). |

| 3. | PASSWORD (1-5 DIGITS) = **aaaaa** | |
| | Requests password to be assigned to specified security level. | aaaaa = password (1-5 Characters). |

CUSTOMER MEMORY UPDATE PROCEDURE: SERVICE
TITLE: Service State Assignments
Access Level: 3, 4

| SERVICE |

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1. 〉 **DIS SERVICE**

2. PORT EQUIPMENT NUMBER (WXYZ) = **nnnn   nnnn**

Requests PEN of item for which service status is requested. If range   nnnn = valid PEN(s).
of PENs required, enter two PENs separated by space.

3. MODE (〈CR〉 OUT OF SERVICE MODE) = **a...a ... a...a**

Requests status of device(s) associated with above PEN(s) to be   a...a = status; see Table 523.1.
displayed (7 max.). If more than one, separate each by spaces (refer
to NOTE on Table 523.1). Entering 〈CR〉 displays all circuits in the
out of service mode.

1. 〉 **CHA SERVICE**

2. PORT EQUIPMENT NUMBER (WXYZ) = **nnnn**

Requests PEN of item for which service status is to be changed.   nnnn = valid PEN.

3. SERVICE MODE (IN,OUTCAMP,OUTNOW) = **aaaaaaa**

Requests new status of device.   aaaaaaa = IN, OUTCAMP, OUTNOW; see
Table 523.2.

Table 523.1 Display Service Modes

ALPHAMERIC INPUT	DESCRIPTION
ALL	All Service Modes shown below
* IN	In-Service Modes
* MTCE	Maintenance Mode (circuit undergoing automatic or manual test)
OUT	All Out-of-Service Modes shown below
* OUTAUTO	Out-of-Service - Automatic Mode (System has automatically taken circuit out-of-service due to a failure)
* OUTAUTOPEND	Out-of-Service - Automatic Pending Mode (System waiting until failing circuit goes idle as which it will be automatically taken out-of-service)
* OUTCRAFT	Out-of-Service - Craft Mode
* OUTCRAFTCAMP	Out-of-Service - Craft Camp-on Mode (Device in this mode after OUTCAMP is inputted by craftsperson. Device is in the in-service mode, however System is waiting for device to go idle as which it will be placed in the out-of-service mode.)
* OUTCRAFTPEND	Out-of-Service Mode - Craft Pending Mode (Device in this mode after OUTNOW is inputted by craftsperson. Device is in the in-service mode, however System has not completed the out-of-service routine)

NOTE: More than one Display Service Mode may be specified during the DISPLAY action; when ALL is selected, the modes
indicated by an asterisk (*) are included.

Table 523.2 Change Service Mode

ALPHAMERIC INPUT	DESCRIPTION
IN	Put In-Service
OUTCAMP	Put Out-of-Service – Craft Camp-On
OUTNOW	Put Out-of-Service Now

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic   **Definition**

〈CR〉   Carriage Return (RETURN Key)
PEN   Port Equipment Number

| SMDRACCT |

CUSTOMER MEMORY UPDATE PROCEDURE: SMDRACCT
TITLE: SMDR Account Code Assignments
Access Level: 2, 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

---

1. 〉 **DIS SMDRACCT**

2. SMDR ACCOUNT NUMBER (1-11 DGTS) = **nnnnnnnnnnn**

Requests account number for which data is to be displayed. Enter 〈CR〉 for all account numbers.

nnnnnnnnnnn = account number (0-99999999999).

---

1. 〉 **ADD SMDRACCT**

2. NEW SMDR ACCOUNT NUM (1-11 DGTS) = **nnnnnnnnnnn**

Requests new account number to be added.

nnnnnnnnnnn = account number (0-99999999999).

---

1. 〉 **DEL SMDRACCT**

2. SMDR ACCOUNT NUMBER (1-11 DGTS) = **nnnnnnnnnnn**

Requests account number to be deleted.

nnnnnnnnnnn = account number (0-99999999999).

---

1. 〉 **CHA SMDRACCT**

2. OLD SMDR ACCOUNT NUM (1-11 DGTS) = **nnnnnnnnnnn**

Requests account number to be changed.

nnnnnnnnnnn = account number (0-99999999999).

3. NEW SMDR ACCOUNT NUM (1-11 DGTS) = **nnnnnnnnnnn**

Requests new account number to be added.

nnnnnnnnnnn = account number (0-99999999999).

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
SMDR	Station Message Detail Recording

CUSTOMER MEMORY UPDATE PROCEDURE: SMDRASSN
TITLE: SMDR Assignments and Control
Access Level: 3, 4

SMDRASSN

STEP NO.	PROMPT/EXPLANATION

---

1. ） **DIS SMDRASSN**

This procedure is used to display the current status of the recording output device(s).

2. TYPE (VOICE,DATA,BOTH,ALARM) = **aaaaa**

Requests which type of SMDR report parameters are to be displayed.

NOTE: Entering ⟨CR⟩ is the same as entering BOTH.

aaaaa = VOICE (standard telephone plus alarm reports);
aaaaa = DATA (data call plus alarm reports - OC II only);
aaaaa = BOTH (both VOICE and DATA alarms plus reports); or,
aaaaa = ALARM (alarm reports only).

---

1. ） **BEG SMDRASSN**

2. TYPE (VOICE, DATA, BOTH) = **aaaaa**

Requests type of calls for which detailed recording is to be started.

aaaaa = VOICE (standard telephone reports);
aaaaa = DATA (data call reports - OC II only); or
aaaaa = BOTH (both types or reports).

3. OUTPUT STATUS (CONT,START) = **aaaaa**

Requests output status which shall apply to the SMDR reports. If START, go to step 4; if CONT, procedure is completed.

aaaaa = output status; see Table 800.1.

4. OUTPUT DEVICE (TTY0-3) = **aaan**

Requests output port to which the SMDR reports are to be routed. Procedure is completed.

aaan = output device option; see Table 800.2.

---

1. ） **CHA SMDRASSN**

2. ALARM MESSAGE DEVICE (TTY0-3) = **aaan**

Requests the output device to which the SMDR alarm messages are to be routed.

aaan = TTY0 - TTY3.

NOTE: Alarm messages are used to report conditions such as "output device not ready." The alarm device is also used to output the annoyance call tracing feature, if SMDR is not running.

CUSTOMER MEMORY UPDATE PROCEDURE: SMDRASSN
TITLE: SMDR Assignments and Control

STEP NO.	PROMPT/EXPLANATION

1.
> STO SMDRASSN

2.
TYPE (VOICE,DATA,BOTH) = aaaaa

Requests type of SMDR output to be stopped, either voice, data, or both types.

aaaaa = VOICE (standard telephone reports);
aaaaa = DATA (data call reports - OC II only); or
aaaaa = BOTH (both types of reports).

3.
OUTPUT STATUS (HOLD/END) = aaaa

Requests SMDR output status:

aaaa = HOLD or END.

NOTE: If HOLD, the SMDR output is stopped temporarily, until the craftsperson resumes the reporting routine via the BEGIN action. Call records are maintained on existing and succeeding calls as long as buffers are available, until recording is restarted, so that little or no call data is lost. When recording is restarted, held buffer contents are transmitted to the output device.

If END, the SMDR output is terminated.

Table 800.01   SMDR Output Status Options

ALPHAMERIC INPUT	DESCRIPTION
CONT	Continue recording on the previously-selected output device. This option is valid only if recording was temporarily held using the STOP action.
START	Start recording on a new output device. This option is valid only if recording is currently in an idle state.

Table 800.2   SMDR Output Device Options

ALPHAMERIC INPUT	DESCRIPTION
TTY0	RS-232-C service port 0
TTY1	RS-232-C service port 1
TTY2	RS-232-C service port 2
TTY3	RS-232-C service port 3

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
SMDR	Station Message Detail Recording

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments
Access Level: 3, 4

SPCLEQPT

STEP NO.	PROMPT/EXPLANATION

1.	> DIS SPCLEQPT

2.	EQUIPMENT TYPE = aaaaaaaaa
	Requests type of special equipment for which data is to be displayed. If ZUNA, go to step 3; if RECANN, go to step 4; if PAGE, go to step 5. Enter ⟨CR⟩ for all.	aaaaaaaaa = equipment type; MUSIC, ZUNA, RECANN, PAGE, DICT, CODE, XCVRTEST, or VOICEMAIL.

3.	UNA ZONE(S) TO DISPLAY (1-4) = n
	Requests UNA zone numbers to be displayed.	n = UNA zone numbers (1-4).

4.	ANNOUNCER SERVICE(S) TO DISPLAY = aaaaaaa
	Requests announcement services to be displayed.	aaaaaaa = INTCPT, ACD1, ACD2, or ACDNITE.

5.	PAGE ZONE(S) TO DISPLAY (1-4) = n
	Requests paging zones to be displayed.	n = paging zone numbers (1-4).

1.	> ADD SPCLEQPT

2.	EQUIPMENT TYPE = aaaaaaaaa
	Requests type of special equipment to be assigned. If MUSIC, go to step 3; if ZUNA, go to step 5; if RECANN, go to step 8; if PAGE, go to step 13; if DICT, go to step 16; if CODE, go to step 18; if XCVRTEST, go to step 21; if VOICEMAIL, go to step 23.	aaaaaaaaa = equipment type; MUSIC, ZUNA, RECANN, PAGE, DICT, CODE, XCVRTEST, or VOICEMAIL.
	NOTE: Refer to Table 509.1 for required interface.	

3.	MUSIC-ON-HOLD PEN (WXYZ) = nnnn
	Requests PEN to be assigned to the music source trunk for the music on hold feature.	nnnn = valid PEN.

4.	INTERFACE TYPE (EM,SLMA,SLA16) = aaaaa
	Requests type of line/trunk interface. Procedure is completed.	aa = EM = E&M trunk; aaaa = SLMA = Subscriber line module analog; aaaaa = SLA16 = Subscriber line module analog - 16 line.

5.	UNA ZONE NUMBER (1-4) = n
	Requests zone number to be assigned to ZUNA bell.	n = UNA zone numbers (1-4).

6.	UNA ZONE BELL PEN (WXYZ) = nnnn
	Requests PEN to be assigned to ZUNA bell for zone "n" of the zoned UNA feature.	nnnn = valid PEN.

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments

STEP NO.	PROMPT/EXPLANATION	
7.	INTERFACE TYPE (SLMA,SLA16) = aaaaa	
	Requests type of line interface. Procedure is complete.	aaaa = SLMA = Subscriber line module analog; aaaaa = SLA16 = Subscriber line module analog - 16 line.
8.	RECORDED ANNOUNCER SERVICE MODE = aaaaaaa	
	Requests recorded announcement to be assigned to ACD service.	aaaaaaa = INTCPT, ACD1, ACD2, or ACDNITE.
9.	RECORDED ANNOUNCEMENT PEN (WXYZ) = nnnn	
	Requests PEN to be assigned to the recorded announcement trunk for the intercept or ACD recorded announcement feature.	nnnn = valid PEN.
10.	PLAY MODE (CONT,START,DEMAND) = aaaaaa	
	Requests play mode to be assigned to the recorded announcement equipment. If DEMAND, go to step 10; if CONT or START, go to step 11.	aaaaaa = play mode; CONT, START, or DEMAND.
11.	INTERFACE TYPE (EM,SLMA,SLA16) = aaaaa	
	Requests type of line/trunk interface assigned to the recorded announcement equipment when used on a demand basis.	aa = EM = E&M trunk; aaaa = SLMA = subscriber line module analog; aaaaa = SLA16 = Subscriber line module analog - 16 line.
12.	MESSAGE LENGTH IN SECONDS = nn	
	Requests message length to be assigned to recorded announcement. Procedure is completed. NOTE: Enter one second longer than the message length associated with selected recorder announcement service mode (INTCPT, ACD1, ACD2, or ACDNITE).	nn = message length (1-60) seconds.
13.	PAGING ZONE NUMBER (1-4) = n	
	Requests zone number to be assigned to paging equipment.	n = paging zone number (1-4).
14.	PAGING ZONE PEN (WXYZ) = nnnn	
	Requests PEN to be assigned to the paging equipment trunk for paging zone "n."	nnnn = valid PEN.
15.	GIVE BACKGROUND MUSIC ON IDLE? = a	
	Requests music to be provided when paging equipment is idle. Procedure is completed.	a = Y = Yes; a = N = No.
16.	DICTATION PEN (WXYZ) = nnnn	
	Requests PEN to be assigned to the dictation equipment trunk. NOTE: The system will allow a maximum of four dictation machines.	nnnn = valid PEN.

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments

Page 3 of 6

STEP NO.	PROMPT/EXPLANATION

---

17. INTERFACE TYPE (SLMA,SLA16) = **aaaaa**

Requests type of line interface. Procedure is completed.

aaaa = SLMA = Subscriber line module analog;
aaaaa = SLA16 = Subscriber line module analog - 16 line.

---

18. CODE CALL PEN (WXYZ) = **nnnn**

Requests PEN to be assigned to the code calling equipment trunk.

nnnn = valid PEN.

---

19. ADDRESSS SIGNALING (DP,DTMF) = **aaaa**

Requests address signaling type that applies for access to the code-calling equipment.

aaaa = DP = Dial Pulse;
aaaa = DTMF = Dual-Tone Multifrequency.

NOTE: If Code Calling equipment is to be accessed from remote SATURN PABXs in a Main-Satellite network, the signaling type must be DTMF.

---

20. CODE CALL DIGIT COUNT (1-4) = **n**

Requests number of digits that can be sent to the code-calling equipment. Procedure is completed.

n = number of digits (1-4).

---

21. TRANSCEIVER DCI PEN (WXYZ) = **nnnn**

Requests PEN of DCI to be used for the Data Test Transceiver.

nnnn = valid PEN.

NOTE: The DCI must first be assigned in the DATAASSN procedure.

---

22. IO CHANNEL (TTY, TTY0, TTY1) = **aaan**

Requests the IO output port to be used for the Data Test Transceiver. Procedure is completed.

aaan = TTY, TTY0, or TTY1.

NOTE: The IO port selected cannot be used for any other function unless or until the data test transceiver is deleted via the DEL SPCLEQPT action/command.

---

23. VOICE MAIL PEN (WXYZ) = **nnnn**

Requests PEN to be assigned to voice mail interface.

nnnn = valid PEN.

---

24. VOICE MAIL EXTENSION NUMBER = **nnnn**

Requests voice mail extension number.

nnnn = extension number.

---

25. CLASS OF SERVICE NUMBER (0-31) = **nn**

Requests class of service number for voice mail.

nn = class of service number (0-31).

---

26. INTERFACE TYPE (SLMA,SLA16) = **aaaaa**

Requests type of line interface. Procedure is completed.

aaaa = SLMA = Subscriber line module analog;
aaaaa = SLA16 = Subscriber line module analog - 16 line.

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DEL SPCLEQPT**

2.	EQUIPMENT TYPE = **aaaaaaaaa**
	Requests type of special equipment that is to be unassigned. If ZUNA, go to step 3; if RECANN, go to step 4; if PAGE, go to step 5; if DICT, go to step 6; if VOICEMAIL, go to step 7; for others, procedure is completed. — aaaaaaaaa = equipment type; MUSIC, ZUNA, RECANN, PAGE, DICT, CODE, XCVRTEST, or VOICEMAIL.

3.	UNA ZONE NUMBER (1-4) = **n**
	Requests UNA zone number to be deleted. Procedure is completed. — n = UNA zone numbers (1-4).

4.	RECORDER ANNOUNCER SERVICE MODE = **aaaaaaa**
	Requests recorded announcement to be deleted. Procedure is completed. — aaaaaaa = INTCPT, ACD1, ACD2, or ACDNITE.

5.	PAGING ZONE NUMBER (1-4) = **n**
	Requests paging zone number to be deleted. Procedure is completed. — n = paging zoning numbers (1-4).

6.	DICTATION PEN (WXYZ) = **nnnn**
	Requests PEN of Dictation Equipment to be deleted. Procedure is completed. — nnnn = valid PEN.

7.	VOICE MAIL PEN (WXYZ) = **nnnn**
	Requests voice mail PEN to be deleted. Procedure is completed. — nnnn = valid PEN.

1.	⟩ **CHA SPCLEQPT**

2.	EQUIPMENT TYPE = **aaaaaaaaa**
	Requests type of recorded announcement equipment for which data are to be changed. If RECANN, go to step 3; if DICT, go to step 6; if CODE, go to step 7; if PAGE, go to step 9; and if VOICEMAIL, go to step 11. — aaaaaaaaa = equipment type; RECANN, DICT, CODE, PAGE, or VOICEMAIL.
	NOTE: Refer to Table 509.1 for required interface.

3.	ANNOUNCER SERVICE TO BE CHANGED = **aaaaaaa**
	Requests announcer service to be changed. — aaaaaaa = INTCPT, ACD1, ACD2, or ACDNITE.

4.	NEW PLAY MODE (CONT,START,DEMAND) = **aaaaaa**
	Requests new play mode to be assigned to the recorded announcement equipment. Enter ⟨CR⟩ for no change. — aaaaaa = play mode; CONT, START, or DEMAND.

5.	NEW MESSAGE LENGTH IN SECONDS = **nn**
	Requests new message length. Procedure is completed. — nn = message length (1-60) seconds.

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments

STEP NO.	PROMPT/EXPLANATION

6. DICTATION DISCONNECT DIGIT (0-9) = **n**

Requests digit to be recognized as disconnect signal for the dictation   n = disconnect digit (0-9).
equipment. Enter ⟨CR⟩ for no change. Procedure is completed.

NOTE: The disconnect digit is only administered on "CHANGE" because it is a system-wide function.

7. ADDRESS SIGNALING (DP,DTMF) = **aaaa**

Requests address signaling type that applies ffor access to the code-   aaaa = DP = Dial Pulse;
calling equipment. Enter ⟨CR⟩ for no change.   aaaa = DTMF = Dual-Tone Multifrequency.

8. CODE CALL DIGIT COUNT (1-4) = **n**

Requests number of digits that can be sent to the code-calling equip-   n = number of digits (1-4).
ment. Enter ⟨CR⟩ for no change. Procedure is completed.

9. PAGING ZONE TO BE CHANGED (1-4) = **n**

Requests new paging zone.   n = paging zones (1-4).

10. GIVE BACKGROUND MUSIC ON IDLE? (Y/N)= **a**

Requests Music to be provided when paging equipment is idle. Proce-   a = Y = Yes; a = N = No.
dure is completed.

11. VOICE MAIL PEN (WXYZ) = **nnnn**

Requests PEN to be assigned to voice mail interface.   nnnn = valid PEN.

12. NEW VOICE MAIL EXTENSION NUMBER = **nnnn**

Requests new voice mail extension number.   nnnn = extension number.

13. NEW CLASS OF SERVICE (0-31) = **nn**

Requests new class of service number for voice mail. Procedure is   nn = class of service number (0-31).
completed.

Table 509.1   Interface Types Required for Special Equipment

SPECIAL EQUIPMENT TYPE	REQUIRED INTERFACE
CODE	CO Trunk
DICT	SLMA or SLA16 Lines
MUSIC	E&M Trunk, SLMA Line, or SLA16 Line
RECANN	E&M Trunk, SLMA Line, or SLA16 Line
VOICEMAIL	SLMA or SLA16 Lines
XCVRTEST	Data Test Transceiver
ZUNA	SLMA or SLA16 Lines

CUSTOMER MEMORY UPDATE PROCEDURE: SPCLEQPT
TITLE: Special Equipment Assignments

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ACD	Automatic Call Distribution
ACDREC	ACD Recorded Announcement
CONT	Continuous Play Mode
⟨CR⟩	Carriage Return (RETURN key)
DEMAND	Demand Play Mode
DCI	Data Communications Interface (Siemens)
DP	Dial Pulse
DTMF	Dual-Tone Multifrequency
IOP	Input/Output Port
INCPTREC	Intercept Recorded Announcement
MUSIC	Music-On-Hold Feature
PAGEn	Paging Zone - Zone 'n' (1-4)
PEN	Port Equipment Number
RECANN	Recorded Announcement
START	Start Mode (Party Connected at Start of Cycle)
UNA	Universal Night Answer
XCVRTEST	Transceiver Test
ZUNA	Zoned Universal Night Answer

CUSTOMER MEMORY UPDATE PROCEDURE: SPEEDGRP
TITLE: Speed Calling Group Assignments
Access Level: 2, 3, 4

SPEEDGRP

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DIS SPEEDGRP**

2.	SPEED CALLING GROUP NUMBER (1-4) = **n**
	Requests number of speed calling group for which data is to be displayed. Enter ⟨CR⟩ for all speed calling groups (1-4). n = group number (1-4).

1.	⟩ **CHA SPEEDGRP**

2.	SPEED CALLING GROUP NUMBER (1-4) = **n**
	Requests number of speed calling group for which data is to be changed. n = group number(1-4).

3.	GROUP MEMBER INDEX NUMBER (0-63) = **nn**
	Requests index number of speed call group to change. nn = index (0-63).

4.	DIGIT SEQUENCE (1-18 DIGITS) = **aa ... aa**
	Requests new digits to be entered in speed call list for this group. aa ... aa = digit sequence (18 digits maximum).

NOTE: The digits 0-9 may be used. The * may be used in the digit sequence to indicate a 3-second pause. The * may also be used as the last digit, to indicate that supplementary dialing is permitted.

If the digit sequence is longer than 16 digits, insert a space in the middle of the extended digit sequence. This space does not affect the outdialing of the digit sequence.

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments
Access Level: 2, 3, 4

STNASSN

Page 1 of 6

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS STNASSN

2.	STATION EXTENSION NUMBER=nnnn ... nnnn
	Requests station number(s) for which data is to be displayed. If range desired, enter two numbers separated by space. Enter ⟨CR⟩ to display all.	nnnn = station number(s) (0-9999).

1.	⟩ ADD STNASSN

2.	STATION EXTENSION NUMBER=nnnn
	Requests number of station to be added.	nnnn = station number (0-9999).

3.	TYPE=aaaaaaaaa
	Requests type of station to be added. If DPI or DPI2, go to step 8. If NONE, go to step 13. If DP16, DTMF16, ELEC16, or HOTLINE16, go to step 12. For others, go to step 4.	aaaaaaaaa = station type; see Table 201.1.
	NOTE: Button map 0 is the default assignment for DPIs. This map consists of two assigned buttons: Button Number 1 is assigned as STNDEF (for assignment of the Prime Line); Button Number 2 is assigned as XFER. Button map 0 may not be changed via the CMU procedures.	

4.	OFF-PREMISES STATION? (Y, N)=a
	Requests whether this is an Off-Premises Station (OPS). If Y (Yes), go to step 5. If N (No), go to step 12.	a = Y = Yes; a = N = No.

5.	IS OFF-PREMISES STN FOR T1? (Y, N)=a
	Requests whether the OPS is used for T1. If Y (Yes), go to step 6. If N (No), go to step 12.	a = Y = Yes; a = N = No.

6.	ENTER TMD NUMBER FOR STN (1-15)=nn
	Requests Trunk Module Digital (TMD) number associated with the OPS.	nn = TMD number (1-15).
	NOTE: You can have a total of 2 T1 spans with SATURN II and 15 with SATURN III.	

7.	SPECIAL ACCESS SERVICE? (Y, N)=a
	Requests whether or not a special access service is used. Verify with operating company the type of signaling used: either Foreign Exchange (FX) or Special Access Service (SP). If a = N (No), no special access service is required. If a = Y (Yes), a special access service is used. Go to step 12.	a = Y = Yes; a = N = No.
	NOTE: Entering ⟨CR⟩ is the same as entering N for No.	

8.	TERM PREF (NO,RING,INC)=aaaa

	Requests terminating line preference type for DPI.	aa = NO = NO preference;
		 aaaa = RING = RINGing line;
		 aaa = INC = INComing call.

	NOTE: Entering ⟨CR⟩ is the same as entering NO for NO preference.	

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments

STEP NO.	PROMPT/EXPLANATION

9. ORIG PREF (NO,PRIME,LAST,IDLE)=aaaaa

Requests originating line preference type for DPI.

    aa   = NO = no preference;
    aaaaa = PRIME = prime line;
    aaaa = LAST = last line used;
    aaaa = IDLE = idle line.

NOTE: Entering ⟨CR⟩ is the same as entering PRIME for prime line.

10. PRIVACY AUTOMATIC (ENA,DIS)=aaa

Requests whether the automatic privacy feature for the DPI is to be enabled or disabled.

    aaa = ENA = ENAble;
    aaa = DIS = DISable.

NOTE: Entering ⟨CR⟩ is the same as entering DIS for disable.

11. AUTO INCOMING CALL COMP (ENA, DIS) = aaa

Requests whether to enable or disable the AICC processing for calls completed to the station (DPIs and DYADs).

    aaa = ENA = ENAble;
    aaa = DIS = DISable.

12. PORT EQUIPMENT NUMBER (WXYZ)=nnnn

Requests PEN of station to be added.

    nnnn = valid PEN; see Table 201.2 for channel number PEN assignments.

NOTE: "WX" fields of PEN are the ADLTU shelf and Trunk Group numbers respectively.

13. CLASS OF SERVICE NUMBER (0-31)=nn

Requests COS of station to be added.

    nn = station COS (0-31).

14. TENANT GROUP NUMBER (0-254))=nnn

Requests Tenant Group Number

    nnn = tenant group (0-254).

15. VFAC REQUIRED ? (Y,N)= a

Requests the user to specify if VFAC verification should be applied to outgoing calls on this station.
If YES – VFAC verification is applied.
If NO – No verification required.

    a = Y = Yes;
    a = N = No.

16. CALL FWD TYPE (FIXED,SECR,NONE) =aaaaa

Requests Call Forwarding type. If Fixed, go to 17. If Secreterial, go to 18. If None, go to 19.

    aaaaa = FIXED = Fixed;
    aaaa = SECR = Secreterial;
    aaaa = NONE = None.

17. CALL FWD ON (BUSY, NOANS, BOTH) = aaaaa

Requests condition(s) when CFW will be implemented.

    aaaa = BUSY = Busy;
    aaaaa = NOANS = No Answer;
    aaaa = BOTH = Busy and No Answer.

18. CALL FWD DESTINATION EXT NUM = nnnn

Requests destination extension number for CFW.

    nnnn = extension number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments

STEP NO.	PROMPT/EXPLANATION

---

19. OFFHOOK ALARM EXT NUM =nnnn

Requests extension number for Off-Hook alarm.   nnnn = extension number (0-9999).

20. SMDR ACCOUNT NUMBER IDX (0-254)=nnn

Requests SMDR account index number. Enter (CR) for none.   nnn = SMDR index (0-254).

21. HOT LINE DEST TABLE INDEX (0-31)=nn

Requests Hotline destination index number. Enter (CR) for none.   nn = hotline destination index (0-31).

1.) **DEL STNASSN**

2. STATION EXTENSION NUMBER=nnnn

Requests station number to be deleted from data base.   nnnn = station number (0-9999).

NOTE: When deleting a station that is a Call Forwarding – (Secretarial or Off-Hook Alarm (OFFHOOK)) destination, the user needs to take one of two courses of action. Either:

1. Change the FWDTOSECR / OFFHOOK destination of the stations affected, or

• 2. Change the Class of Service (COS) of the affected stations to a COS which does not include the FWDTOSECR / OFFHOOK classmark.

1.) **CHA STNASSN**

2. OLD STATION EXTENSION NUMBER=nnnn

Requests station number for which data is to be changed.   nnnn = station number (0-9999).

3. STATION EXTENSION NUMBER=nnnn

Requests new station number for station being changed. Enter (CR)   nnnn = station number (0-9999).
for no change.

4. TYPE=aaaaaaaaa

Requests new type of station being changed. Enter (CR) for no   aaaaaaaaa = station type; see Table 201.1.
change.

NOTE: Type changes are possible only so long as the PCB type assigned to the PEN is not required to change. For example, DTMF to DP is allowed, but DPI (two channel DPI) to DPI2 (DPI II or DYAD) is not allowed (PCB change required).

5. CLASS OF SERVICE NUMBER (0-31)=nn

Requests new COS of station being changed. Enter (CR) for no   nn = station COS (0-31).
change.

6. NEW TENANT GROUP NUMBER (0-254)=nnn

Requests Tenant Group Number.   nnn = tenant group (0-254).

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments

Page 4 of 6

STEP NO.	PROMPT/EXPLANATION

7. NEW STATE OF VFAC (ACT,DIS) =aaa

Allows the user to modify the VFAC treatment for this station.

If ACT – VFAC verification is applied.
If DIS – No verification required.

aaa = ACT = ACTive;
aaa = DIS = DISable.

8. NEW DEST (FIXED,SECR,OFFHOOK,NONE) = aaaaaaa

Requests new destination for forwarded calls.

If Fixed go to 9.
If Secretarial/OffHook go to 10.
If None go to 11.

aaaaa = FIXED = Fixed;
aaaa = SECR = Secretarial;
aaaaaaa = OFFHOOK = Off-Hook Alarm;
aaaa = NONE = None.

9. CALL FWD ON (BUSY,NOANS,BOTH) = aaaaa

Requests new condition(s) when CFW will be implemented.

aaaa = BUSY = Busy;
aaaaa = NOANS = No Answer;
aaaa = BOTH = Busy and No Answer.

10. CALL FWD/OFFHK ALM EXT NUM =nnnn

Requests extension number for CFW or Off-Hook alarm.

nnnn = extension number (0-9999).

11. CHANGE SMDR ACCT NUM IDX? (Y,N)=a

Requests whether SMDR account number index is to be changed.
If Yes, go to step 12.
If No, go to step 13.

a = Y = Yes;
a = N = No.

12. SMDR ACCOUNT NUMBER IDX (0-254)=nnn

Requests new SMDR account index number; if none, depress RETURN key and continue.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

nnn = SMDR index (0-254).

13. CHGE HOT LINE DEST TBL IDX?(Y,N)=a

Requests whether Hotline destination table index is to be changed.
If Yes, go to step 14.
If No, go to step 15.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes;
a = N = No.

14. HOT LINE DEST TABLE INDEX (0-31)=nn

Requests new Hotline destination index number; if none, enter ⟨CR⟩ and continue.

nn = Hotline destination index (0-31).

15. TERM PREF (NO,RING,INC)=aaaa

Requests new terminating line preference type for DPI.
Enter ⟨CR⟩ for no change.

aa = NO = no preference;
aaaa = RING = ringing line;
aaa= INC = incoming call.

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments

STEP NO.	PROMPT/EXPLANATION

16. ORIG PREF (NO,PRIME,LAST,IDLE)=aaaaa

Requests new originating line preference type for DPI.
Enter ⟨CR⟩ for no change.
	aa = NO = no preference;
	aaaaa = PRIME = prime line;
	aaaa = LAST = last line used;
	aaaa = IDLE = idle line.

17. PRIVACY AUTOMATIC (ENA,DIS)=aaa

Requests whether the automatic privacy feature for the DPI is to be enabled or disabled. Enter ⟨CR⟩ for no change.	aaa = ENA = ENAble; aaa = DIS = DISable.

18. AUTO INCOMING CALL COMP (ENA, DIS) = aaa

Requests whether to change the AICC processing for the station. Enter ⟨CR⟩ for no change.	aaa = ENA = ENAble; aaa = DIS = DISable.

Table 201.1   Station Types

ALPHAMERIC INPUT	DESCRIPTION
NONE	No Physical Station Assigned to Extension Number (Does not apply to DYAD).
DP	Dial Pulse Station.
DP16	Dial Pulse Station - 16 Line
DPI	SIEMENS' DPI telephone (Two Channel).
DPI2	SIEMENS' DPI II or DYAD telephone (Single Channel).
DTMF	Dual-Tone Multifrequency Station (Mixed DTMF, DP).
DTMF16	Dual-Tone Multifrequency Station - 16 Line
ELEC	Electronic Hookflash Station (See Note).
ELEC16	Electronic Hookflash Station - 16 Line
HOTLINE	Hotline Station.
HOTLINE16	Hotline Station - 16 Line

Note: Not Applicable to Domestic (U.S.) Systems.

Table 201.2   "Y Z" Fields of PEN for T1 Spans

T1 Channel Number	Y Z Field of PEN	T1 Channel Number	Y Z Field of PEN
1	10	13	14
2	20	14	24
3	30	15	34
4	11	16	15
5	21	17	25
6	31	18	35
7	12	19	16
8	22	20	26
9	32	21	36
10	13	22	17
11	23	23	27
12	33	24	37

NOTE: For example, the PEN required to assign channel 5 to T1 span on ADLTU shelf 3, channel group 2 would be: 3221.

CUSTOMER MEMORY UPDATE PROCEDURE: STNASSN
TITLE: Station Assignments

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ACD	Automatic Call Distribution
AICC	Automatic Incoming Call Connection
CFW	Call Forwarding
COS	Class of Service
⟨CR⟩	Carriage Return (RETURN key)
DPI2	SIEMENS Single-Channel Digital Premium Instrument II
FX	Foreign Exchange
PEN	Station Port Equipment Number
SMDR	Station Message Detail Recording
SP	Special Access Service
TMD	Trunk Module – Digital
TYPE	New Station Type
VFAC	Verified and Forced Account Codes

STNDATA

CUSTOMER MEMORY UPDATE PROCEDURE: STNDATA
TITLE: Station Data (Display)
Access Level: 1, 2, 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS STNDATA

2.	(DATA,DSS,DIRTRK,TRKGRP,FIXCFWD) = aaaaaa

Requests type of station data to be displayed. If DATA, go to step 3; if DIRTRK, DSS, FIXCFWD, or TRKGRP, procedure is completed. aaaaaa = DATA, DSS, DIRTRK, FIXCFWD, or TRKGRP.

3.	(DCI,STN,MODEM,TRK) = aaaaa

Requests the type of data device to be displayed; procedure is completed. aaaaa = DCI, STN, MODEM, or TRK.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DIRTRK	Direct Trunk Select Data
TRKGRP	Trunk Group Select Data
DSS	Direct Station Selection Data
DATA	OC II Device Data
DCI	Data Communication Interface
FIXCFWD	Fixed Call Forwarding Destination Data
STN	Station with Data Capability
MODEM	Modem
TRK	Trunk with Data Capability

CUSTOMER MEMORY UPDATE PROCEDURE: STNEXT
TITLE: Station Extension Assignments

	STNEXT

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	> **DIS STNEXT**

2.	DISP PRIME OR ALIAS NUMBERS = **aaaaa**

Requests whether one or all "alias" extension number(s) is to be displayed for the specified station number. If PRIME specified, go to step 3; if ALIAS specified, go to step 4.   aaaaa = PRIME or ALIAS.

3.	ALIAS EXTENSION NUMBER = **nnnn**

Requests known alias extension number for which prime station number is to be displayed. Procedure is completed.   nnnn = station number (0-9999).

4.	PRIMARY EXTENSION NUMBER = **nnnn**

Requests primary extension number for station for which alias extension number(s) are to be displayed. Enter ⟨CR⟩ to display aliases for all stations. Procedure is completed.   nnnn = station number (0-9999).

1.	> **ADD STNEXT**

2.	PRIMARY EXTENSION NUMBER = **nnnn**

Requests primary station extension number for which alias data is to be added.   nnnn = station number (0-9999).

3.	NEW ALIAS EXTENSION NUMBER = **nnnn ... nnnn**

Requests new alias extension number(s) to be assigned to above primary extension number (4 maximum). If more than one, separate each by spaces. Procedure is completed.   nnnn = station number (0-9999).

NOTE: To assign more than four alias extension numbers, repeat the procedure.

1.	> **DEL STNEXT**

2.	DELETE 1 OR ALL ALIAS (ONE,ALL) = **aaa**

Requests whether one or all "alias" extension number(s) is (are) to be deleted for the specified station number. If ONE specified, go to step 3; if ALL specified, go to step 4.   aaa = ONE or ALL.

3.	ALIAS EXTENSION NUMBER = **nnnn**

Requests alias extension number which is to be deleted. Procedure is completed.   nnnn = station number (0-9999).

4.	PRIMARY EXTENSION NUMBER = **nnnn**

Requests primary extension number for which alias extension numbers are to be deleted. Procedure is completed.   nnnn = station number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: SYSOPT
TITLE: System Options
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ **DIS SYSOPT**

---

2. SYSTEM OPTION ASSIGNMENT = **aaaaaaaaa**

Requests which system option is to be displayed. Enter ⟨CR⟩ for all.   aaaaaaaaa = options; see Table 502.1.

---

1. ⟩ **CHA SYSOPT**

---

2. SYSTEM OPTION ASSIGNMENT = **aaaaaaaaa**

Requests which system option is to be changed. If FLAGS, go to step 3; if SNAP or SOAP, go to step 5; if OVDEST, go to step 8; if NIGHT, go to step 9; if OVCNT or CWLEDFLSH, go to step 10; if CONFTRKS or CONFCO, go to step 11; if SPCLACCT, go to step 12; if DUPLEX, go to step 13 (see Note 2); if SYSITE, go to step 16; if CASINTCP, go to step 17 (see Note 1).   aaaaaaaaa = options; see Table 502.1.

---

3. SYSTEM FLAG(S) = **a...a   a...a**

Requests which system flags are to be set. If more than one, separate each by spaces.   a...a = flag(s); see Table 502.2.

---

4. ENABLE SYSTEM FLAG? (Y,N) = **a**

Requests whether or not to enable system flag(s) specified in previous step; procedure is completed.   a = Y = Yes, a = N = No.

---

5. TYPE (STN,PILOT,EXTRN,ACD,NONE) = **aaaaa**

Requests type of destination for special night-answering or overflow position. If STN, PILOT or EXTRN, go to step 6; if ACD, go to step 7; if NONE, procedure is completed.   aaaaa = STN, PILOT, ACD, EXTRN or NONE; see Table 502.3.

---

6. EXTENSION NUMBER = **nnnn**

Requests destination station number (station external, or pilot number) for special procedure; procedure is completed.   nnnn = extension number (0-9999).

---

7. ACD GROUP NUMBER (0-63) = **nn**

Requests ACD group number for special answering procedure; procedure is completed.   nn = ACD group (0-63).

---

8. ATTENDANT OVERFLOW DEST TYPE = **aaaaa**

Requests which overflow procedure is to apply; procedure is completed.   aaaaa = SNAP, SOAP, ZUNA1, ZUNA2, ZUNA3, or ZUNA4; see Table 502.4.

---

9. NIGHT SVC SWITCH TMR (0-765 SEC) = **nnn**

Requests number of seconds in which attendant must answer call prior to console being placed in night answer mode automatically; procedure is completed.   nnn = number of seconds (0-765).

NOTE: The value stored internally by the system is a multiple of 3 seconds. For example, if the user assigns a time value of 31 seconds, the internal value stored is 10; therefore, the timer actually expires after 30 seconds.

CUSTOMER MEMORY UPDATE PROCEDURE: SYSOPT
TITLE: System Options

STEP NO.	PROMPT/EXPLANATION

---

10. | NUMBER OF CALLS (0-255) = **nnn**

If preceding input was OVCNT, requests number of calls required at console to invoke special overflow procedure; if preceding input was CWLEDFLSH, requests the number of all types of queued calls to the attendant pool to cause the calls-waiting LED to flash. Procedure is completed.

nnn = number of calls (0-255).

---

11. | TRKS ALLOWED IN CONFERENCE (0-6) = **n**

Requests number of trunks allowed in eight-party conference. If the previous input was CONFTRKS, denotes the number of trunks of any type; if the previous input was CONFCO, denotes number of central office trunks allowed; procedure is completed.

n = number of trunks (0-6).

---

12. | SPCL SMDR ACCT CODE LENGTH (1-11) = **nn**

Requests number of digits required for special account code; procedure is completed.

nn = number of digits (1-11).

---

13. | DUPLEX SWITCHOVER HOUR (0-23) = **nn**

Requests setting of hours for automatic system switchover (24-hour clock). Enter ⟨CR⟩ for no change.

(See Note 2.)

nn = hours (0-23).

---

14. | DUPLEX SWITCHOVER MINUTE (0-59) = **nn**

Requests setting of minutes for automatic system switchover. Enter ⟨CR⟩ for no change.

nn = minutes (0-59).

---

15. | AUTO SWITCHOVER STATUS (ON,OFF) = **aaa**

Requests whether system is to provide automatic switchover between processors. Procedure is completed. Enter ⟨CR⟩ for no change.

aaa = ON (Switchover will occur);
aaa = OFF (Switchover will not occur).

---

16. | SYSTEM SITE ID (1-16 CHARS) = **aa ... aa**

Requests site identification for this system. Enter up to 16 alphameric characters. Enter ⟨CR⟩ for no change. Procedure is completed.

aa ... aa = site ID characters.

---

17. | CAS INTERCEPT TRKGRP (0-31) = **nn**

Requests CAS trunk group over which CAS intercept calls are to be routed. Procedure is completed.

nn = CAS trunk group number (0-31).

CUSTOMER MEMORY UPDATE PROCEDURE: SYSOPT
TITLE: System Options

Table 502.1 System Options

ALPHAMERIC INPUT	DESCRIPTION
OVDEST	Attendant Overflow Destination
OVCNT	Attendant Overflow Threshold
CWLEDFLSH	Call Waiting LED Flash Threshold
CONFCO	Central Office Trunks Allowed in Conference
CASINTCP	Centralized Attendant Service Intercept (Note 1)
NIGHT	Night Service Switching
SNAP	Special Night Answering Position
SOAP	Special Overflow Answering Position
SPCLACCT	Special SMDR Account Code Length
DUPLEX	System Control Configuration (Note 2)
FLAGS	System Flags
SYSITE	System Site Identification
CONFTRKS	Trunks Allowed in Conference

NOTES: 1. The trunk group information is used for vacant number intercept calls at CAS branch SATURN systems which have the INCPTCASATT system option flag set.
2. Applicable to duplex systems only.

Table 502.2 System Flags

ALPHAMERIC INPUT	DESCRIPTION
ACDAUTO	ACD scan restarted Automatically
BSYATT	Alert Busy Attendant consoles if no idle console available
LKOUTSECR	Attendant Lockout with Secrecy
TIME24HR	Attendant console time is in 24-hour mode
CASBRANCH	CAS Branch
CASMAIN	CAS Main
TEXTCCITT	CCITT call progress Text messages (default is expanded text messages) (OC II only)
DMDRAUTO	Data Message Detail Recording restarted Automatically (OC II only)
TSTDIAG	Diagnostic Tests from any station (same as TSTAPP in COSASSN; allows TSTAPP from all stations in system)
CONSDX	Duplex state display in attendant Console clock field
INTERTNT	InterTenant calling
INCPTCASATT	Intercepted trunk calls routed to CAS Attendant
INCPTREC	Intercepted trunk calls routed to Recorded announcement (or reorder tone)
LCRDPLN	LCR access codes in Dialing Plan
LCRANAL	LCR digit Analysis used on non-LCR calls
MSMAIN	MS Main
MSLNUMTST	MSL Number Test
MSSAT	MS Satellite
SPARE	Reserved for future use
SMDRBSY	SMDR Busy calls allowed
SMDRAUTO	SMDR restarted Automatically
SERIAL	Serial calling for attendant consoles
HLDTOATT	Station Hold recalls routed To Attendant
SUPSTNRLS	Supervised Station Release
TCRTOATT	Toll Code Restricted calls routed To Attendant
TRAFAUTO	Traffic metering restarted Automatically
RCLTOATT	Transfer security Recalls routed To Attendant
NORCLANA	Unanswered calls at ANA station Not Recalled

CUSTOMER MEMORY UPDATE PROCEDURE: SYSOPT
TITLE: System Options   **Page 4 of 4**

Table 502.3   SNAP and SOAP Destination Options

ALPHAMERIC INPUT	DESCRIPTION
ACD	Destination is ACD Group "ACD#"
EXTRN	Destination is External Number
PILOT	Destination is Pilot Number "EXT#"
STN	Destination is Station Number "EXT#"
NONE	No destination specified

Table 502.4   Attendant Overflow Destination Options

ALPHAMERIC INPUT	DESCRIPTION
SNAP	Overrflow Calls Route to SNAP
SOAP	Overflow Calls Route to SOAP
ZUNA1	Overflow Calls Route to Zoned UNA, Zone 1
ZUNA2	Overflow Calls Route to Zoned UNA, Zone 2
ZUNA3	Overflow Calls Route to Zoned UNA, Zone 3
ZUNA4	Overflow Calls Route to Zoned UNA, Zone 4

MNEMONICS USED IN THIS CMU PROCEDURE:

ˌemonic	Definition
ACCT	Account
ACD	Automatic Call Distribution
ANA	Assigned Night Answer
AUTO	Automatic
CAS	Centralized Attendant Service
DMDR	Data Message Detail Recording
DEST	Attendant Overflow Destination
LCR	Least Cost Routing
LED	Light-Emitting Diode
MS	Main-Satellite
SMDR	Station Message Detail Recording
SPCL	Special
STN	Station
SVC	Service
TMR	Timer
UNA	Universal Night Answer

CUSTOMER MEMORY UPDATE PROCEDURE: SYSSIZE
TITLE: System Sizing Assignments
Access Level: 1 (For Display Purposes Only)

SYSSIZE

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION

1.	⟩ DIS SYSSIZE

NOTE: Displays number of entries in selected adjustable-length data tables.

Sizes of these tables can be adjusted by Siemens personnel only.

See Table 908.1 for definitions.

Table 908.1 System Sizing Parameters

ALPHAMERIC INPUT	DESCRIPTION
AUTHCODES	Number of Authorization Codes
CDRBS	Number of Call Detail Recording Buffers
ALTD/V	Number of Alternate Data/Voice Stations
DPLNS	Number of Dialing Plans in LCR
KSLINES	Number of Key System Lines in System
LCBS	Number of Least Cost Routing (LCR) Call Buffers
ODRS	Number of Outdialing Rules Used in LCR
OFHKQ	Size of Off-Hook Queue
ONHKQ	Size of On-Hook Queue
ROUTES	Number of Routes Used in LCR
SCCn	Number of Area Codes for each Specialized Common Carrier (n=0-2)
EXTONHKQ	Size of External On-Hook Queue

CUSTOMER MEMORY UPDATE PROCEDURE: SYSTIMER
TITLE: System Timers
Access Level: 3, 4

SYSTIMER

Page 1 of 3

STEP NO.	PROMPT/EXPLANATION

1.	> DIS SYSTIMER
2.	VARIABLE SYSTEM TIMER=a...a ... a...a
	Requests timer value(s) to be displayed (10 max.). If more than one, a...a = timer; see Table 506.1. separate each by spaces. Enter ⟨CR⟩ to display all.

1.	> CHA SYSTIMER
2.	VARIABLE SYSTEM TIMER=a...a
	Requests timer for which value is to be changed. a...a = timer; see Table 506.1.
3.	TIMER VALUE (0-65,535 TENTH SECS)=nnnnn
	Requests new timer setting. nnnnn = timer setting in 0.1 s (0-65,535).
	NOTE: Timer input values represent increments of 0.1 second (100 ms). Example: inputting "100" sets the timer at 10 sec.

Table 506.1 System Timers

ALPHAMERIC INPUT	DESCRIPTION
ANSUPV	Answer Supervision – Simulated for SMDR.
ATTHOLDRCL	Attendant Console Hold Recall.
TRKANSPRI	Attendant Console Trunk Answering Priority (see Note 1).
ATTGONE	Attendant Console Unstaffed (Automatic Night Switchover).
DATASPEED	Automatic Speed Selection Character Input (see Note 2).
OVRDAUTO	Break-In Delay for Automatic Override.
FWDNOANS	Call Forwarding – No Answer.
PARKRCL	Call Park Recall.
CALLWAITOFF	Call Waiting Tone Off Duration.
CALLWAITON	Call Waiting Tone On Duration.
CWTONE	Call Waiting Tone Repeat.
CBDELRNG	Callback Delay Ring (see Note 3).
CBACT	Callback Queue Activation Delay (Busy Tone Duration) (see Note 4).
CBRING	Callback Ringing Duration.
CAMPRCL	Camp-On Recall.
CODECALL	Code Call Apparatus Release Guard Time.
DATACONN	Data Connection Indication (see Note 5).
DATACODE	Data Terminal Code Change Timer (see Note 13) (OC II only).
DTDELAY	Dial Tone Delay Peg.
DIALTONE	Dial Tone Filter Timer for LCR DETECT2 Outdial Command.
DISADELAY	DISA Automatic Answer Delay (see Note 6).
LOWTONE	Extended Low Tone (Standby Queue Rejection) (see Note 7).
NOANSADV	Hunt Group No Answer Advance.
INTRDGT	Interdigit Timeout.
LCREXTCB	LCR External Callback Retry (see Note 8).
LCRONHKQ	LCR On-Hook Queue Delay (see Note 9).
LCRONHKQFIL	LCR On-Hook Queue Filter (see Note 10).
LCRONHKQTN	LCR On-Hook Queue Tone (see Note 11).
LCRRETRY	LCR Internal Callback Retry (see Note 12).
LOCKOUT	Line Lockout.
LPSDISC	Loop Start Disconnect.

SATURN EPABX
CMU Procedures

A30808-X5051-E120-3-B919
Issue 5, January 1986

CUSTOMER MEMORY UPDATE PROCEDURE: SYSTIMER
TITLE: System Timers

Page 2 of 3

Table 506.1   System Timers (Continued)

ALPHAMERIC INPUT	DESCRIPTION
MODEMRESP	Modem Response Failure (see Note 14) (OC II only).
NOANSRCL	No Answer Recall.
NOANSOUTG	No Answer Recall on Outgoing Calls (see Note 15).
IGNOREHF	Outgoing Call Ignore Hookflash (see Note 16).
RLTNOANS	Release Link Trunk No Answer Timer (Automatic CAS Out of Service).
ALARMDURATION	SDT Timed Reminder Duration.
SERIAL	Series Calling (see Note 17).
STANDBYQ	Standby Queue Activation (Low Tone Duration).
STNHOLDRCL	Station Hold Recall.
STNHFMIN	Station Hookflash Minimum.
STNONHK	Station On-Hook Detect.
T1WTNOALM	T1 Span Wait No Alarm Condition.
TRKDISC	Trunk Forced Disconnect (Unanswered ANA/ZUNA Calls).
TRKRLS	Trunk Release Failure Detection (Disconnect Errors).
SZACKFAIL	Trunk Reseize Failure (No Response from Trunk).
TRKTRBL	Trunk Trouble (Long Guard Timing).
VOICEREJ	Voice Call Reject.

NOTES:

1. TRKANSPRI – Attendant Console Trunk Answering Priority. This timer is set when an incoming trunk call is placed on the attendant incoming call queue and canceled when an attendant answers the call. If the timer expires, the priority of the call is raised from the level specified in the TRKGRP procedure to the highest priority level (priority 32).

2. DATASPEED – Automatic Speed Selection Character Input. This timer is set at the start of data call origination from a device configured for automatic speed selection; the timer is canceled when the user enters a ⟨CR⟩ character to allow the DCI to determine the data rate of the data terminal. If the timer expires, the data call is blocked. This timer applies to OC II only.

3. CBDELRNG – Callback Delay Ring. When station callback has been activated, and the desired station goes idle, this timer determines the delay before the station (which activated the callback) begins to ring. The purpose of the delay is to reduce the occurrence of callbacks aborted because the desired station goes off-hook again before the ringing station answers.

4. CBACT – Callback Queue Activation Delay. This timer is set at the start of busy tone, when a station dials a busy station or trunk group, and is eligible for trunk or station callback. The timer is canceled when the station goes on-hook. If the timer expires, low tone (callback eligibility tone) is initiated, and the STANDBYQ timer is set. If the originating station goes on-hook while low tone is present, the callback feature is activated.

5. DATACONN – Data Connection Indication. When a station with an associated data device (DCI) dials a digital data destination, this timer is started at the start of called party tone. If the station user goes on-hook while the tone is present, the data call is established between the dialed destination and the associated DCI. If the timer expires, the tone is terminated and the destination is released. This timer applies to OC II only.

6. DISADELAY – DISA Automatic Answer Delay. The timer is started when an incoming seizure is detected on a DISA trunk. When the timer expires, the trunk is answered and the call is given DISA dial tone.

7. LOWTONE – Extended Low Tone. This timer is started when the STANDBYQ timer expires, if the originating station is not eligible for standby queuing. The low tone (callback eligibility tone) remains present in this case. The timer is canceled, and the callback feature is activated, when the station goes on-hook. If the timer expires, the station is given reorder tone and the callback request is aborted.

8. LCREXTCB – LCR External Callback Retry. In an MS network, LCR at the Main PABX can provide on-hook trunk queuing service for users at Satellite PABXs. When a trunk becomes available at the Main, but the Satellite station is busy, the station is placed on the external callback retry list. This timer determines the period between LCR recalls (retries) to queued external stations.

CUSTOMER MEMORY UPDATE PROCEDURE: SYSTIMER
TITLE: System Timers

NOTES (Continued):

9. LCRONHKQ – LCR On-Hook Queue Delay. This timer determines how long an LCR user must wait, off-hook, for an idle trunk before the user is eligible for LCR on-hook queuing. Eligibility is signaled by the initiation of steady low tone.

10. LCRONHKQFIL – LCR On-Hook Queue Filter. If a station places an outgoing trunk call via LCR, encounters an all trunks busy condition, gets LCR on-hook queuing tone, and remains off-hook, LCR will continue to search for an idle trunk. This timer is started when an idle trunk is found and confirmation tone is started. If the caller goes onhook before this timer expires, the system assumes that the caller did not hear the confirmation tone, and will leave the on-hook queuing request active.

11. LCRONHKQTN – Least Cost Routing On-Hook Queue Tone. This timer is started when the LCR on-hook queue eligibility tone is initiated. The tone is terminated when the timer expires. The caller is eligible for on-hook trunk queuing any time after initiation of the tone.

12. LCRRETRY – Least Cost Routing Internal Callback Retry. This timer is started at the expiration of the callback ring duration timer (CBRING), when a station fails to answer an LCR trunk callback. When the timer expires, the station is placed back on the on-hook trunk queue and is rerung when a trunk becomes available.

13. DATACODE – Data Terminal Code Change. This timer is started when a data caller dials a code indicating a data speed, code, or stop bit change on the attached data terminal. The timer is canceled when the caller strikes a character to indicate that the change to the data terminal has been made. If the timer expires, the data call is blocked. This timer applies to OC II only.

14. MODEMRESP – Modem Response Failure. This timer is started when a pooled modem is given a command to perform some operation, and is canceled when the system detects that the operation is complete. If the timer expires, a modem failure is declared and the modem is released. This timer applies to OC II only.

15. NOANSOUTG – No Answer Recall on Outgoing Calls. On a trunk-to-trunk connection, if the outgoing trunk has answer supervision (TIE or MSL), and the trunk group miscellaneous flag NOANSRCLO is set, then the no answer recall feature is provided. The timer is started when the outgoing tie line call is originated and is canceled when answer supervision is returned from the far end. If the timer expires, the outgoing trunk is dropped and the call is routed to the attendant or to the night answering arrangement.

16. IGNOREHF – Outgoing Call Ignore Hookflash. This timer applies only to outgoing trunk calls. The timer is started when the last digit is outpulsed on CO trunks. The calling station will not be allowed to hook-flash until the timer expires, to reduce the possibility of the caller accidentally putting an unanswered trunk on consultation.

17. SERIAL – Series Calling. This timer applies to two-party trunk calls locked on an attendant hold key, if the system option flag SERIAL is enabled. When the internal station party hangs up, the trunk is left on hold, and this timer is started. The timer is canceled when the trunk party releases. If the timer expires, the system assumes that the trunk party wishes to speak to the attendant or another station party, and routes the call to the attendant recall queue for further processing.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ANA	Assigned Night Answer
CAS	Centralized Attendant Service
CO	Central Office
⟨CR⟩	Carriage Return (RETURN key)
DCI	Data Communications Interface
DISA	Direct Inward System Access
LCR	Least Cost Routing
MS	Main-Satellite
PABX	Private Automatic Branch Exchange
SDT	Siemens Digital Telephone
SMDR	Station Message Detail Recording
ZUNA	Zoned Universal Night Answer

CUSTOMER MEMORY UPDATE PROCEDURE: TCRLIST
TITLE: Toll Code Restriction Lists
Access Level: 3, 4

TCRLIST

Page 1 of 3

STEP NO.	PROMPT/EXPLANATION

1. ⟩ **DIS TCRLIST**

2. TOLL CODE REST LIST NUM (0-19) = **nn**

Requests restriction list number for which data is to be displayed.   nn = list number (0-19); see Table 112.1.

---

1. ⟩ **ADD TCRLIST**

2. ASSIGN TYPE OR LIST? (T,L) = **a**

Requests whether addition is to be a restriction type or list. If T   a = T = Type, a = L = List.
(Type), go to step 3; if L (List), go to step 5.

3. ALLOCATE LIST LENGTHS (1-256) = **nnn ... nnn**

Requests number of entries to be in each restriction list.   nnn = number of entries (1-256).

NOTE: All 20 list lengths must be specified; separate each by spaces. A maximum of 256 entries may be allo-
cated over the 8-digit lists (lists 0 through 15), plus a maximum of 32 entries allocated over the 15-digit
lists (lists 16 through 19). If no initial change is indicated, the default values are 16 entries per 8-digit
list plus 8 entries per 15-digit list.

4. ALLOW OR DENY LIST? (A, D) = **a ... a**

Requests whether each list specified is to allow or deny access.   a = A = Allow, a = D = Deny.
Procedure is completed.

NOTE: All 20 list types (allow or deny) must be specified; separate each by spaces.

5. TOLL CODE REST LIST NUM (0-19) = **nn**

Requests restriction list number for which data is to be added.   nn = list number (0-19); see Table 112.1.

6. DIGIT COUNT (1-15) = **nn**

Requests number of digits to be contained in the restriction lists.   nn = digit count (1-15).

NOTE: Maximum digit count for 8-digit lists (0-15) is 8.

7. RESTRICTION LIST DIGITS (0-9, A) = **n ... n**

Requests actual digits to be stored in restriction list(s).   n ... n = restriction list digits; enter
each digit, 0-9, or A for
"don't care."

NOTE: Enter digits as a continuous string; do not separate by spaces.

---

1. ⟩ **DEL TCRLIST**

2. TOLL CODE REST LIST NUM (0-19) = **nn**

Requests restriction list number for which data is to be deleted.   nn = list number (0-19); see Table 112.1.

CUSTOMER MEMORY UPDATE PROCEDURE: TCRLIST
TITLE: Toll Code Restriction List

Page 2 of 3

STEP NO.	PROMPT/EXPLANATION

3.	DELETE ALL MEMBERS? (Y, N) = **a**

Requests whether all members of restriction list are to be deleted.   a = Y = Yes, a = N = No.
If N (No), go to step 4; if Y (Yes), procedure is completed.

4.	OLD DIGIT COUNT (1-15) = **nn**

Requests digit count of list to be deleted.   nn = digit count (1-15).

NOTE: Maximum digit count for 8-digit lists (0-15) is 8.

5.	OLD REST LIST DIGITS (0-9, A) = **n . . . n**

Requests actual digits contained in specified list that are to be   n . . . n = restriction list digits; enter each
deleted.   digit, 0-9, or A for "don't care".

NOTE: Enter digits as a continuous string; do not separate by spaces.

1.	⟩ **CHA TCRLIST**

2.	TOLL CODE REST LIST NUM (0-19)=. **nn**

Requests restriction list number for which data is to be changed.   nn = list number (0-19); see Table 112.1.

3.	CHANGE TYPE OR NUMBER? (T, N) = **a**

Requests whether type of list or number of entries to be changed.   a = T = Type, a = N = Number.
If T (Type), go to step 4; if N (Number), go to step 5.

4.	ALLOW OR DENY LIST? (A, D) = **a**

Requests whether list to be changed is to allow or deny access;   a = A = Allow, a = D = Deny.
procedure is completed.

5.	OLD DIGIT COUNT (1-15) = **nn**

Requests number of digits in list prior to change.   nn = digit count (1-15).

NOTE: Maximum digit count for 8-digit lists (0-15) is 8.

6.	OLD REST LIST DIGITS (0-9, A) = **n . . . n**

Requests which digits in list are to be changed.   n . . . n = restriction list digits; enter each
  digit, 0-9, or A for "don't care".

NOTE: Enter digits as a continuous string; do not separate by spaces.

7.	DIGIT COUNT (1-15) = **nn**

Requests number of digits in list after change.   nn = digit count (1-15).

NOTE: Maximum digit count for 8-digit lists (0-15) is 8.

CUSTOMER MEMORY UPDATE PROCEDURE: TCRLIST
TITLE: Toll Code Restriction Lists

Page 3 of 3

STEP NO.	PROMPT/EXPLANATION

8.	RESTRICTION LIST DIGITS (0-9, A) = n . . . n

Requests new digits to be placed in restriction list.　　　n . . . n = restriction list digits; enter each digit, 0-9, or A for "don't care".

NOTE: Enter digits as a continuous string; do not separate by spaces.

Table 112.1　Restriction Lists

ALPHANUMERIC INPUT	DESCRIPTION	NUMBER OF ENTRIES
0	Eight-Digit Restriction List 0	
1	Eight-Digit Restriction List 1	
2	Eight-Digit Restriction List 2	
3	Eight-Digit Restriction List 3	
4	Eight-Digit Restriction List 4	
5	Eight-Digit Restriction List 5	
6	Eight-Digit Restriction List 6	
7	Eight-Digit Restriction List 7	256 ENTRIES TOTAL
8	Eight-Digit Restriction List 8	
9	Eight-Digit Restriction List 9	
10	Eight-Digit Restriction List 10	
11	Eight-Digit Restriction List 11	
12	Eight-Digit Restriction List 12	
13	Eight-Digit Restriction List 13	
14	Eight-Digit Restriction List 14	
15	Eight-Digit Restriction List 15	
16	Fifteen-Digit Restriction List 0	
17	Fifteen-Digit Restriction List 1	32 ENTRIES TOTAL
18	Fifteen-Digit Restriction List 2	
19	Fifteen-Digit Restriction List 3	

CUSTOMER MEMORY UPDATE PROCEDURE: TENANT
TITLE: Tenant Assignments
Access Level: 2

	TENANT

Page 1 of 3

STEP NO.	PROMPT/EXPLANATION

---

1. **⟩ DIS TENANT**

---

2. **TGRP, CGRP, = aaaa**

   Requests the type of group information to be displayed.

   TGRP – Tenant Group information; Go to step 3.
   CGRP – Console Group information; Go to step 5.

   aaaa = TGRP = Tenant Group;
   aaaa = CGRP = Console Group.

---

3. **ENTER TENANT GROUP NUMBER = nnn**

   Requests the number of the Tenant Group for display.

   nnn = tenant group number (0-254).

---

4. **DISPLAY ALL MEMBERS? (Y/N) = a**

   Requests whether or not to display all members of the Tenant Group.

   a = Y = Yes; a = N = No.

   If YES – all members assigned to the Tenant Group are dis-
   played along with other group information.
   If NO – no members are displayed, only other group infor-
   mation.

---

5. **ENTER CONSOLE GROUP NUMBER (0-12) = n**

   Requests the number of the Console Group for display.

   n = console group number (0-12).

---

6. **DISPLAY ALL MEMBERS? (Y/N) = a**

   Requests whether or not to display all members of the Console Group.

   a = Y = Yes; a = N = No.

   If YES – all members assigned to the Console Group displayed
   along with other group information.
   If NO – no members are displayed, only other group infor-
   mation.

---

1. **⟩ ADD TENANT**

---

2. **CONSOLE/TENANT GROUP? CGRP/TGRP = aaaa**

   Requests the user to specify the type of Group being added.

   If CGRP – add Console Group; Go to step 3.
   If TGRP – add Tenant Group; Go to step 6.

   aaaa = CGRP = Console Group;
   aaaa = TGRP = Tenant Group.

---

3. **ENTER NIGHT ANSWER EXTENSION = nnnn**

   Requests the extension number of the Night Answer Position.

   nnnn = extension number (1-4 characters).

---

4. **ENTER CONSOLE GROUP NUMBER (0-12) = nn**

   Requests the number assigned to this Console Group.

   nn = console group number (0-12).

---

5. **ENTER TENANT GROUP NUMBER (0-254) = nnn**

   Requests the number assigned to this Tenant Group.

   nnn = tenant group number (0-254).

CUSTOMER MEMORY UPDATE PROCEDURE: TENANT
TITLE: Tenant Assignments

STEP NO.	PROMPT/EXPLANATION

---

6. ENTER CONSOLE ID STRING = aa...aa

Requests Tenant Console display ID text string.   aa...aa = any combination of alphanumeric characters (8 maximum).

7. GROUP SERVED BY A CONSOLE Y/N = a

Requests whether Tenant Group is to be served by a console.   a = Y = Yes; a = N = No.

Y – YES – The Tenant Group will be served by a console; Go to Step 11.
N – NO – There will be no console serving the Tenant Group. The console functions must be dedicated to other facilities.

8. ENTER CONSOLE GROUP NUMBER (0-12) = nn

Requests the number of the Console Group serving this Tenant Group.   nn = console group (0-12).

1.) DEL TENANT

2. DELETE CONSOLE OR TENANT GROUP = aaaa

Requests the type of Group to be deleted.   aaaa = TGRP = Tenant Group;
   aaaa = CGRP = Console Group.

If TGRP – Tenant Group; Go to step 3.
If CGRP – Console Group; Go to step 4.

3. ENTER TNT GROUP NUMBER (1-254) = nnn

Requests the user to specify the number of the Tenant Group being deleted.   nnn = tenant group number (1-254).

4. ENTER CNSL GROUP NUMBER (1-12) = nn

Requests the user to specify the number of the Console Group being deleted.   nn = console group number (1-12).

1.) CHA TENANT

2. CHANGE CONSOLE OR TENANT GROUP = aaaa

Requests the user to specify whether a Console or Tenant Group is to be changed: aaaa = TGRP = Tenant Group;
   aaaa = CGRP = Console Group.

If TGRP – add Tenant Group; Go to step 3.
If CGRP – add Console Group; Go to step 8.

3. ENTER TENANT GROUP NUMBER = nnn

Requests the new number assigned to this Tenant Group.   nnn = tenant group number (0-254).

CUSTOMER MEMORY UPDATE PROCEDURE: TENANT
TITLE: Tenant Assignments

STEP NO.	PROMPT/EXPLANATION	
4.	ENTER CONSOLE ID STRING = aa...aa	
	Requests the new Tenant LDN Console display ID Text String.	aa...aa = any combination of alphanumeric characters (8 maximum).
5.	ENTER CONSOLE GROUP NUMBER (0-12) = nn	
	Requests the number of the Console Group serving this Tenant Group.	nn = console group number ((0-12).
6.	ENTER NIGHT ANSWER EXTENSION = nnnn	
	Requests the user to optionally specify the new extension number of the new Night Answer Position for this Console Group.	nnnn = extension number (1-4 characters).
7.	ENTER CONSOLE GROUP NUMBER (0-12) = nn	
	Requests the number of the new Console Group serving this Tenant Group.	nn = console group number (0-12).

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
CONS	Console
CGRP	Console Group
STN	Station
TGRP	Tenant Group
TRK	Trunk

```
                                                    ┌─────────────────────┐
                                                    │      TIMEDATE       │
                                                    └─────────────────────┘
```

CUSTOMER MEMORY UPDATE PROCEDURE: TIMEDATE
TITLE: System Time/Date Change
Access Level: 2, 3, 4

STEP NO.	PROMPT/EXPLANATION

1.	⟩ **DIS TIMEDATE**

1.	⟩ **CHA TIMEDATE**

2.   ENTER TIME (HH MM SS) = **hh mm ss**

Requests that correct time be entered: hours, minutes, and seconds.
Separate each by spaces.

hh = hours (0-23),
mm = minutes (0-59),
ss = seconds (0-59).

NOTE: Set time in terms of a 24-hour clock (e.g., 1 PM = 1300).

3.   ENTER DATE (YY MM DD) = **yy mm dd**

Requests that correct date be entered: year, month, and date. Separate each by spaces.

yy = year (00-99),
mm = month (1-12),
dd = date (1-31).

NOTE: Time and date is set at the instant that the system responds to the depression of the RETURN key by the user.

TRACE

CUSTOMER MEMORY UPDATE PROCEDURE: TRACE
TITLE: Call Trace Data
Access Level: 4

STEP NO.	PROMPT/EXPLANATION

1.) BEG TRACE

Requests that the printout of collected data begin.

2. LINES TO SEARCH FOR (HEX) = (@@@@)

Requests the LST(s) stored in the trace buffer which is (are) to be printed. If no value is entered, the trace buffer entries are not screened for matching LST(s). If more than one, separate each by spaces.

NOTE: Line numbers are in hexadecimal format.

aaaaaaaa = lines (5 max.).

1.) DIS TRACE

NOTE: Analysis of this output requires the assistance of Siemens personnel.

2. DISPLAY TYPE (STATE,DATA) = aaaaaaaa ... aaaaaaaa

If STATE (of TRACE On/Off/Reset) is entered procedure is completed. If DATA is entered go to Step 3.

aaaaaaaa = State or Data

3. LINES TO SEARCH FOR (HEX) = (@@@@)

Requests the LST(s) stored in the trace buffer which is (are) to be displayed. If no value is entered, the trace buffer entries are not screened for matching LST(s). If more than one, separate each by spaces.

aaaaaaaa = lines (5 max.).

4. NUM OF ENTRIES TO PRINT (1-500) = nnn

Requests the number of entries to print matching the Lines to Search For and the Process IDs to Search For, if any. If no value entered, all matching entries in the trace buffer are printed.

nnn = number of entries (1-500).

5. PROCESS IDS TO SEARCH FOR = aaaaaaaa ... aaaaaaaa

Requests the identification on numbers of the resident process(es) creating entries in the trace buffer which are to be printed. If no value is entered, the trace buffer entries are not screened for matching process IDs. If more than one, separate by spaces.

aaaaaaaa = process IDs (3 max.).

1.) CHA TRACE

NOTE: The trace procedure is used for software and hardware troubleshooting. It should be activated **only** after consultation with Siemens personnel.

2 TRACE STATE (ON/OFF/RESET) = aaaaa

Requests whether the trace routine is to be turned on or off, or reset. If trace is turned on, the trace buffer is cleared and the trace begins based on the following data. If the trace is turned off, the trace buffer is not cleared. Resetting the trace buffer causes the trace buffer to be cleared, but the status remains the same (either on or off).

aaaaa = ON, OFF, or RESET.

CUSTOMER MEMORY UPDATE PROCEDURE: TRACE
TI:⋯ Call Trace Data

STEP NO.	PROMPT/EXPLANATION

3.	DATA TO BE COLLECTED (0-5)=n ... n
	Requests which trace routines are to be activated (3 max.). If none are specified, the following are turned on: n = data; see Table 602.1. 4 – Input Signaling, and 5 – Call Processing. If more than one, separate each by spaces.
4	LINES TO TRAP (⟨CR⟩ = ALL LINES) = aaaaaaaa
	Requests which lines to trap. If more than one, separate each by spaces. aaaaaaaa = lines (2 max)

Table 602.1 Call Trace Data

ALPHAMERIC INPUT	DESCRIPTION
0	Unused.
1	All events.
2	Unused.
3	Digit collection routines.
4	Input signaling.
5	Call processing.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
LST	Line Status Table Index

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFASSN
TITLE: Traffic Metering Assignments and Control
Access Level: 3, 4

| TRAFASSN |

Page 1 of 2

STEP NO.	PROMPT/EXPLANATION

| 1. | > DIS TRAFASSN |

NOTE: This procedure is used to display a demand or immediate traffic data report.

Traffic data collection must currently be active, in either the manual or automatic report mode. If the system is operating in the manual mode, the data counts are zeroed at the end of the report. If the system is operating in the automatic mode, data is not affected by the display operation.

| 2. | ALIGN PAPER TO TOP OF PAGE = |

Requests that user align paper prior to system outputting data. Enter
⟨CR⟩ to printout traffic data.

NOTE: The report output is directed to the assigned traffic output device, regardless of the device on which the DISPLAY action is entered.

| 1. | > BEG TRAFASSN |

NOTE: This action is used to activate traffic data collection.

| 2. | AUTOMATIC OR MANUAL MODE? (A/M) = a |

Requests whether traffic metering reporting is to be set for the automatic or manual mode of operation. If Automatic, go to step 3; if Manual, go to step 4.   a = A = automatic; a = M = manual.

NOTE: If the "A" mode is selected, reports will be periodically printed; if the "M" mode is selected, data collection is initiated but reports must be manually initiated with the DISPLAY action.

| 3. | REPORT TIME PERIOD (15-1440) = nnnn |

Requests time period between automatic outputting of traffic metering reports.   nnnn = time period (15-1440 minutes).

NOTE: Entering ⟨CR⟩ automatically selects 15 minutes.

| 4. | OUTPUT DEVICE (TTY0-3) = aaan |

Requests output port to which the traffic metering reports are to be routed.   aaan = output device option; see Table 801.1.

| 5. | ALIGN PAPER TO TOP OF PAGE = |

Requests that user align paper prior to system outputting data. Enter
⟨CR⟩ to print out traffic data.

NOTE: To permanently enable traffic reports, set the output device and report period using either the BEGIN or the CHANGE actions. Set the TRAFAUTO System Option flag, and do a SAVE CUSTDATA operation.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFASSN
TITLE: Traffic Metering Assignments and Control

Page 2 of 2

STEP NO.	PROMPT/EXPLANATION

---

1. > **CHA TRAFASSN**

NOTE: This procedure is used to set the data reporting parameters used by the automatic metering restart feature.

This action is allowed only when metering is inactive (stopped).

2. REPORT TIME PERIOD (15-1440) = **nnnn**

Requests time period between automatic outputting of traffic meter- nnnn = time period (15-1440 minutes)
ing reports. Enter ⟨CR⟩ for no change.

3. OUTPUT DEVICE (TTY0-3) = **aaan**

Requests output port to which the traffic metering reports are to aaan = output device option; see Table
be routed. Enter ⟨CR⟩ for no change. 801.1.

---

1. > **STO TRAFASSN**

NOTE: This action is used to terminate metering data collection and stop any scheduled metering reporting.

Table 801.1 Traffic Metering Output Options

ALPHAMERIC INPUT	DESCRIPTION
TTY0	RS-232-C Service Port 0
TTY1	RS-232-C Service Port 1
TTY2	RS-232-C Service Port 2
TTY3	RS-232-C Service Port 3

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

1. > DIS TRAFCTR

2. COUNTER CATEGORY = **aaaa**

Requests which category of traffic counter data is to be displayed.   aaaa = Counter category; see Table 802.1.

---

1. > CHA TRAFCTR

2. CHANGE MODE (DISABLE ENABLE) = **aaaaaaa**

Requests whether traffic counter category selected is to be enabled   aaaaaaa = DISABLE or ENABLE.
(data is printed out on traffic reports) or disabled (data is not printed
out on traffic reports).

3. COUNTER CATEGORY = **aaaa**

Requests the category for which traffic counter data is to be ena-   aaaa = Counter category (one only); see
bled or disabled. If ALL,, procedure is completed (see NOTE); if ATTP,   Table 802.1.
go to step 4; if ATTQ, go to step 5; if ATTU, go to step 6; if DGPP,
go to step 7; if HCP, go to step 22; if HCU, go to step 23; if DGPU,
go to step 8; if LCRP, go to step 9; if LCRU, go to step 10; if MDPP,
go to step 11; if MDPU, go to step 12; if SYDP, go to step 13; if SYDU,
go to step 14; if SYSP, go to step 15; if SYSU, go to step 16; if TAA,
go to step 17; if TKDP, go to step 18; if TKDU, go to step 19; if TRKP,
go to step 20; if TRKU, go to step 21; if ACDP, go to step 24; if ACDU,
procedure is completed (there is only one counter per ACD group).

NOTE: If DISABLE was entered in step 2 and ALL is entered in this step, all traffic counter categories will be disa-
bled. If ENABLE was entered in step 2 and ALL is entered in this step, all traffic counter categories except
TAA will be enabled

4. ATT POSITION PEG COUNTERS = **aaaaaaaa ... aaaaaaaa**

Requests which counters applicable to attendant position peg counts   aaaaaaaa = Attendant position peg coun-
are to be enabled or disabled (40 max.). If more than one, separate   ters; see Table 802.2.
each by spaces. Procedure is completed.

5. ATT QUEUE USAGE COUNTERS = **aaa ... aaa**

Requests which counters applicable to attendant queue usage are   aaa = Attendant queue usage; see Table
to be enabled or disabled (4 max.). If more than one, separate each   802.3.
by spaces. Procedure is completed.

6. ATT POSITION USAGE COUNTERS = **aaaaaaaa ... aaaaaaaa**

Requests which counters applicable to attendant position usage are   aaaaaaaaa = Attendant position usage
to be enabled or disabled (3 max.). If more than one, separate each   counters; see Table 802.4.
by spaces. Procedure is completed.

7. DATA ACD GRP PEG COUNTERS = **aaaaaa ... aaaaaa**

Requests which counters applicable to ACD groups are to be enabled   aaaaaa = data ACD group peg counters;
or disabled (3 max.). If more than one, separate each by spaces.   see Table 802.5.
Procedure is completed.

NOTE: If one or more of these counters are enabled after the Trunk Activity Audit (TAA) counter, the trunk activity
report will not be generated. If the TAA counter is enabled after any of these counters, these counters and
the Data ACD Usage counters will be disabled. The system will not allow both functions to be active simul-
taneously.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
T¹⁻˙ ⁵: Traffic Metering Counter Assignments   Page 2 of 12

STEP NO.	PROMPT/EXPLANATION

---

8. | DATA ACD USAGE COUNTERS = aaaaaaa ... aaaaaaa

Requests which counters applicable to data groups are to be enabled or disabled (3 max.). If more than one, separate each by spaces. See Note in step 7. Procedure is completed.

aaaaaaa = data ACD usage counters; see Table 802.6.

---

9. | LCR PEG COUNTERS = aaaa ... aaaa

Requests which counters applicable to LCR peg counts are to be enabled or disabled (2 max.). If more than one, separate each by spaces. Procedure is completed.

aaaa = LCR peg counters; see Table 802.7.

---

10. | LCR USAGE COUNTERS = aaaaa ... aaaaa

Requests which counters applicable to LCR usage are to be enabled or disabled (2 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaa = LCR usage counters; see Table 802.8.

---

11. | MODEM POOL PEG COUNTERS = aaaaaaa ... aaaaaaa

Requests which counters applicable to modem pools are to be enabled or disabled (3 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaa = modem pool peg counters; see Table 802.9.

---

12. | MODEM POOL USAGE COUNTERS = aaaa ... aaaa

Requests which counters applicable to modem pool usage are to be enabled or disabled (2 max.). If more than one, separate each by spaces. Procedure is completed.

aaaa = modem pool usage counters; see Table 802.10.

---

13. | SYSTEM DATA PEG COUNTERS = aaaaaaaaa ... aaaaaaaaa

Requests which counters applicable to system data are to be enabled or disabled (19 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaaa = system data counters; see Table 802.11.

---

14. | SYSTEM DATA USAGE COUNTERS = aaaaaaaa

Requests which counters applicable to system data usage are to be enabled or disabled (1 max.). Procedure is completed.

aaaaaaaa = system data usage counters; see Table 802.12.

---

15. | SYSTEM PEG COUNTERS = aaaaaaaaaaa ... aaaaaaaaaaa

Requests which counters applicable to system peg counts are to be enabled or disabled (139 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaaaaa = system peg counters; see Table 802.13.

---

16. | SYSTEM USAGE COUNTERS = aaaaaaa ... aaaaaaa

Requests which counters applicable to system usage are to be enabled or disabled (11 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaa = system usage counters; see Table 802.14.

---

17. | TRUNK GROUP TO BE AUDITED = nn

Requests trunk group for which individual trunk statistics are to be accumulated. Procedure is completed.

nn = trunk group number (0-31).

NOTE: If the Trunk Activity Audit (TAA) counter is enabled, the Data ACD Group Peg counters and the Data ACD Usage counters will automatically be disabled. Conversely, if one or more of the Data ACD Group Peg counters or Data ACD Usage counters are enabled after the TAA counter, the TAA counter will be disabled and the TAA report will not be generated. The system will not allow both functions to be active simultaneously.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

STEP NO.	PROMPT/EXPLANATION

18. | TRUNK GROUP DATA PEG COUNTERS = aaaaaaaa ... aaaaaaaa

Requests which counters applicable to trunk group data calls are to be enabled or disabled (4 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaa = trunk group data peg counters; see Table 802.15.

19. | TRUNK GROUP DATA USAGE COUNTERS = aaaaaaa ... aaaaaaa

Requests which counters applicable to trunk group data usage are to be enabled or disabled (3 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaa = trunk group data usage counters; see Table 802.16.

20. | TRUNK GROUP PEG COUNTERS = aaaaaaaaa ... aaaaaaaaa

Requests which counters applicable to trunk group peg counts are to be enabled or disabled (7 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaaa = system peg counters; see Table 802.17.

21. | TRUNK GROUP USAGE COUNTERS = aaaaaaa ... aaaaaaa

Requests which counters applicable to trunk group usage are to be enabled or disabled (4 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaa = trunk group usage counters; see Table 802.18.

22. | HEALTH CARE CALL TYPE PEGS = aaaaaaaaaa ... aaaaaaaaaa

Requests which counters applicable to Health Care peg counts are to be enabled or disabled (17 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaaaa = health care peg counters; see Table 802.19.

23. | HEALTH CARE CALL TYPE USAGES = aaaaaaaaaa ... aaaaaaaaaa

Requests which counters applicable to Health Care usage are to be enabled or disabled (17 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaaaaaa = health care usage counters; see Table 802.20.

24. | ACD PEG COUNTERS = aaaaaa ... aaaaaa

Requests which counters applicable to automatic call distribution are to be enabled or disabled (2 max.). If more than one, separate each by spaces. Procedure is completed.

aaaaaa = automatic call distribution peg counters; see Table 802.21.

Table 802.1   Traffic Counter Categories

ALPHAMERIC INPUT	COUNTER DESRIPTION
ALL	All Traffic Counter Categories. (See NOTE 1)
ATTP	Attendant Position Peg Counters.
ATTQ	Attendant Position Queue Usage Counters.
ATTU	Attendant Position Usage Counters.
ACDP	Automatic Call Distribution Peg Counters.
ACDU	Automatic Call Distribution Queue Usage Counters.
DGPP	Data ACD Group Peg Counters. (See NOTE 2)
DGPU	Data ACD Usage Counters. (See NOTE 2)
HCP	Health Care Peg Counters.
HCU	Health Care Usage Counters.
LCRP	Least Cost Routing Peg Counters.
LCRU	Least Cost Routing Usage Counters.
MDPP	Modem Pool Peg Counters.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Page 4 of 12

Table 802.1   Traffic Counter Categories (Continued)

ALPHAMERIC INPUT	COUNTER DESRIPTION
MDPU	Modem Pool Usage Counters.
SYDP	System Data Peg Counters.
SYDU	System Data Usage Counters.
SYSP	System Peg Counters.
SYSU	System Usage Counters.
TAA	Trunk Activity Audit (Individual Trunk Data Collection). (See NOTE 2)
TKDP	Trunk Group Data Peg Counters.
TKDU	Trunk Group Data Usage Counters.
TRKP	Trunk Group Peg Counters.
TRKU	Trunk Group Usage Counters.

NOTES: 1. When ALL is entered following a DISABLE entry, all counter categories are disabled. When ALL is entered follow-ing an ENABLE entry, all counter categories except TAA are enabled.

2. If the Trunk Activity Audit (TAA) report is enabled last, the Data ACD Group Peg and/or Usage counters will auto-matically be disabled. Conversely, if one or more of the Data ACD counters are enabled last, the TAA report coun-ters will be disabled and the TAA report will not be generated. The system will not allow both functions to be active simultaneously.

Table 802.2   Attendant Position Peg Counters: ATTP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: One counter of each type for each attendant console (total of 480 counters)	
ALL	All Position Peg Counters.
SLMBACT	Attendant-Activated Slumber Time.
SMDRACT	Attendant-Activated SMDR.
TTLOOP	Attendant Call Hold.
ATTCONF	Attendant Conference.
SLMBCAN	Attendant-Deactivated Slumber Time.
SMDRCAN	Attendant-Deactivated SMDR.
ACCT	Attendant-Entered SMDR Account Code.
ATTXTND	Attendant Extended Call.
INCQANS	Attendant Incoming Queue Answer.
OPRQANS	Attendant Operator Queue Answer.
ATTORIG	Attendant-Originated Calls.
OVERFLOW	Attendant Overflow Activate.
OVERRIDE	Attendant Override.
PAGE	Attendant Paging.
PAGE1	Attendant Paging – Zone 1.
PAGE2	Attendant Paging – Zone 2.
PAGE3	Attendant Paging – Zone 3.
PAGE4	Attendant Paging – Zone 4.
RCLQANS	Attendant Recall Queue Answer.
TIME	Attendant Time Display.
TRKFLASH	Attendant Trunk Flash.
FWDALL	Call Forwarding – All Calls: Attendant-Activated.
FWDBUSY	Call Forwarding – Busy: Attendant-Activated.
FWDCAN	Call Forwarding – Cancel by Attendant.
FWDNOANS	Call Forwarding – No Answer: Attendant-Activated.
FWDTOSECR	Call Forwarding - Secretarial: Attendant-Activated.
PARK	Call Park – Attendant.
CWLEDFLASH	Calls Waiting LED Flashing.
CASQANS	CAS Call Queue Answers.
EXCCAS	CAS Calls Excluded.
EXCINC	Incoming Calls Excluded.
MSGSET	Message Waiting Activate by Attendant.
MSGCAN	Message Waiting Cancel by Attendant.

Table 802.2   Attendant Position Peg Counters: ATTP (Continued)

ALPHAMERIC INPUT	COUNTER DESRIPTION
MINALM EXCOPR EXCRCL SERIAL VOLUME	Minor Alarm Identification. Operator Calls Excluded. Recalls Excluded. Serial Call. Volume Control – Attendant.
CMU MSGGRAM	RESERVED FOR FUTURE USE RESERVED FOR FUTURE USE

Table 802.3   Attendant Position Queue Usage Counters: ATTQ

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Four counters per system.	
ALL INC OPR RCL CAS	All Attendant Position Queue Usage Counters. Attendant Incoming Queue. Attendant Operator Queue. Attendant Recall Queue. Centralized Attendant Service Queue.

Table 802.4   Attendant Position Usage Counters: ATTU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Three counters per attendant console.	
ALL BSY CWLEDFLSH CWLEDON	All Attendant Position Usage Counters. Attendant Position Busy. Call Waiting LED Flashing. Call Waiting LED on.

Table 802.5   Data ACD Group Peg Counters: DGPP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Three counters per ACD group.	
ALL ORIG TERM SBYQ	All Data ACD Group Peg Counters. Data Call Originations from ACD Group. Data Calls Answered by Data Line Group. Standby Queuing Activations on Incoming Calls.

Table 802.6   Data ACD Group Usage Counters: DGPU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Three counters per ACD group.	
ALL TERM ORIG STYQ	All Data ACD Group Usage Counters. Incoming Data Call Usage. Outgoing Data Call Usage. Standby Queuing Holding Time (Data Calls).

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.7   LCR Peg Counters: LCRP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Two counters per LCR route.	
ALL	All LCR Peg Counters.
RACC	Route Accessed.
RADV	Route Advanced.

Table 802.8   LCR Usage Counters: LCRU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Two counters per trunk group.	
ALL	All LCR Usage Counters.
CBQ	Trunk Callback Queue Usage.
SBYQ	Trunk Standby Queue Usage.

Table 802.9   Modem Pool Peg Counters: MDPP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Three counters per modem pool.	
ALL	All Modem Pool Peg Counters.
BSY	All Modems Busy Count.
SBYQ	Number of Standby Queuing Activations.
ATTEMPT	Pooled Modem Allocation Attempts.

Table 802.10   Modem Pool Usage Counters: MDPU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Two counters per modem pool.	
ALL	All Modem Pool Usage Counters.
GRP	Group Modem Pool Usage.
CRPQ	Group Standby Queue Holding Time.

Table 802.11   System Data Peg Counters: SYDP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Nineteen counters per system.	
ALL	All System Data Peg Counters.
FAIL	Data Call Ineffective Attempts.
ATTEMPT	Data Call Originations.
LASTNO	Data Call Redials Using Last Number Redial Feature.
SBYQTERM	Data Call Standby Queuing Activations (Destination Device Busy).
SBYQTOTAL	Data Call Standby Queuing Activations (Includes standby queuing for data destinations and modems).
CODEMANIND	Data Code Manual Protocol Selections.
DATAOFF	DCI Disable (DCI ENABLE Switch Off).
DATAON	DCI Enable (DCI ENABLE Switch On).
CMPLT	Internal Data Call Completions.
BSY	Internal Data Call to Busy Destination.
NOANS	Internal Data Call to No Answer.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.11   System Data Peg Counters: SYDP (Continued)

ALPHAMERIC INPUT	COUNTER DESRIPTION
ECHOON	Local Echo Activations (DCI Local Echo Switch).
ECHOOFF	Local Echo Deactivations (DCI Local Echo Switch).
SPDMANIND	Manual Data Speed Selections.
MPMANIND	Manual Pooled Modem Selections.
AUTOANS	Number of Activations of DCI Auto Answer Switch.
MANANS	Number of Deactivations of DCI Auto Answer Switch.
SWVOICE	Switch from Data to Voice Using DCI Data Call Switch.
SWDATA	Switch from Voice to Data Using DCI Data Call Switch.

Table 802.12   System Data Usage Counters: SYDU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: One counter per system.	
DATALINE	Total Data Call Holding Time.

Table 802.13   System Peg Counters: SYSP

ALPHAMERIC INPUT	COUNTER DESCRIPTION	ATT	DPI	STA	TRKS
ALL	All System Peg Counters.				
SYATTP	All System Attendant Peg Counters.				
SYDPIP	All System DPI Peg Counters.				
SYSTNP	All System Station Peg Counters.				
SYTRKP	All System Trunk Peg Counters.				
ACD	ACD Hunt Group Access.			X	
ADDON	Add-On Conference.			X	
ATTCONFBSY	Attendant Conference Busy.	X			
ATTRTRV	Attendant Held Call Retrieve.			X	
ATTINCAB	Attendant Incoming Call Abandon.	X			
ATTINCQ	Attendant Incoming Call Queued.	X			
ATTOPRAB	Attendant Operator Call Abandon.	X			
ATTOPRQ	Attendant Operator Call Queued.	X			
ATTOVFL	Attendant Overflow Facility.	X			
ATTQJUMP	Attendant Queue Jump.	X			
ATTRCLAB	Attendant Recall Abandon.	X			
ATTRCLQ	Attendant Recall Queued.	X			
AUTH	Authorization Code.			X	
ICOMAUTOB	Automatic Intercom Pickup Button.		X		
ATTCASAB	CAS Attendant Queue Abandoned Calls.	X			
ATTCASQ	CAS Attendant Queue Entries.	X			
RLTQJUMP	CAS Call Priority Upgrade Due to Attendant Delay.	X			
CALLCOSTB	Call Cost DPI Button Activations.		X		
FWDALLB	Call Forwarding – All Calls Button.		X		
FWDALL	Call Forwarding – All Calls.			X	
FWDBUSYB	Call Forwarding – Busy Button.		X		
FWDBUSY	Call Forwarding – Busy.			X	
FWDCAN	Call Forwarding – Cancel.			X	
FWDNOANSB	Call Forwarding – No Answer Button.		X		
FWDNOANS	Call Forwarding – No Answer.			X	
FWDRTN	Call Forwarding – Return.			X	
FWDTOB	Call Forwarding – Secretary Button.		X		
SPLITB	Call Hold – Flip-Flop Button.		X		
SPLIT	Call Hold – Flip-Flop.			X	

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.13   System Peg Counters: SYSP (Continued)

ALPHAMERIC INPUT	COUNTER DESCRIPTION	ATT	DPI	STA	TRKS
CALLHOLD	Call Hold.			X	
PARKB	Call Park Button.		X		
PARK	Call Park.			X	
PICKUPDIRB	Call Pickup – Directed Button.		X		
PUDIR	Call Pickup – Directed.			X	
PICKUPGRPB	Call Pickup – Group Button.		X		
PUGRP	Call Pickup – Group.			X	
PRIVB	Call Privacy Button.		X		
CALLTIMERB	Call Timer Button.		X		
XFER	Call Transfer.			X	
STNCW	Call Waiting – Station.			X	
CWREJ	Call Waiting Reject Button.		X		
STNCMPLT	Call to Station Complete.			X	
CBQCAN	Callback Queuing Cancel.			X	
NOANS	Calls Abandoned – No Answer.			X	
STNBSY	Calls to Station Busy.			X	
CODECALL	Code Call Accessed.			X	
CNSTBY	Conference Station Busy.			X	
CNHLDB	Consultation Hold Button.		X		
CONSHOLD	Consultation Hold.			X	
DIDAB	DID Calls Abandon.				X
DIDCMPLT	DID Calls Complete.				X
DIDBSY	DID Calls to Busy Destination.				X
DISAAB	DISA Calls Abandon.				X
DISABSY	DISA Calls Busy Condition.				X
?ACMPLT	DISA Calls Completed.				X
CT	DPI-Entered SMDR Account Code.		X		
DTMFATMPT	DTMF Receiver Allocation Attempts.			X	
DTMFBSY	DTMF Receivers All Busy.			X	
DTDELAY	Dial Tone Delay.			X	
DICTB	Dictation Button.		X		
DICT	Dictation.			X	
DSSB	Direct Station Selection Button.		X		
DIRTKB	Direct Trunk Pickup Button.		X		
DNDB	Do Not Disturb Button.		X		
HOLDEXCLB	Exclusive Hold Button.		X		
ICOMDIALB	Executive Intercom Pickup Button.		X		
OVERRIDEB	Executive Override Button.		X		
FWDFORCEB	Forced Call Forwarding Button.		X		
CNF4PBSY	Four-Port Conference Busy.			X	
HANDSFREEB	Hands-Free Operation Button.		X		
IUSEB	I-Use Button.		X		
RLTINCQ	Incoming Trunk Calls Routed to the CAS Attendant via RLT.				X
FAIL	Internal Call Failures.			X	
ATTEMPT	Internal Origination Attempt.			X	
LCRA	LCR Attendants.	X			
LCRD	LCR DISA Trunks.				X
LCRS	LCR Stations.			X	
LCRT	LCR Tie Trunks.				X
LASTNOB	Last Number Redial Button.		X		
LINEXTB	Line Extension Pickup Button.		X		
LOCKOUT	Line Lockout.			X	
HOLDB	Manual Hold Button.		X		
ICOMMANB	Manual Intercom Pickup Button.		X		
BUZZB	Manual Signaling Button.		X		
'EETMEB	Meet-Me Conference Button.		X		

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.13   System Peg Counters: SYSP (Continued)

ALPHAMERIC INPUT	COUNTER DESCRIPTION	COUNTER TYPE			
		ATT	DPI	STA	TRKS
MMCONF	Meet-Me Conference.			X	
MSGSETB	Message Waiting Activate Button.		X		
MSGSET	Message Waiting Activate.			X	
MSGCB	Message Waiting Automatic Callback.			X	
MSGCALLBKB	Message Waiting Callback Button.		X		
MSGCANCELB	Message Waiting Cancel Button.		X		
MSGCAN	Message Waiting Cancellation.			X	
OFFHKALM	Off-Hook Alarm Calls.			X	
OHKDL	On-Hook Dialing Button.		X		
RLTOPRQ	Operator Calls Routed to CAS Attendant via RLT.				X
PAGE1	Paging – Zone 1.			X	
PAGE2	Paging – Zone 2.			X	
PAGE3	Paging – Zone 3.			X	
PAGE4	Paging – Zone 4.			X	
PAGEB	Paging Button.		X		
PAGE	Paging.			X	
PILOT	Pilot Number Access.			X	
TALKB	Push-to-Talk Button.		X		
RLTRCLQ	Recalls Routed to CAS Attendant via RLT.				X
RLSB	Release Button.		X		
RINGEROFFB	Ringer Cutoff Button.		X		
SAVENOB	Saved Number Redial Button.		X		
SLUMBER	Slumber Time Calls Diverted.			X	
NOCDRB	SMDR Emergency Call Buffer Attempts Ending in Failure.			X	
SPEEDGRP1B	Speed Calling – Group 1 Button.		X		
SCG1	Speed Calling – Group 1.			X	
SPEEDGRP2B	Speed Calling – Group 2 Button.		X		
SCG2	Speed Calling – Group 2.			X	
SPEEDGRP3B	Speed Calling – Group 3 Button.		X		
SCG3	Speed Calling – Group 3.			X	
SPEEDGRP4B	Speed Calling – Group 4 Button.		X		
SCG4	Speed Calling – Group 4.			X	
SPEEDINDB	Speed Calling – Individual Button.		X		
SCIND	Speed Calling – Individual.			X	
STNCBQ	Station Camp-On with Callback.			X	
STNCONFRMV	Station Conference Member Removal.			X	
STNCONF	Station-Controlled Conference.			X	
DIALB	Station-Defined Direct Dial Button.		X		
TIEAB	Tie Trunk Calls Abandoned.				X
TIECMPLT	Tie Trunk Calls Complete.				X
TIEBSY	Tie Trunk Calls to Busy Destination.				X
TIMEB	Time Display Button.		X		
SETALARMB	Timed Reminder Button.		X		
XFEROB	Transfer to Attendant Button.		X		
TRKCBQ	Trunk Callback Queuing.				X
TRKORIGB	Trunk Group (Originating) Pickup Button.		X		
TRKTERMB	Trunk Group (Terminating) Pickup Button.		X		
TRKSBYQ	Trunk Standby Queuing.				X
UNAB	Universal Night Answer Button.		X		
VCDIALB	Voice Calling – Dial Pickup Button.		X		
VCDSSB	Voice Call DSS Pickup Button.		X		
VOICEREJB	Voice Call Rejected Button.		X		
ZUNA	Zoned Universal Night Answer.			X	
MSGGRAMB	RESERVED FOR FUTURE USE.		X		

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Page 10 of 12

Table 802.14   System Usage Counters: SYSU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Eleven counters per system.	
ALL	All System Usage Counters.
ATTCONF	Attendant Conference.
CONF4P	Conference – 4-Port.
DICT	Dictation.
DTMF	DTMF Receivers.
MMCONF	Meet-Me Conference.
PAGE1	Paging – Zone 1.
PAGE2	Paging – Zone 2.
PAGE3	Paging – Zone 3.
PAGE4	Paging – Zone 4.
STNBSY	Stations Busy.
STNCONF	Station-Controlled Conference.

Table 802.15   Trunk Group Data Peg Counters: TKDP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Four counters per trunk group.	
ALL	All Trunk Group Data Peg Counters.
SBYQ	Data Call Standby Queuing Activations.
BSY	Data Calls Encountering All Trunks Busy.
'NC	Incoming Data Calls.
)UT	Outgoing Data Calls.

Table 802.16   Trunk Group Data Usage Counters: TKDU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Three counters per trunk group.	
ALL	All Trunk Group Data Usage Counters.
SBYQ	Data Call Standby Queuing Holding Time.
INC	Incoming Data Call Usage.
OUT	Outgoing Data Call Usage.

Table 802.17   Trunk Group Peg Counters: TRKP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Seven counters per trunk group.	
ALL	All Trunk Group Peg Counters.
BSY	All Trunks in Group Busy.
INC	Incoming Trunk Call.
OUT	Outgoing Trunk Call.
CBQ	Trunk Callback Queuing.
PCKORG	Trunk Group Pickup Button Originating.
PCKTRM	Trunk Group Pickup Button Terminating.
SBYQ	Trunk Standby Queuing.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.18   Trunk Group Usage Counters: TRKU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Four counters per trunk group.	
ALL INC OUT CBQ SBYQ	All Trunk Group Usage Counters. Incoming Trunk. Outgoing Trunk. Trunk Callback Queuing. Trunk Standby Queuing.

Table 802.19   Health Care Peg Counters: HCP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
ALL	All Health Care Peg Counters.
ATTTOATT	Attendant to Attendant.
ATTTONPAT	Attendant to Nonpatient.
ATTTOPAT	Attendant to Patient.
ATTTOTRK	Attendant to Trunk.
NPATTOATT	Nonpatient to Attendant.
NPATTONPAT	Nonpatient to Nonpatient.
NPATTOPAT	Nonpatient to Patient.
NPATTOTRK	Nonpatient to Trunk.
PATTOATT	Patient to Attendant.
PATTONPAT	Patient to Nonpatient.
PATTOPAT	Patient to Patient.
PATTOTRK	Patient to Trunk.
TOTAL	Total of all Health Care Peg Counters.
TRKTOATT	Trunk to Attendant.
TRKTONPAT	Trunk to Nonpatient.
TRKTOPAT	Trunk to Patient.
TRKTOTRK	Trunk to Trunk.

Table 802.20   Health Care Usage Counters: HCU

ALPHAMERIC INPUT	COUNTER DESCRIPTION
ALL	All Health Care Usage Counters.
ATTTOATT	Attendant to Attendant.
ATTTONPAT	Attendant to Nonpatient.
ATTTOPAT	Attendant to Patient.
ATTTOTRK	Attendant to Trunk.
NPATTOATT	Nonpatient to Attendant.
NPATTONPAT	Nonpatient to Nonpatient.
NPATTOPAT	Nonpatient to Patient.
NPATTOTRK	Nonpatient to Trunk.
PATTOATT	Patient to Attendant
PATTONPAT	Patient to Nonpatient.
PATTOPAT	Patient to Patient.
PATTOTRK	Patient to Trunk.
TOTAL	Total of all Health Care Usage Counters.
TRKTOATT	Trunk to Attendant.
TRKTONPAT	Trunk to Nonpatient.
TRKTOPAT	Trunk to Patient.
TRKTOTRK	Trunk to Trunk.

CUSTOMER MEMORY UPDATE PROCEDURE: TRAFCTR
TITLE: Traffic Metering Counter Assignments

Table 802.21   Automatic Call Distribution Peg Counters: ACDP

ALPHAMERIC INPUT	COUNTER DESCRIPTION
NOTE: Two counters per system.	
ALL QUEUE ACCESS	All ACD Peg Counters. ACD Calls Queued. ACD Group Access.

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ACD	Automatic Call Distribution
DCI	Data Communications Interface
DID	Direct Inward Dialing
DISA	Direct Inward System Access
DTMF	Dual-Tone Multifrequency
LCR	Least Cost Routing
LED	Light-Emitting Diode
RLT	Release Link Trunk
SMDR	Station Message Detail Recording

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments
Access Level: 3, 4

TRKASSN

Page 1 of 6

STEP NO.	PROMPT/EXPLANATION

---

1. ⟩ DIS TRKASSN

2. PORT EQUIPMENT NUMBER (WXYZ) = nnnn

Requests PEN for which trunk assignment is to be displayed. nnnn = valid PEN.

NOTE: See Table 101.1 for the PEN "YZ" fields for T1 trunks.

---

1. ⟩ ADD TRKASSN

2. PORT EQUIPMENT NUMBER (WXYZ) = nnnn

Requests PEN for which trunk assignment is to be added. nnnn = valid PEN.

NOTE: See Table 101.1 for the PEN "YZ" fields for T1 trunks.

3. TRUNK GROUP NUMBER (0-31) = nn

Requests trunk group number to which trunk is to be assigned. nn = trunk group number (0-31).

4. TENANT GROUP NUMBER (0-254) = nnn

Requests tenant group number to which trunk is being assigned. nnn = tenant group number (0-254).
Default is Tenant Group 0.

5. VFAC REQUIRED FOR INCOMING (Y/N) = a

Requests the user to specify if VFAC verification should be applied a = Y = Yes; a = N = No.
to incoming calls on this trunk.

If Y (Yes) – VFAC verification is applied.
If N (No) – No verification required.

6. VFAC REQUIRED FOR OUTGOING (Y/N) = a

Requests the user to specify if VFAC verification should be applied a = Y = Yes; a = N = No.
to outgoing calls on this trunk.

If Y (Yes) – VFAC verification is applied.
If N (No) – No verification required.

7. IS THIS A T1 TRUNK? (Y, N) = a

Requests whether trunk is used with T1. a = Y = Yes; a = N = No.

If Y (Yes), go to step 8.
If N (No), go to step 10.

NOTE: Entering ⟩CR⟩ is the same as entering N for No.

8. T1 SPAN NUMBER (1-15) = nn

Requests T1 span number for trunk. nn = T1 span number (1-15).

NOTE: You can have a total of 2 T1 spans with SATURN II and 15 with SATURN III.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments

STEP NO.	PROMPT/EXPLANATION

9. SPECIAL ACCESS SERVICE (Y, N) = a

Requests whether or not a special access service is used. Verify with operating company the type of signaling used: either Foreign Exchange (FX) or Special Access Office Channel Unit (SP).
If Y (Yes), a special access service is used.
If N (No), no special access service is required.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes; a = N = No.

10. TRUNK TYPE = aaaaa

Requests trunk type of trunk be added.
If DID, procedure is completed. If MSL, go to step 11. If RLT, go to step 12. If GS, LS,NTT, or EM, go to step 13.

aaaaa = trunk type; see Table 101.2.

11. ASSIGN MSL NUMBER (0-255) = nnn

Requests assignment of MSL number to this trunk. Go to step 16.

nnn = MSL number (0-255).

12. OUTGOING OR INCOMING? (O,I) = a

Requests whether this RLT is an incoming or outgoing CAS trunk.
If O (Outgoing), procedure is completed. If I (Incoming), go to step 16.

a = O (Outgoing); or
a = I (Incoming).

NOTE: The RLT should be marked outgoing if used by this EPABX to reach the CAS attendant pool at the CAS Main EPABX. The RLT should be marked incoming if this EPABX is the Main PABX serving the centralized attendants.

13. ONE-WAY OUTGOING TRUNK? (Y,N) = a

Requests whether trunk is outgoing only, rather than two-way.
If Y (Yes), procedure is completed.
If N (No), go to step 14.

a = Y = Yes; a = N = No.

NOTE: Entering ⟨CR⟩ is the same as entering N for NO.

14. IS THIS A DIT? (N/Y) = a

Requests whether this is a Dedicated Incoming Trunk (DIT).
If Y (Yes), go to step 15. If N (No), go to step 16.

a = Y = Yes; a = N = No.

NOTE: Enter "Y" only if the trunk group incoming usage is DIT. Entering ⟨CR⟩ is the same as entering N for NO.

15. DIT EXTENSION NUMBER = nnnn

Requests extension number of DIT.

nnnn = extension number (0-9999).

16. NIGHT ANSWER TYPE = aaaaa

Requests night answer type assigned to this trunk. If NONE, SNAP, or ZUNA1 through ZUNA4, procedure is completed. If ANA, go to step 17.

aaaaa = night answer type; see Table 101.3.

17. ANA EXTENSION NUMBER = nnnn

Requests extension number of ANA station.

nnnn = extension number (0-9999).

NOTE: If the trunk group incoming usage is DIT, DPIGRP, or DPITRK, the night answer destination is used only in a no answer recall situation, when all consoles are in the night mode.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments

STEP NO.	PROMPT/EXPLANATION

1. > DEL TRKASSN

2. PORT EQUIPMENT NUMBER (WXYZ) = nnnn

Requests PEN for which trunk assignment is to be deleted.   nnnn = valid PEN.
NOTES: 1. Trunk must be out of service before deleting.
       2. See Table 101.1 for the PEN "YZ" fields for T1 trunks.

---

1. > CHA TRKASSN

2. PORT EQUIPMENT NUMBER (WXYZ) = nnnn

Requests PEN for which trunk assignment is to be changed.   nnnn = valid PEN.
NOTE: See Table 101.1 for the PEN "YZ" fields for T1 trunks.

3. CHANGE VFAC REQUIREMENTS? (N/Y) = a

Requests whether VFAC requirements are to be changed.   a = Y = Yes; a = N = No.
If YES, go to step 4.
If NO, go to step 6.

4. VFAC REQUIRED INCOMING (N/Y) = a

Allows the user to modify the VFAC requirement on incoming calls   a = Y = Yes, a = N = No.
for this trunk.
If YES – VFAC verification is applied.
If NO – No verification required.

5. VFAC REQUIRED OUTGOING (N/Y) = a

Allows the user to modify the VFAC requirement on outgoing calls   a = Y = Yes, a = N = No.
for this trunk. Procedure is completed.
If YES – VFAC verification is applied.
If NO – No verification required.

6. CHANGE T1 SIGNALING MODE? (Y, N) = a

Requests whether T1 signaling mode assigned is to be changed.   a = Y = Yes, a = N = No.
If Y (Yes), go to step 7. If N (No), go to step 9.
NOTE: Entering ⟨CR⟩ is the same as entering N for No.

7. SIGNALING MODE (NONE, A, AB, ABCD) = aaaa

Requests whether signaling mode is to be NONE, A, AB, or ABCD.   aaaa = signaling mode
                                                                  (NONE, A, AB, or ABCD).

8. DIAL PULSE BIT(S) (A, B, AB)? = aaaa

Requests whether dial pulse bits are to be A, B, AB, or NONE.   aaaa = dial pulse bits required
Procedure is completed.   (A, B, AB, or NONE).
Enter ⟨CR⟩ for none.

9. CHANGE MSL NUMBER? (N/Y) = a

Requests whether MSL number assignment is to be changed.   a = Y = Yes, a = N = No.
If Y (Yes), go to step 10. If N (No), go to step 11.
Enter ⟨CR⟩ for no change.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments

STEP NO.	PROMPT/EXPLANATION

10. MSL NUMBER (0-255) = **nnn**

Requests assignment of MSL number to this trunk. Procedure is completed.
nnn = MSL number (0-255).

11. CHANGE DIT EXTENSION NUM? (N/Y) = **a**

Requests whether DIT assignment is to be changed.   a = Y = Yes; a = N = No.

If Y (Yes), go to step 12. If N (No), go to step 13.

Enter ⟨CR⟩ for no change.

12. DIT EXTENSION NUMBER = **nnnn**

Requests DIT extension number to which trunk is to be assigned.   nnnn = extension number (0-9999).
Procedure is completed.

13. CHANGE NIGHT ANSWER TYPE? (N/Y) = **a**

Requests whether night answer type for trunk is to be changed.   a = Y = Yes; a = N = No.

If Y (Yes), go to step 11. If N (No), procedure is completed.

Enter ⟨CR⟩ for no change.

14. NIGHT ANSWER TYPE = **aaaaa**

Requests night answer type to be assigned to this trunk. If ANA, go to step 15. If NONE, SNAP, or ZUNA1 through ZUNA4, procedure is completed.
aaaaa = night answer type;
see Table 101.3.

15. ANA EXTENSION NUMBER = **nnnn**

Requests ANA extension number which this trunk is assigned.   nnnn = extension number (0-9999).
Procedure is completed.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments

Table 101.1 "Y Z" Fields of PEN for T1 Spans

T1 Channel Number	Y Z Field of PEN	T1 Channel Number	Y Z Field of PEN
1	10	13	14
2	20	14	24
3	30	15	34
4	11	16	15
5	21	17	25
6	31	18	35
7	12	19	16
8	22	20	26
9	32	21	36
10	13	22	17
11	23	23	27
12	33	24	37

Example: The PEN required to assign channel 5 to T1 span on ADLTU shelf 3, channel group 2 would be: 3221.

Table 101.2 Trunk Types

ALPHAMERIC INPUT	DESCRIPTION
DID	Direct Inward Dial
EM	E & M
GS	Ground Start
LS	Loop Start
MSL	Main-Satellite Link (for MS applications)
RLT	Release Link Trunk (for CAS applications)
T1	T1 Line
NTT	
TBLLC	
TMBC	} NOT APPLICABLE TO DOMESTIC (U.S.) SYSTEMS
TMBE	

CUSTOMER MEMORY UPDATE PROCEDURE: TRKASSN
TITLE: Trunk Assignments

Table 101.3   Night Answer Types

ALPHAMERIC INPUT	DESCRIPTION
NONE	Not assigned to night answer
ANA	Assigned Night Answer
SNAP	Special Night Answer Position
ZUNA1	Zoned Universal Night Answer – Zone 1
ZUNA2	Zoned Universal Night Answer – Zone 2
ZUNA3	Zoned Universal Night Answer – Zone 3
ZUNA4	Zoned Universal Night Answer – Zone 4

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
CAS	Centralized Attendant Service
DIT	Dedicated Incoming Trunk
FX	Foreign Exchange
MS	Main/Satellite Service
PEN	Port Equipment Number
SP	Special Access Office Channel Unit

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments
Access Level: 3, 4

STEP NO.	PROMPT/EXPLANATION

1.) DIS TRKGRP

2. DISPLAY TRUNK GROUP(S) (0-31) = nn nn

Requests trunk group(s) for which data is to be displayed. If range is desired, enter two trunk group numbers separated by a space. Enter ⟨CR⟩ to display all.
nn = trunk group number(s) (0-31).

3. DISP ALL TRUNKS? (Y,N) = a

Requests whether all trunks in the group are to be listed in the display. Entering ⟨CR⟩ is the same as entering N for No.
a = Y = Yes; a = N = No.

1.) ADD TRKGRP

2. TRUNK GROUP NUMBER (0-31) = nn

Requests trunk group number which is to be added. If trunk group number is 0, 25-31 go to Step 4. If trunk group number is 1-24, go to Step 3.
nn = trunk group number (0-31).

3. BUSY LAMP THRESHOLD (0-100) = nnn

Requests threshold setting for trunk group busy lamp on attendant console, i.e., the number of idle trunks (0-100) remaining in the trunk group to cause the associated LED on the attendant console to flash.
nnn = number of idle trunks (0-100).

NOTES: 1. The threshold is set to zero if ⟨CR⟩is entered.
2. Busy lamps are provided for Trunk Groups 1-24 only.

4. TRUNK GROUP DISPLAY (1-8 CHARS) = aaaaaaaa

Requests display character(s) to represent this trunk group on the attendant console. Enter ⟨CR⟩ for none.
aaaaaaaa = display characters; see Table 102.1.

5. TRUNK COS (0-31) = nn

Requests trunk COS assigned to this trunk group.
nn = trunk COS (0-31).

NOTE: Trunks use the same Class-of-Service definitions as stations: those defined by the COSASSN procedure. However, most classmarks are ignored if the user is a trunk circuit.

6. TOLL CODE REST LIST NUMS (0-19) = aaaaa

Requests restriction list(s) that may be accessed by this trunk group. If more than one, separate by spaces. Enter ⟨CR⟩ for none.
aaaaa = restriction list(s); see Table 102.2.

7. TRUNK GROUP MISCELLANEOUS FLAGS = aaaaa ... aaaaa

Requests miscellaneous flag(s) to be set for this trunk group. If more than one, separate each by spaces. Enter ⟨CR⟩ for none.
aaaaa = flag(s); see Table 102.3.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

STEP NO.	PROMPT/EXPLANATION

8. ASSIGN OUTGOING PARAMETERS? (Y,N) = a

Requests whether parameters are required for outgoing (or outgoing portion of two-way) trunks. If Y (Yes), go to step 9; If N (No), go to step 13.

a = Y = Yes; a = N = No.

9. ALTERNATE TRUNK GROUPS (0-31) = nn ... nn

Requests alternate trunk groups (3 max.) to be assigned to the new trunk group. If more than one, separate each by spaces.
Enter ⟨CR⟩ for none.

nn = alternate group(s) (0-31).

10. OUTGOING CALL USAGE = aaaaa

Requests outgoing call usage type that applies to this trunk group. If TWX, go to step 12 (OC II only); if MSL or RLTBRANCH, go to step 13; for all others, go to step 11.

aaaaa = usage type; see Table 102.4.

11. OUTGOING CONTROL SIGNALING = aaaaaa

Requests type of outgoing control signaling for this trunk group.

aaaaaa = outgoing control; see Table 102.5.

12. OUTGOING ADDR SIG (AUTO,DP,DTMF) = aaaa

Requests type of outgoing address signaling that applies to this trunk group.

aaaa = signaling type; see Table 102.6.

13. ASSIGN INCOMING PARAMETERS? (Y,N) = a

Requests whether parameters are required for incoming (or incoming portion of two-way) trunks.
If Y (Yes), go to step 14; If N (No), go to step 24.

a = Y = Yes; a = N = No.

14. TRUNK GROUP PRIORITY LEVEL (0-31) = nn

Requests priority level to be set for attendant console answering of this trunk group (priority 31 is the highest).
Enter ⟨CR⟩ for 0.

nn = priority (0-31).

NOTE: The trunk group priority levels 0-3 are the only ones which apply to trunks directed to console groups 1-12 in Shared Tenant Service.

15. INCOMING CALL USAGE = aaaaa

Requests incoming call usage type that applies to this trunk group. If ACD, go to step 16; If DID, go to step 17; If CO or TIE, go to step 22; If MSL or RLTMAIN, procedure is completed; for all other usage types, go to step 23.

aaaaa = usage type; see Table 102.4.

16. ACD HUNT GROUP NUMBER (0-63) = nn

Requests ACD group number assigned to this trunk group; go to step 24.

nn = ACD group (0-63).

17. DID DIGITS EXPECTED (0-5) = n

Requests number of DID digits expected from the CO.

n = DID digits (0-5).

18. DID DIGIT DELETE COUNT (0-3) = n

Requests number of incoming DID digits that are to be deleted.

n = delete digit count (0-3).

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

Page 3 of 10

STEP NO.	PROMPT/EXPLANATION

19.	DID CONVERSION TABLE INDEX (0-3) = n
	Requests conversion table number for conversion of incoming DID digits. n = conversion table number (0-3)

20.	DID NIGHT ANSWER TYPE = aaaaa
	Requests night answer type. If ANA, go to step 21; for others, go to step 22. aaaaa = night answer type; see Table 102.5.

21.	ANA EXTENSION NUMBER = nnnn
	Requests extension number to which incoming ANA calls are to be routed. nnnn = ext number (0-9999)

22.	INCOMING CONTROL SIGNALING = aaaaaa
	Requests type of incoming signaling control for this trunk group. aaaaaa = incoming control; see Table 102.5.

23.	INCOMING ADDR SIG (AUTO,DP,DTMF) = aaaa
	Requests type of incoming address signaling that applies to this trunk group. aaaa = signaling type; see Table 102.6.

24.	ASSIGN DATA PARAMETERS?(Y,N) = a
	Requests whether data parameters are to be assigned to this trunk group. If Y (Yes), go to step 25; if N (No), procedure is completed. Entering ⟨CR⟩ is the same as entering N for No. a = Y = Yes; a = N = No.

25.	TRUNK DATA COS (0-31) = nn
	Requests trunk data COS to be assigned to this trunk group. Procedure is completed. nn = trunk data COS (0-31).

1.	⟩ DEL TRKGRP

2.	TRUNK GROUP NUMBER (0-31) = nn
	Requests trunk group number which is to be deleted. nn = trunk group number (0-31).
	NOTE: All trunks must be taken out of service and deleted before the trunk group can be deleted.

1.	⟩ CHA TRKGRP
	NOTE: For most prompts, entering a ⟨CR⟩ indicates no change.

2.	TRUNK GROUP NUMBER (0-31) = nn
	Requests trunk group number which is to be changed. If trunk group 0, or 25-31 is entered, go to Step 4. If trunk group number 1-24 is entered, go to Step 3. nn = trunk group number (0-31).

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

STEP NO.	PROMPT/EXPLANATION

3. BUSY LAMP THRESHOLD (0-100) = nnn

Requests threshold setting for trunk group busy lamp on attendant console, i.e., the number of busy trunks (0-100) in the trunk group to flash the associated lamp on attendant console.
Enter ⟨CR⟩ for no change.

nnn = number of busy trunks (0-100).

NOTE: Busy lamps are provided for Trunk Groups 1 – 24 only.

4. TRUNK GROUP DISPLAY (1-8 CHARS) = aaaaaaaa

Requests display character(s) to represent this trunk group on the attendant console.
Enter ⟨CR⟩ for no change.

aaaaaaaa = display characters; see Table 102.1.

5. TRUNK COS (0-31) = nn

Requests trunk COS to be assigned to this trunk group.
Enter ⟨CR⟩ for no change.

nn = trunk COS (0-31).

6. CHANGE TCR LIST NUMS? (Y,N) = a

Requests whether the Toll Code Restriction Lists are to be changed. If Y (Yes), go to step 7; if N (No), go to step 8. Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes; a = N = No.

7. TOLL CODE REST LIST NUMS (0-19) = aaaaa

Requests restriction list(s) that may be accessed by this trunk group. If more than one, separate by spaces. ⟨CR⟩ = none.

aaaaa = restriction lists; see Table 102.2.

8. ENABLE TRK GRP MISC FLAGS = aaaaaaaaa ... aaaaaaaaa

Requests miscellaneous flag(s) to be set for this trunk group. If more than one, separate each by spaces. Enter ⟨CR⟩ for no change.

aaaaaaaaa = flag(s); see Table 102.3.

NOTE: Limit multiple flags to a single line of input. If additional flags must be entered, repeat the procedure.

9. DISABLE TRK GRP MISC FLAGS = aaaaaaaaa ... aaaaaaaaa

Requests miscellaneous flag(s) to be reset for this trunk group. If more than one, separate each by spaces. Enter ⟨CR⟩ if none.

aaaaaaaaa = flag(s); see Table 102.3.

NOTE: Limit multiple flags to a single line of input. If additional flags must be entered, repeat the procedure.

10. INTERFACE TYPE = aaaa

Requests type of interface that applies to this trunk group.
Enter ⟨CR⟩ for no change.

aaaa = interface; see Table 102.7.

11. CHANGE ALTERNATE TRK GRPS? (Y,N) = a

Requests whether alternate trunk group assignments are to be changed. If Y (Yes), go to step 13; if N (No), go to step 14. Entering ⟨CR⟩ is the same as entering N for No.

a = Y = Yes; a = N = No.

12. ALTERNATE TRUNK GROUPS = nn ... nn

Requests alternate trunk groups to be assigned to the new trunk group. If more than one, separate each by spaces.
Enter ⟨CR⟩ for no change.

nn = alternate group(s) (0-31).

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

STEP NO.	PROMPT/EXPLANATION

13.	OUTGOING CONTROL SIGNALING = aaaaaa

Requests type of outgoing signaling control for this trunk group.   aaaaaa = outgoing control;
Enter ⟨CR⟩ for no change.   see Table 102.5.

14.	OUTGOING ADDR SIG (AUTO,DP,DTMF) = aaaa

Requests type of outgoing address signaling that applies to this   aaaa = Signaling type; see Table 102.6.
trunk group.
Enter ⟨CR⟩ for no change.

15.	DELAY CONNECT TIMER (0-50) = nn

Requests timer setting for delay prior to establishing connection.   nn = delay x 0.1 second (0-50).
Enter ⟨CR⟩ for no change.

16.	AWAIT DIAL TONE TIMER (0-100) = nnn

Requests timer setting for delay prior to sending digits.   nnn = await DT delay x 0.1 second (0-100).
Enter ⟨CR⟩ for no change.

17.	TRUNK RESEIZE TIMER (0-100) = nnn

Requests timer setting for reseizure time after releasing trunk.   nnn = reseizure time x 0.1 second (0-100).
Enter ⟨CR⟩ for no change.

18.	OUTDIAL FIRST DIGIT TIMER (0-200) = nnn

Requests timer setting for delay after outpulsing first digit.   nnn = delay x 0.1 second (0-200).
Enter ⟨CR⟩ for no change.

19.	OUTDIAL INTER DIGIT TIMER (0-200) = nnn

Requests timer setting for delay between digits during outpulsing.   nnn = delay x 0.1 second (0-200).
Enter ⟨CR⟩ for no change.

20.	CO RELEASE GUARD TIMER (0-200) = nnn

Requests CO release guard timer setting.   nnn = release interval x 0.1 second
Enter ⟨CR⟩ for no change.   (0-200).

NOTE: This timer is used to delay outgoing seizures after the CO initiates a call disconnect.

21.	PBX RELEASE GUARD TIMER (0-200) = nnn

Requests PBX release guard timer setting.   nnn = release interval x 0.1 second (0-200).
Enter ⟨CR⟩ for no change.

NOTE: This timer is used to delay outgoing seizures after the PABX initiates a call disconnect.

22.	TRUNK GROUP PRIORITY LEVEL (0-31) = nn

Requests priority level to be set for attendant console answering   nn = priority (0-31).
of this trunk group.
Enter ⟨CR⟩ for no change.
NOTE: The trunk group priority levels 0-3 are the only ones which apply to trunks directed to console
          groups 1-12 in Shared Tenant Service.

23.	CHANGE ACD HUNT GRP NUM? (Y,N) = a

Requests whether ACD hunt group number is to be changed. If Y   a = Y = Yes; a = N = No.
(Yes), go to step 25; if N (No), go to step 27.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

STEP NO.	PROMPT/EXPLANATION

---

24. | ACD HUNT GROUP NUMBER = **nn**

Requests ACD group number assigned to this trunk group. nn = ACD group (0-63).
Enter ⟨CR⟩ for no change.

---

25. | CHANGE DID PARAMETERS? (Y/N) = **n**

Requests whether DID parameters are to be changed. If Y (yes) n = DID digits (0-5).
go to Step 27; if N (no) go to step 33.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

---

26. | DID DIGITS EXPECTED (0-5) = **n**

Requests number of DID digits expected from the CO. n = DID digits (0-5).
Enter ⟨CR⟩ for no change.

---

27. | DID DIGIT DELETE COUNT (0-3) = **n**

Requests number of incoming DID digits that are to be deleted. n = delete digit count (0-3).
Enter ⟨CR⟩ for no change.

---

28. | CHANGE DID CONV TABLE INDEX? (Y/N) = **a**

Requests whether DID conversion table is to be changed. If Y (Yes) a = Y = Yes; a = N = No.
go to Step 30; if N (No) go to Step 31.

NOTE: Entering ⟨CR⟩ is the same as entering N for No.

---

29. | DID CONV TABLE INDEX = **n**

Requests conversion index number for conversion of incoming DID n = conversion index number (0-3).
digits.

---

30. | DID NIGHT ANSWER TYPE = **aaaaa**

Requests night answer type. If ANA, go to step 32. For others, go aaaaa = night answer type;
to step 33.   see Table 102.8.

---

31. | ANA EXTENSION NUMBER = **nnnn**

Requests extension number to which incoming ANA calls are to nnnn = ext number (0-9999).
be routed.

---

32. | INCOMING CONTROL SIGNALING = **aaaaaa**

Requests type of incoming signaling control for this trunk group. aaaaaa = incoming control;
Enter ⟨CR⟩ for no change.   see Table 102.5.

NOTE: Incoming Control Signaling only applies to trunks that receive digits.

---

33. | INCOMING ADDR SIG (AUTO,DP,DTMF) = **aaaa**

Requests type of incoming address signaling that applies to this aaaa = signaling type; see Table 102.6.
trunk group.
Enter ⟨CR⟩ for no change.

---

34. | CHANGE DATA PARAMETERS (Y,N) = **a**

Requests whether data parameters are to be changed. If Y (Yes) a = Y = Yes; a = N = No.
go to Step 36; if N (No), procedure is completed.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

STEP NO.	PROMPT/EXPLANATION

35.	TRUNK DATA COS (0-31) = nn

Requests the trunk data COS to be assigned to this trunk group.   nn = trunk data COS (0-31).
Entering ⟨CR⟩ is the same as removing the data COS.

Table 102.1 Suggested Attendant Display Characters

ALPHAMERIC INPUT	DESCRIPTION
FX-aaaa	Foreign Exchange Trunk – aaaa denotes city or code.
INWATS	Inward WATS trunk.
LOCAL-nn	Local Trunk – nn denotes trunk group number.
TIE-aaaa	Tie Trunk – aaaa denotes other end of tie trunk.
WATS1	Wide Area Telephone Service – Band 1.
WATS2	Wide Area Telephone Service – Band 2.
aaaaWATS	WATS Trunk – aaaa denotes state or national (e.g., FLWATS, NATLWATS, etc.).

NOTES: 1. The alphameric characters shown above are suggestions only.
2. Imbedded blanks are not permitted; use a hyphen (-) to separate fields (as shown above).

Table 102.2 Restriction Lists

ALPHAMERIC INPUT	DESCRIPTION
0	Eight-Digit Restriction List 0
1	Eight-Digit Restriction List 1
2	Eight-Digit Restriction List 2
3	Eight-Digit Restriction List 3
4	Eight-Digit Restriction List 4
5	Eight-Digit Restriction List 5
6	Eight-Digit Restriction List 6
7	Eight-Digit Restriction List 7
8	Eight-Digit Restriction List 8
9	Eight-Digit Restriction List 9
10	Eight-Digit Restriction List 10
11	Eight-Digit Restriction List 11
12	Eight-Digit Restriction List 12
13	Eight-Digit Restriction List 13
14	Eight-Digit Restriction List 14
15	Eight-Digit Restriction List 15
16	Fifteen-Digit Restriction List 0
17	Fifteen-Digit Restriction List 1
18	Fifteen-Digit Restriction List 2
19	Fifteen-Digit Restriction List 3

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

Table 102.3   Trunk Group Miscellaneous Flags

ALPHAMERIC INPUT	DESCRIPTION
NONE	No flags affected (applies only to CHANGE).
TRKTOTRKO	Allow Trunk-to-Trunk Connection Even if Both Trunks are Seized Outgoing.
ASRO	Answer Supervision Received – Outgoing.
CBQ	Trunk group provides outgoing queuing (Callback and Standby) for user accessing this group. (Not allowed on 2-way AUTO groups)
DMDR	Data Call Message Detail Recording Required (OC II only).
DAYCTRL	Daytime Trunk Control Enabled.
DIDPREFIX	Digits from DID Conversion Table are to be Prefixed (See DIDCONV Procedure).
DSRI	Disconnect Supervision Received – Incoming.
DSRO	Disconnect Supervision Received – Outgoing.
EM4WIRE	E&M Group Consists of 4-Wire Facilities, rather Than 2-Wire.
RCLTOANA	Go to ANA Station on No Answer Recall, Even if System in Day Mode.
NOANSRCLI	No Answer Recall – Incoming.
NOANSRCLO	No Answer Recall – Outgoing.
REROUTE	Reroute to Another Trunk on Failure to Detect DT.
SMDRI	SMDR – Incoming Calls Recorded.
SMDRO	SMDR – Outgoing Calls Recorded.
SPCLACCT	Special Account Code (Does not apply to LCR).
SBYQ	Standby Queuing. Incoming calls on this trunk group may standby queue for another trunk group (tandem trunking).
XFERSECURE	Transfer Security Feature active on this Trunk Group.
DIGITAL TMBCDR	RESERVED FOR FUTURE USE NOT APPLICABLE TO DOMESTIC SYSTEMS

Table 102.4   Incoming/Outgoing Call Usage

ALPHAMERIC INPUT	DESCRIPTION
OUTGOING TRUNKS:	
CO	Central Office.
DPITRK	DPI Direct Trunk Appearance.
DPIGRP	DPI Trunk Group Originate Button.
FX	Foreign Exchange.
TWX	Teletypewriter Exchange Service.
TIE	Tie Trunk.
WATS	Wide Area Telephone Service.
INCOMING TRUNKS:	
CO	Central Office.
DIT	Dedicated Incoming Trunk.
DID	Direct Inward Dialing.
DISA	Direct Inward System Access.
DISAS	DISA – Shared.
DPIGRP	DPI Trunk Group Answer Button.
DPITRK	DPI Direct Trunk Appearance.
FX	Foreign Exchange.
TIE	Tie Trunk.
UCD	Uniform Call Distribution.
WATS	Wide Area Telephone Service.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

Table 102.5   Incoming/Outgoing Control Signaling

INPUT	DESCRIPTION
NONE	None Assigned.
DELAY	Delay Dial Signal a. Incoming – The SATURN EPABX returns a delay signal within 150 ms after trunk seizure. The signal persists for no less than 140 ms and ends when the EPABX is ready to receive address signaling. Dial tone is not returned. b. Outgoing – The calling party's dialed digits are stored and forwarded to the trunk following the end of the delay dial signal from the distant end.
DIALTN	Dial Tone (cut-through operation) a. Incoming – Dial tone is connected to the trunk when the SATURN EPABX is ready to receive address signaling. b. Outgoing – The calling party's transmission path is cut-through to the trunk when the trunk is seized. Dial tone is returned from the far end when it is prepared to receive digits.
IMMED	Immediate Start (Senderized Operation) a. Incoming – The SATURN EPABX is ready to receive address signaling 65 ms after the trunk seizure. Return of dial tone is optional. b. Outgoing – The calling party's dialed digits are stored and forwarded to the trunk following the time-out of the first digit delay timer.
WINK	Wink Start Signaling (Senderized Operation) a. Incoming – The SATURN EPABX returns a wink start signal when it is ready to receive address signaling; however, the wink start signal does not occur earlier than 100 ms after trunk seizure. Dial tone is not returned. b. Outgoing – The calling party's dialed digits are stored and forwarded to the trunk following the receipt of the wink start signal from the distant end.

Table 102.6   Incoming/Outgoing Address Signaling

ALPHAMERIC INPUT	DESCRIPTION
AUTO	Automatic. System provides/expects seizure/ringdown, but no outpulsing.
DP	Dial Pulse. System provides/expects dial pulse (loop) outpulsing.
DTMF	Dual-Tone Multifrequency. System provides/expects DTMF outpulsing.

Table 102.7   Trunk Group Interface Types

ALPHAMERIC INPUT	DESCRIPTION
PCOH	Central Office Trunk – High Grade (See Note).
PCOL	Central Office Trunk – Normal.
PATO	Pad – Analog Toll Office.
PATT	Pad – Analog Tie Trunk.

NOTE: On high-grade CO trunks, the system provides increased gain on CO to E&M connections.

Table 102.8   Night Answer Types

ALPHAMERIC INPUT	DESCRIPTION
NONE	None Assigned.
ANA	Assigned Night Answering.
SNAP	Special Night Answering Position.
ZUNA1	Zoned Universal Night Answering – Zone 1.
ZUNA2	Zoned Universal Night Answering – Zone 2.
ZUNA3	Zoned Universal Night Answering – Zone 3.
ZUNA4	Zoned Universal Night Answering – Zone 4.

CUSTOMER MEMORY UPDATE PROCEDURE: TRKGRP
TITLE: Trunk Group Assignments

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
ANA	Assigned Night Answer
CO	Central Office
COS	Class of Service
DID	Direct Inward Dialing
DISA	Direct Inward System Access
DIT	Dedicated Incoming Trunk
DP	Dial Pulse
DPI	Digital Premium Instrument
DT	Dial Tone
DTMF	Dual-Tone Multifrequency
FX	Foreign Exchange
SNAP	Special Night Answer Position
UCD	Uniform Call Distribution
WATS	Wide Area Telephone Service
ZUNA	Zoned Universal Night Answer

TTYPARMS

CUSTOMER MEMORY UPDATE PROCEDURE: TTYPARMS
TITLE: RS-232-C Ports

STEP NO.	PROMPT/EXPLANATION

---

1. > DIS TTYPARMS

Prints a formatted display giving all the user-changeable parameters as stored in the customer database and that are currently in effect for each RS-232-C port.

NOTE: On a system reload, the CIOP port (TTY) is initialized to the values set on the CIOP switches, regardless of the database values.

---

1. > CHA TTYPARMS

Adds or changes the RS-232-C parameters in the customer database for a given RS-232-C port. This action will not affect the operational characteristics of the RS-232-C port being changed.

2. PORT: (TTY, TTY0, TTY1, MODEM) = aaaaa

Requests the RS-232-C port for which the parameters are to be changed.

aaaaa = RS-232-C port.
For CIOP, enter TTY; for RAUP, enter TTY0, TTY1, or MODEM.

NOTE: If PORT=MODEM, the system automatically selects a data speed of either 300 (default) or 1200 baud; go to Step 4. If PORT=TTY, TTY0, or TTY1, the default data speed is 1200 baud.

3. ENTER DATA SPEED = nnnn

Requests data speed (baud rate) for the requested RS-232-C port.
Default = 300 baud for PORT=MODEM, or 1200 baud for any other port.

nnnn = baud rate (110, 300, 1200, 2400, 4800, or 9600).

4. ENTER # BITS/CHAR (5,6,7,8) = n

Requests the user to enter the number of bits per character. Optional.

n = 5,6,7, or 8.

5. PARITY (EVEN, ODD, SPACE, MARK, NONE) = aaaaa

Requests the user to enter the parity type.

aaaaa = EVEN, ODD, SPACE, MARK, NONE.

6. # OF STOP BITS (1, 1.5, 2) = nnn

Requests the number of stop bits for the requested RS-232-C interface.

nnn = 1, 1.5, 2.

7. CARRIAGE RETURN DELAY COUNT = nnn

Requests the number of null characters to be inserted into the data stream after a carriage return to allow enough time for the carriage to be returned before the data stream continues.

nnn = carriage return delay count (0-255).

NOTE: Entering ⟨CR⟩ is the same as entering 6.

8. LINE FEED DELAY COUNT = nnn

Requests the number of null characters to be inserted into the data stream after a line feed to allow enough time for the paper to be advanced before the data stream continues.

nnn = line feed delay count (0-255).

NOTE: Entering ⟨CR⟩ is the same as entering 4.

CUSTOMER MEMORY UPDATE PROCEDURE: TTYPARMS

T: RS-232-C Ports

STEP NO.	PROMPT/EXPLANATION

1. 〉 BEG TTYPARMS

Causes the parameters currently stored in the customer database for a given RS-232-C port to be downloaded to that device.

2. PORT: (TTY, TTY0, TTY1, MODEM) = aaaaa

Requests the RS-232-C port for which the parameters are to be changed.

aaaaa = RS-232-C port. For CIOP, enter TTY; for RAUP, enter TTY0, TTY1, or MODEM.

NOTE: If PORT=MODEM, the system automatically selects a data speed of either 300 (default) or 1200 baud. If PORT=TTY, TTY0 or TTY1, the default data speed is 1200 baud.

3. ARE YOU SURE? (Y, N) = a

Gives the user the opportunity to abort the action before the requested RS-232-C interface is affected.

a = Y = Yes; a = N = No.

CUSTOMER MEMORY UPDATE PROCEDURE: UCDGRP
TITLE: UCD Group Assignments
Access Level: 2, 3, 4

UCDGRP

Page 1 of 2

STEP NO.	PROMPT/EXPLANATION

1.	> DIS UCDGRP

2.	UCD GROUP NUMBER 0-63 = nn nn

Requests group number to be displayed. For range, enter beginning and ending group numbers, separated by space. Enter <CR> to display all.

nn = group number(s) (0-63).

1.	> ADD UCDGRP

2.	ASSIGN GROUP OR MEMBER? (G,M) = a

Requests whether assignment to be added is new group or member to be added to existing group. If Group, go to step 3; if Member, go to step 5.

a = G = group, a = M = member.

3.	DMDR REQD FOR DATA UCD? (Y,N) = a

Requests whether data message detail recording is required for a data UCD group.

a = Y = Yes, a = N = No.

NOTE: Entering <CR> is the same as entering N for No.

4.	UCD PILOT ACCESS NUMBER = nnnn

Requests UCD pilot number.

nnnn = pilot number.

NOTE: Pilot access codes assigned may be in the following ranges: 0 - 9999, plus *, 0 - *999, plus #, #0 - #999, plus A, B, C, and D digits (for 16-digit telephones).

5.	UCD GROUP NUMBER 0-63 = nn

Requests group number to be assigned (or to add members).

nn = group number (0-63).

6.	GROUP MEMBER EXTENSION NUMBER(S) = nnnn ... nnnn

Requests station number(s) of member(s) to be assigned in this UCD group. Up to 64 members may be assigned to a voice UCD group, and up to 96 members may be assigned to a data UCD group. If more than one, separate each by spaces.

nnnn = station numbers (0-9999).

NOTE: A station may not be a member of both a hunt group and UCD group.

1.	> DEL UCDGRP

2.	DELETE GROUP OR MEMBER? (G,M) = a

Requests type to be deleted: either a UCD group or a member of a group. If Group, go to step 3; if Member, go to step 4.

a = G = group, a = M = member.

3.	UCD GROUP NUMBER 0-63 = nn

Requests group number to be deleted; procedure is completed.

nn = group number (0-63).

4.	MEMBER EXTENSION TO BE DELETED = nnnn

Requests member to be deleted from UCD group.

nnnn = ext number (0-9999).

CUSTOMER MEMORY UPDATE PROCEDURE: UCDGRP
TITLE: UCD Group Assignments

STEP NO.	PROMPT/EXPLANATION
1.	**) CHA UCDGRP**
2.	**CHANGE MEMBER OR PILOT NUM? (M,P) = a**
	Requests whether member or pilot number of UCD group is to be changed; if Member, go to step 3; if Pilot, go to step 5. a = M = member, a = P = pilot number.
3.	**OLD MEMBER EXTENSION NUMBER = nnnn**
	Requests old member number to be changed. nnnn = ext number (0-9999).
4.	**NEW MEMBER EXTENSION NUMBER = nnnn**
	Requests new UCD group member number; procedure is completed. nnnn = ext number (0-9999).
5.	**OLD UCD PILOT ACCESS NUMBER = nnnn**
	Requests old UCD pilot number. nnnn = pilot access number.
6.	**NEW UCD PILOT ACCESS NUMBER = nnnn**
	Requests new UCD pilot number. nnnn = pilot access number.
	NOTE: Pilot access codes assigned may be in the following ranges: 0 - 9999, plus *, 0 - *999, plus #, #0 - #999, plus A, B, C, and D digits (for 16-digit telephones).

MNEMONICS USED IN THIS CMU PROCEDURE:

Mnemonic	Definition
DMDR	Data Message Detail Recording
UCD	Uniform Call Distribution

CUSTOMER MEMORY UPDATE PROCEDURE: UCDSCAN
TITLE: UCD Scan
Access Level: 3, 4

Page 1 of 1

STEP NO.	PROMPT/EXPLANATION
1.	⟩ **DIS UCDSCAN**
2.	DISPLAY REPORT OR PARMS? (R,P) = **a**
	Requests type of UCD data to be displayed. a = R = Report; a = P = Parameters.

1.	⟩ **BEG UCDSCAN**
	NOTE: This action is used to activate the UCD scan.
2.	OUTPUT DEVICE (TTY0-3) = **aaan**
	Requests output port to which the UCD data are to be routed. a = TTY0 - TTY3.

1.	⟩ **CHA UCDSCAN**
2.	OUTPUT DEVICE (TTY0-3) = **aaan**
	Requests output port to which the UCD data are to be routed. Enter aaan = TTY0 - TTY3. ⟨CR⟩ for no change.
3.	ASCII CODES TO CLEAR CRT SCREEN = **aa**
	Requests ASCII codes to clear CRT screen. aa = ASCII codes (4 max.).