ANIDL, BISI, CAMA, CFG, CLAM, CPD, JUNCT, LRE, MSN,

NMTGC, PLM, PUC, PUCMB, RCHAN, ROTL, RSP, RSSCB,

SCGA, SIMFAC, AND TMBCGA

RECENT CHANGE FORMATS

(1E6/1AE6 THROUGH 1E8/1AE8 GENERIC PROGRAMS)

2-WIRE NO. 1 AND NO. 1A "ESS* " SWITCHES

* Trademark of Western Electirc.

NOTICE

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1. GENERAL

1.01 This section covers the miscellaneous recent change (RC) formats for the 1E6 through 1E8 generic programs for a 2-wire No. 1 ESS switch and the 1AE6 through 1AE8 generic programs for a 2-wire No. 1A ESS switch.

1.02 This section is reissued to:

(a) Add paragraph 10.04 to the RC:NMTGC message for circuit switched digital capability (CSDC).

(b) Change paragraph 10.07 to show RC:NMTGC message as RC hunted for certain unit types.

(c) Add carrier interconnect to the RC:SIMFAC message, 1E8/1AE8 and later generics.

(d) Allow unassigned screening line equipment numbers for INWATS in the RC:SIMFAC messages.

(e) Add CCIS PUC frame growth designator to RC:PUC data link usage (DLU) keyword.

(f) Add information to RC:SCGA for carrier trunk conditioning recognition (CTCR), 1AE8 and later.

(g) Add information on single member software carrier groups for CCIS and CTCR, 1AE8 and later.

(h) Make minor changes as required.

Revision arrows are used to emphasize the more significant changes. Equipment Test Lists are not affected.

1.03 Abbreviations and acronyms are listed in Part 24.

1.04 Starting with the 1E6 and 1AE6 generic programs, the RC formats for No. 1 and No. 1A ESS switches were combined. Formats for the 1E5 and earlier generic programs for the No. 1 ESS switch are covered in the 231-118 series practices. Formats for the 1AE5 and earlier generic programs for the No. 1A ESS switch are covered in the 281-318 series practices.

1.05 Beginning with the 1E6 and 1AE6 generics, those miscellaneous recent change procedures not having specific RC messages were deleted from this section. These procedures are now located in Section 231-048-311 and are as follows:

- Changing an incoming trunk office code selector table (incoming trunk chart table)

- Changing an automatic trunk test table

- Changing a line class code table

- Changing a trunk class code expansion table

- Adding line equipment number class words— noncentrex-central office (CO)

- Adding line equipment number class words to secondary expansion table—centrex-CO

- Adding directory number class words—centrex and noncentrex-CO

- Changing information in the office option table

- ◆Changing information in the prefixed access code (PAC) translator.◀

1.06 In all figures where call store translation word layouts are given, note that the only difference between the No. 1 ESS switch and the No. 1A ESS switch is that the No. 1A ESS switch words (shown in all figures) contain 23 bits, whereas the No. 1 ESS switch words contain 22 bits.

1.07 In change message flowcharts, keywords without a variable shown are YES/NO keywords. When a YES/NO feature is added, enter the keyword; when a YES/NO feature is removed, enter the keyword followed by NO or N.

1.08 When using a change message flowchart, refer to the associated new message flowchart for valid combinations of keywords.

1.09 Refer to the information accompanying the message flowcharts for definitions of keywords used in the messages.

1.10 The order (ORD) number is required only in RC messages, ACT, BISI, DNRNGE, LINE, MLHG, MOVE, MPTY, SCLIST and TWOPTY and is *optional* in all other RC messages. Keyword ORD can be entered as follows:

ORD ḿńńńńńn (No. 1 ESS switch)

or

ORD ḿńńńńńńńn (No. 1A ESS switch)

ḿ = Optional letter prefix. This variable is shown slashed because it may not always be present.

ńńńńńn = Decimal number: Leading zeros can be omitted.

or

ńńńńńn

For example, each of the following are valid external order numbers:

No. 1 ESS Switch	No. 1A ESS Switch
ORD B123456	ORD B1234567
ORD F6	ORD F6
ORD 23	ORD 27

1.11 Refer to Section 231-048-301 for information on RC message formats, verify message format, and the interpretation of message flowcharts.

1.12 Refer to Section 231-048-302 for RC message program listings, system acknowledgment

and RC18, RC16, RC29, and RC FAILURE output messages.

1.13 Refer to Translation Guide TG-1A for documentation of translation data and associated forms.

1.14 For the No. 1 ESS switch, refer to Translation Output Configuration PA-591003 for information relating the ESS switch forms to the translation memory (translators). For the No. 1A ESS switch, refer to PA-6A002. The miscellaneous message procedures refer to forms ESS 1204, 1207, 1306, and 1505.

1.15 ▶Program record (PRs) for the No. 1 ESS switch are covered in the PR-1A series documents and for the No. 1A ESS switch in the PR-6A series documents. For the 1E6/1AE6 generic programs, PRs are listed in numerical order by the PR number. For 1E7/1AE7 and later generic programs, PRs are listed in alphabetical order by the message program identification (pident).

1.16 Input messages (IM) for the No. 1 and No. 1A ESS switches are covered in the Input Message Manuals IM-1A001 and IM-6A001 respectively. These manuals do not cover RC input formats.

1.17 Output messages (OM) for the No. 1 and No. 1A ESS switches are covered in the Output Message Manuals OM-1A001 and OM-6A001 respectively.◀

Flowchart Symbols

1.18 The following flowchart symbols are used in RC message flowcharts.

OPTION Symbol: The OPTION symbol is used to indicate that all flowlines leaving the symbol are optional. None, one, some, or all such flowlines may be selected.

EXCLUSIVE OR Symbol: The EXCLUSIVE OR symbol is used to indicate that exactly one of two or more flowlines leaving the symbol must be selected.

NONEXCLUSIVE OR Symbol: The NONEXCLUSIVE OR symbol is used to indicate that one or more of the flowlines leaving the symbol must be selected (no less than one, but more than one may be selected).

● *AND Symbol:* The AND symbol is used to indicate that all flowlines leaving the symbol must be used.

Repeatable Segment: The repeatable segment symbol is used to indicate that the keyword unit or the specific group of keyword units within the segment bracket can be repeated within an RC message without reentering previous keyword units. Each segment is terminated by the percent sign (%).

2. GENERAL RECENT CHANGE PROCEDURES

A. Determining Starting Address of the Base Translation Block (Master Head Table) (No. 1 ESS Switch Only)

2.01 The master head table is the first 30 words in the base translation block. The base translation block is 530 words long. The starting address may be determined as follows by reading an address in parameters.

T-READ-1105615-01.

The system response TW02 message contains the octal starting address of the master head table. Record this address for future reference.

B. Determining Starting Address of Master Head Table Annex (No. 1 ESS Switch Only)

2.02 The master head table annex is not located at a fixed address. The address may be determined by typing in the following message.

T-READ-aaaaaaa.

aaaaaaa = Starting address of master head table (see paragraph 2.01) plus octal 33.

The system response TW02 message contains the octal starting address of the master head table annex.

C. Starting Address of the Base Translator Block (Master Head Table) (No. 1A ESS Switch Only)

2.03 The master head table in the No. 1A ESS switch is the first 128 (1AE6) or 256 (1AE7 and later) decimal words in the base translation block.

The base translation block for the 1AE6 generic program is 1376 decimal words long and is fixed at octal location 3724000 (F9HHTP) in unduplicated call store. The base translation block for 1AE7 and later generics is 3424 decimal words long and is fixed at location 7720000 (F9HHTP) in unduplicated call store. The No. 1A ESS switch does not have a master head table annex as does to No. 1 ESS switch.

D. Recent Change Verification (No. 1 and No. 1A ESS Switches)

2.04 Verify a customer facility auxiliary block associated with the input customer facility group (CFG) by typing in the following message.

V-CFG-aaaa.

aaaa = CFG number; aaaa = 0001 through 8191.

The system response should be PF (printout follows) TTY acknowledgment (TACK) followed by a TR63 message containing the contents of the customer facilities auxiliary block or a TR09 message if the input is invalid. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.05 Use the following message to verify the junctor network number (JNN). This message is used to request the system to indicate whether the terminating end of the specified junctor is on a trunk link network (TLN) or a line link network (LLN) and to print the JNN for the terminating end. In the case of a line-to-line junctor, the system is requested to print the junctor scanner number (JSN) associated with the input JNN. This message is restricted to use with intraoffice junctors.

VFY-JNN-37 a bbbbbb.

a = L—This end of the junctor is on an LLN.

= T—This end of the junctor is on a TLN.

bbbbbb = JNN.

The system response should be a PF TACK followed by a JN03 message containing the requested information. If the specified junctor is unassigned or out of range, the system response will be TR09. Refer to

Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.06 On shelves which have been restored to active service, verify the specified junctor network by using the following message.

VFY-JNN-37 a bbbbbb.

a = L—This end of the junctor is on an LLN.

= T—This end of the junctor is on a TLN.

bbbbbb = JNN.

The system response should be a PF TACK followed by a JN03 message. The JN03 message reports the junctor network number or junctor network number and junctor scanner number associated with input bbbbbb. A TR09 message is given if the specified junctor input bbbbbb is unassigned or out of range. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.07 On shelves which have been restored to active service, verify the JSN translations (line-to-line connections) by using the following message. This message is restricted to use with interoffice junctors.

VFY-JJSN-38 aa b cc d e f.

aa = Junctor frame number.

b = Bay number (0 or 2).

cc = Horizontal mounting plate (01 through 16).

d = Vertical file number.

e = Circuit number.

f = Scan point number.

The system response should be a PF TACK followed by a JN03 message containing the junctor scanner number and the terminating junctor network number. A TR09 message is given if the specified junctor scanner is unassigned, out of range, or the format is in error. Refer to Output Message Manual OM-

1A001/OM-6A001 for an interpretation of the response.

2.08 Verify a master scanner number (MSN) translation or all MSN translations of one master scanner by typing in the following message.

VFY-MSN-aa bb cc dd.

aa = 06—Specifies an entire master scanner verification. When aa = 06 specify the master scanner number only, bbccdd = all 0's. If an interrupt occurs a block of data will be lost. Request the block again.

= 13—Specifies a single MSN translation.

bb = Frame (00 through 63).

cc = Row (00 through 63).

dd = Column (00 through 15).

The system response should be an IP TACK followed by a TR12 message with the translation information, or a TR09 message if the input is invalid. If the verify request is already in progress at another input/output (I/O) channel an NG or RL TACK will be returned. Refer to Output Message Manual OM-1A001/6A001 for an interpretation of the output message.

2.09 Verify the simulated facilities auxiliary blocks associated with the inputted simulated facilities group number (SFGN) by typing in the following message.

V-SFGN-aaaa.

aaaa = SFGN (0001 through 2047).

aaaa = 0000 will request all simulated facilities group (SFG) auxiliary blocks to be printed.

The system response should be a PF TACK followed by a TR35 message with the contents of the simulated facilities auxiliary block, or a TR09 message if the input is invalid. End of verify is indicated by a TR28 end-of-job message. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.10   Verify the contents of the auxiliary block associated with a carrier group alarm (CGA) or trunk make-busy (TMB) member by typing in the following message.

VFY-UNTY-15 aaa bbbb.

aaa = 040 for CGA.

= 047 for TMB.

bbbb = CGA key member number for CGA.

= TMB key member number for TMB.

The system response should be a PF TACK followed by a TR13 message containing the unit type (CGA or TMB), member number, and up to 15 words of the auxiliary block. The message is then repeated until the total content of the auxiliary block is printed. The V-STOP message is available to discontinue printing of the output message. A TR09 message will be printed if the unit type or member number is unassigned. An NG or RL TACK will be printed if the verify request is already in progress at another I/O channel. Refer to Output Message Manual OM-1A001/6A001 for an interpretation of the response.

2.11   Verify the coin line activity-monitoring (CLAM) interval associated with the specified coin directory number (DN) by typing in the following message.

V-CLAM-aaa aaaa.

aaa aaaa = 7-digit directory number.

The system response should be a PF TACK followed by a TR45 message containing the translation information, or a TR09 message if the DN is not an intraoffice DN. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the output message.

2.12   ♦Verify the contents of the auxiliary block(s) associated with a peripheral unit controller (PUC), for data link (DL) or digital carrier trunk (DCT) applications, by typing the following message.

VFY-UNTY-15 aaa bbbb.

aaa = 061—PUC (DCT and DL).

= 018—Universal trunk scanner (DCT only).

= 020—Universal trunk signals distributor (DCT only).

bbb = Member number.

The system response should be a PF TACK followed by a TR13 message containing the unit type, member number, and up to 15 words of the auxiliary block. The message is then repeated until the total content of the auxiliary block is printed. The V-STOP message is available to discontinue printing of the output message. A TR09 message will be printed if the unit type or member number is unassigned. An RL TACK will be printed if the verify request is already in progress at another I/O channel. Refer to Output Message Manual OM-1A001/6A001 for an interpretation of the response.♦

2.13   Verify the contents of the peripheral unit controller maintenance bus (PUCMB) (1E7/1AE7 and later generics) by typing in the following message.

V-PUCMB-.

The system response should be a PF TACK followed by a TR111 message containing the requested information or a TR09 message if an error is encountered.

2.14   Verify a remote miscellaneous scanner number (RMSN) translation or all RMSN translations of one by typing in the following message.

V-RMSN-abbcdee.

a = O—One RMSN translation.

= A—All RMSN translations. Only variables bb should be specified (cdee = 0000).

bb = Remote Switching System (RSS) number (01 through 31).

c = Module (0 through 1) in which the board is located.

d = Board (0 through 3) in the module.

ee = Point (00 through 23) on the board.

The system response should be a PF TACK followed by a TR12 output message containing the translation data or a TR09 if the input is invalid. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.15 Verify the contents of the RSS common block by typing in the following message.

VFY-CSTG-62 bbbb.

bbbb = RSS number.

The system response should be a PF TACK followed by a TR92 output message containing the contents of the RSS common block or a TR09 if the input is invalid. Refer to Output Message Manual OM-1A001/6A001 for an interpretation of the response.

2.16 Verify the remote equipment number (REN) translation by typing in the following message.

V-REN-a bb c d ee f g.

a = O—One REN.

= A—All RENs in an RSS.

= U—All unassigned RENs in an RSS.

bb = RSS number (01 through 31).

c = Module (0 through 1) in which the unit is located.

d = Unit type (0 = lines; 1 = channels).

ee = Concentrator (00 through 15) within the module.

f = Switch (0 through 7) within the concentrator.

g = Level (0 through 7) on the switch.

The system response should be a PF TACK followed by a TR03 output message containing the REN translation data or a TR09 if the input is invalid. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.17 Verify the loop range extension (LRE) translations for all or a single LRE physical frame, a group assigned on a frame, or a circuit in a group by typing in the following message.

V-LRE-a b cc dd eee.

a = A—Verification of all frames, all groups on a frame, or all circuits in a group.

= O—Verification of one frame, group, or circuit.

b = C—Verification of a circuit.

= F—Verification of a frame.

= G—Verification of a group.

cc = Frame number. If a verification of all frames is desired, then field cc should equal the number of the first frame to be verified, and fields dd and eee should be typed as 0's.

dd = Group number (unit-group). If a verification of all groups on a frame is desired, then field dd should equal the number of the first group to be verified, and field eee should be typed as 0's.

eee = Circuit number (shelf-card-circuit). If a verification of all circuits in a group is desired, then field eee should be typed as 0's.

The system response should be a PF TACK followed by a TR76 output message with the valid translation information or a TR09 if the input is in error. End of verify is indicated by a TR28 end-of-job message. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

2.18 Verify those trunk network numbers (TNNs) assigned to software carrier groups (SCGs) as shown in Fig. 1.

The system response should be a PF TACK followed by a TR106 message. Refer to Output Message Manual OM-1A001/OM-6A001 for an interpretation of the response.

VF:TNNSVY:

⊗── SCGA (áddda,(bbbb))
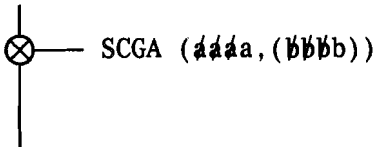
(Other Options)

SCGA (áddda,(bbbb))= Restricts the TNN
survey to those TNNs
assigned to software
carrier group(s):

(áddda,(bbbb))= 0≥a≥b≥4095.

Fig. 1—Verifying TNN Data

3. ADDING OR DELETING AN AUTOMATIC NUMBER-IDENTIFICATION (ANI) DATA LINK RC:ANIDL (RCAI, PR-1A367 OR PR-6A367)

3.01 Refer to Table A for keyword definitions.

A. Adding an ANI Data Link

3.02 *Initial Conditions:* The automatic identified outward dialing (AIOD) subtranslator (unit type 50) exists and the member number is unassigned.

3.03 *Results of Message:* An auxiliary block is seized, linked to the specified number and is built as specified. The associated MSN translator entry is built.

3.04 Add an ANI data link by entering the following message.

RC:ANIDL:
MEMN áa
MSN eeeee
SDN bccccc

Note: The above message provides the auxiliary block in unit type 50 (AIOD) for a new ANI data link. The member number must be three or greater and previously unassigned.

B. Deleting an ANI Data Link

3.05 *Initial Conditions:* Specified member is assigned.

3.06 *Results of Message:* The member number and associated MSN translations are unassigned. The auxiliary block is released.

3.07 Delete an ANI data link by entering the following message.

RC:ANIDL;OUT:
MEMN áa!

Note: In order to change a signal distributor number (SDN) or MSN for an existing ANI data link, an OUT order and a NEW order must be used. The ANI data link is actually removed by using the OUT message and then all information reentered using the NEW message.

C. Verification

3.08 There is no verification format provided for this type of RC. For the No. 1 ESS switch, this RC is not effective in call processing until the program store (PS) memory cards have been updated.

TABLE A

RC:ANIDL KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
MEMN áa	Member Number.	ESS 1600 Cols. 33-35
MSN eeeeee	Master Scanner Number.	ESS 1600 Cols. 18-23
SDN bccccc	Signal Distributor Number: b = Frame Type (U, M, J, or S). ccccc = Frame Number and first signal distributor point.	ESS 1600 Cols. 18-23

4. ADDING, REMOVING, OR CHANGING ENTRIES IN A CENTRALIZED AUTOMATIC MESSAGE ACCOUNTING (CAMA) INCOMING TRUNK GROUP TRANSLATOR RC:CAMA (RCCA, PR-1A322 OR PR-6A322)

4.01 Refer to Table B for keyword definitions.

A. Adding New CAMA Trunk Group to CAMA Incoming Trunk Group Translator (Fig. 2)

4.02 *Initial Conditions:* The CAMA head table exists.

4.03 *Results of Message:* An auxiliary block 2 to 31 words long (as required by the number of OC3 entries) is seized and linked to the CAMA head table. The specified numbering plan area (NPA) code is entered in word 0, with one office code entered in each remaining word.

```
RC:CAMA:
CTG áa
NPA bbb
OC3(eee,eee,....,eee)      (NOTE 1)

CADX f
NQZ
```
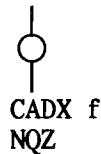
NOTE:
1. The continuation character (-hyphen) must be used when more than one line of data is used for keyword OC3. The hyphen must follow a comma separating the variables within the parentheses.

Fig. 2—Adding New CAMA Trunk Group to CAMA Incoming Trunk Group Translator

B. Replacing Office Codes for a CAMA Trunk Group

Note: To change any data for a CAMA trunk group, first remove the trunk group with the OUT message and then reenter all data with NEW message.

4.04 *Initial Conditions:* Specified CAMA trunk group index is assigned.

4.05 *Results of Message:* The existing auxiliary block is released and a new one is seized and linked to the CAMA head table. All office codes must be specified whether changed or not.

4.06 Replace office codes for a CAMA trunk group by entering the following message.

RC:CAMA;CHG:
CTG ấa
NPA bbb (Note 1)
OC3 (eee,eee,...,eee)! (Note 2)

Note 1: To change the NPA code the CAMA trunk group (CTG) index must be deleted by an OUT order and then reentered by a NEW order using the new NPA code.

Note 2: The continuation character (-hyphen) must be used when more than one line of data is used for keyword OC3. The hyphen must follow a comma separating the variables within the parentheses.

C. Removing a CAMA Trunk Group From CAMA Incoming Trunk Group Translator

4.07 *Initial Conditions:* Specified CAMA trunk group index is assigned.

4.08 *Results of Message:* The index is unassigned in the CAMA head table and the auxiliary block is released.

4.09 Remove a CAMA trunk group by entering the following message.

RC:CAMA;OUT:
CTG ấa
NPA bbb!

RC is not effective in call processing until the PS memory cards have been updated.

D. Verification

4.10 There is no verification format provided for this type of RC. For the No. 1 ESS switch this

TABLE B

RC:CAMA KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CADX f	CAMA Digit X. The first digit (2 through 9) of a called number of form X11 to be generated when a manual seizure CAMA trunk originates.	ESS 1215 Col. 33
CTG ấa	CAMA Trunk Group Index.	ESS 1215 Cols. 25-26
NPA bbb	Numbering Plan Area Code.	ESS 1215 Cols. 27-29
NQZ	No QZ billing (operator identified outward dialing).	ESS 1215 Col. 34
OC3(eee,eee,...,eee)	Office Code: eee = 1 through 30 office codes.	ESS 1101 Cols. 17-19

5. ADDING, CHANGING, OR DELETING A CFG RC:CFG (RCCG, PR-1A314 OR PR-6A314)

5.01 Refer to Table C for keyword definitions. See Fig. 5 for the layout of the CFG translator.

A. Adding a Customer Facilities Group (Fig. 3)

5.02 *Initial Conditions:* The CFG subtranslator exists and the CFG number to be specified is unassigned. Customer additions can be made at any time.

5.03 *Results of Message:* An CFG auxiliary block (3 words) is seized, linked to the CFG subtranslator, and built as specified by the input message.

```
RC:CFG:
CFG aaaa
TYP ƀb
GSZ ¢¢¢c
CTX ɗɗɗd
     |
  o  |
     |
     |——— NXT ¢¢¢e   (NOTE 1)
     |——— TBL ƒf
```
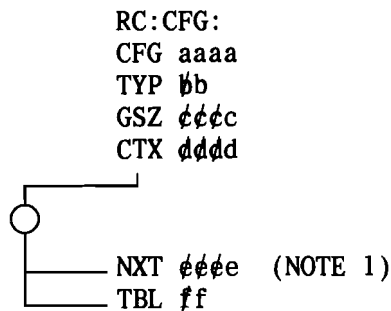
NOTE:
1. Keyword NXT is allowed only with TYP 4 or 5.

Fig. 3—Adding a Customer Facilities Group

B. Changing a Customer Facilities Group (Fig. 4)

5.04 Refer to paragraphs 1.07 and 1.08.

5.05 *Initial Conditions:* The CFG number is assigned and has an auxiliary block built.

5.06 *Results of Message:* The data specified in the input message replaces or deletes the existing data or is added to the auxiliary block.

```
RC:CFG;CHG:
CFG aaaa
     |
  o  |
     |
     |——— TYP ƀb
     |——— GSZ ¢¢¢c
     |——— CTX ɗɗɗd
     |——— NXT ¢¢¢e or NO (NOTE 1)
     |——— TBL ƒf or NO
```
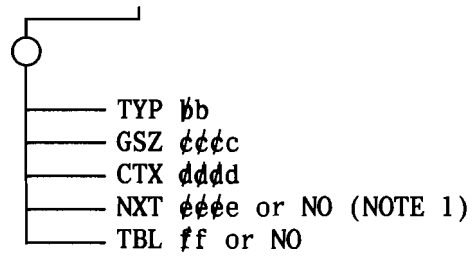
NOTE:
1. Keyword NXT is allowed only with TYP 4 or 5.

Fig. 4—Changing a Customer Facilities Group

C. Deleting a Customer Facilities Group

5.07 *Caution: The ESSX customers or CFGs can be deleted from automatic message accounting (AMA) output only during the first quarter hour. Loss of data will occur if deletions are made at any other time.*

5.08 *Initial Conditions:* The CFG number to be deleted is assigned in the CFG subtranslator.

5.09 *Results of Message:* The word in the CFG subtranslator for the specified CFG number is zeroed (unassigned) and the auxiliary block is returned to the idle link list.

5.10 Delete a CFG by entering the following message.

```
RC:CFG;OUT:
CFG aaaa!
```

D. Verification

5.11 Refer to paragraph 2.04 for the verification procedure for RC:CFG. The RC:CFG messages are immediately effective in call processing.

MASTER HEAD TABLE ANNEX

| +49 | ADDRESS OF CFG HEAD TABLE (NO. 1 ESS SWITCH) |

MASTER HEAD TABLE

| +79 | ADDRESS OF CFG HEAD TABLE (3724117) (NO. 1A ESS SWITCH) |

CFG HEAD TABLE

-1	LENGTH = N + 2
0	ADDRESS OF SUBTRANSLATOR
1	ADDRESS OF SUBTRANSLATOR
N	N ≤ 63

INPUT PARAMETER = CFG

| 12 | 7 6 | 0 |
| SELECTOR | INDEX |

CUSTOMER FACILITIES SUBTRANSLATOR

0	
000	AUXILIARY ADDRESS
127	ALL ZEROES IF UNASSIGNED

NOTE 1

CUSTOMER FACILITIES AUXILIARY BLOCK

WORD	23	22		18	17		12	10		0
0	0	WRON (22-18)			0————————0			NFAC (10-0)		
1	0	TYPE (22-18)			0————————0			NEXT CFG OR ZERO (12-0)		
2	0	TBL OR ZERO (22-17)			0————————0			CTXN (10-0)		

NOTE:
1. BIT 23 IS FOR NO. 1A ESS SWITCH ONLY.

LEGEND:

CFG   – CUSTOMER FACILITIES GROUP
CTXN – CENTREX NUMBER
NFAC – NUMBER OF FACILITIES
TBL   – TRUNK BUSY LAMP
WRON – WORD NUMBER

Fig. 5—Customer Facilities Group Translator

TABLE C

RC:CFG KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CFG aaaa	Customer Facilities Group number. May be used for restrictions of DID, dial 9, intercom, 3-port, and 2-way DID/dial 9 overflow and for accumulation of peg, usage and overflow counts of a centrex group: aaaa = 0001 through 8191.	ESS 1210B Cols. 20-23
CTX dddd	Centrex Group Number. If there is a master centrex group (MCTX), use the CTX number which contains the primary console on which the TBL appears: dddd = 1 through 2047.	ESS 1210B Cols. 31-34
GSZ cccc	Group Size. Number of facilities purchased for this CFG: cccc = 1 through 2047.	ESS 1210B Cols. 27-30
NXT eeee	Next Customer Facilities Group. Designates the next CFG in the hunt sequence: eeee = 0001 through 8191.	ESS 1210B Cols. 37-40
TBL ff	Trunk Busy Lamp number. Used to indicate that a CFG is busy by lighting when the last line in the group is used: ff = 0 through 63.	ESS 1210B Cols. 35-36
TYP bb	Type. Used to identify the type of customer facility: bb = 0 through 3 Invalid. = 4 DID. = 5 Dial 9. = 6 Intercom. = 7 Three-Port. = 8 Two-way DID/Dial 9 Overflow. = 9 through 31 Unassigned.	ESS 1210B Cols. 25-26

6. ADDING, REPLACING, OR REMOVING A CENTRAL PULSE DISTRIBUTOR (CPD) POINT RC:CPD (RCCD, PR-1A324 OR PR-6A324)

6.01 Refer to Table D for keyword definitions.

A. Adding or Replacing a Central Pulse Distributor Point Translation (Fig. 6)

6.02 *Initial Conditions:* The specified CPD point is unassigned.

6.03 *Results of Message:* The 1-word entry in the CPD translator, built as specified, replaces the existing word.

```
RC:CPD:
CPD abcde
UTY ff
   ┐
⊗─┘
   ├── MEMN gggg
   └── SMEMN hhi
```
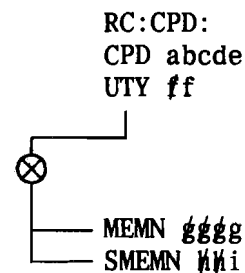
Fig. 6—Adding or Replacing a Central Pulse Distributor Point Translation

B. Removing a Central Pulse Distributor Point Translation

6.04 *Initial Conditions:* The specified CPD point is assigned.

6.05 *Results of Message:* The CPD translator entry is replaced with zeros.

6.06 Remove a CPD point by entering the following message.

RC:CPD;OUT:
CPD abcde!

C. Verification

6.07 There is no verification format provided for this type of RC. For the No. 1 ESS switch, this RC is not effective in call processing until the PS memory cards have been updated.

TABLE D

RC:CPD KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CPD abcde	Central Pulse Distributor Point: a = Pair. b = Half. c = Group. d = Row. e = Column.	ESS 1201 Cols. 44, 47-50
MEMN ggg	Member Number (decimal) for unit types other than unit types 12, 13, 14, 15, 16, 29, 37, and 54.	ESS 1601 Cols 33-35
SMEMN hhi	Special Member Number for unit types 12, 13, 14, 15, 16, 29, 37, and 54: hh = Decimal number. i = Octal number.	
UTY bb	Unit Type (decimal).	ESS 1601 Cols. 27-32

7. ADDING OR DELETING JUNCTOR SUBGROUPS RC:JUNCT (RCJG, PR-1A334 OR PR-6A334)

7.01 Refer to Table E for keyword definitions.

A. Adding Junctor Subgroups (Fig. 7)

7.02 *Initial Conditions:* The junctor circuit number (JCN)-junctor network number (JNN) translator and the junctor network number line (JNNL) to junctor scanner number (JSN) and/or junctor network number trunk (JNNT)-JSN exist with JSN unassigned. The LLN or TLN on each end of the junctor is unassigned in these translators and the junctor subgroup is on a busy shelf.

7.03 *Results of Message:* One-word entries are built in the required translators.

RC:JUNCT:
JSG ₵b

```
 ⊗ ┌── ── ── ── ──┐
   ├─ LLN ₵a        |
   |  CLLN ₵c       |
   |  JCS ₵d      %
   |  JFR ₵e        |
   ├─ LLN ₵a        |
   |  CTLN ₵c       |
   |  CJSH f ◄──── NOTE 1
   ├─ TLN ₵a        |
   |  JSH f ◄──── NOTE 1
   |  CLLN ₵c       |
   └─ TLN ₵a        |
      JSH f ◄──── NOTE 1
      CTLN ₵c       |
      CJSH f ◄──── NOTE 1
   └── ── ── ── ──┘
```
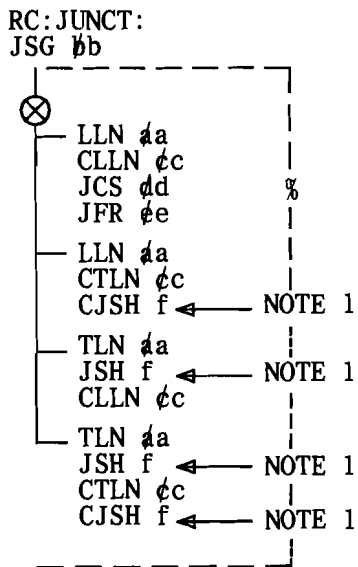
NOTE:
 1. A reconfigured trunk network consists of eight junctor switching frames/circuits and eight trunk switching frames/circuits with a concentration ratio of 1:1 for 2048 inputs and 2048 outputs.

Fig. 7—Adding Junctor Subgroups

B. Deleting Junctor Subgroups (Fig. 8)

7.04 *Initial Conditions:* The LLN or TLN on each end of the junctor is assigned in the JNNL-JSN and/or the JNNT-JSN translator. The subgroups are assigned in the JCN-JNN translator. The JSN is assigned and is on a busy shelf.

7.05 *Results of Message:* In the JNNL-JSN and the JNNT-JSN translator the specified entries are replaced with all zeros except in bits 4 and 21. In the JCN-JNN translator, the specified entries are replaced with all zeros.

RC:JUNCT;OUT:

```
   ┌── ── ── ── ──┐
   │  LLN ₵a        |
 ●⊗<                |
   │  TLN ₵a      %
   │  JSH f         |
   │                |
   └─ JSG ₵b        |
   └── ── ── ── ──┘
```
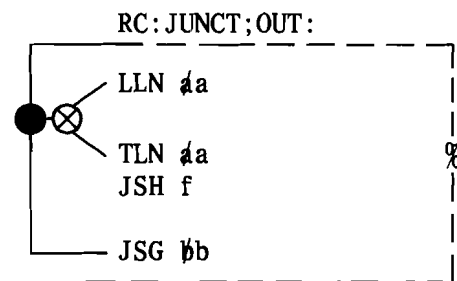
Fig. 8—Deleting Junctor Subgroups

C. Verification

7.06 Refer to paragraphs 2.05 through 2.07 for information to verify new or deletion messages. The audit program acts immediately upon the reconfigured junctors, shelf-by-shelf through the audit program facilities.

TABLE E

RC:JUNCT ADDING OR DELETING JUNCTOR SUBGROUPS
KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CJSH f	Connecting junctor switch half (0 to 1). Only for 2048 TLNs.	ESS 1702 or ESS 1711
CLLN $\not{c}$c	Connecting line link network. (This is the name given to one side of a junctor subgroup for identification.)	
CTLN $\not{c}$c	Connecting trunk link network. (This is the name given to one side of a junctor subgroup for identification.)	
JCS $\not{d}$d	Junctor circuit subgroup numbers: $\not{d}$d = 0 through 15.	
JFR $\not{e}$e	Junctor circuit frame number: $\not{e}$e = 0 through 31.	
JSG $\not{b}$b	Junctor subgroup number: $\not{b}$b = 0 through 63.	
JSH f	Junctor switch half (0 or 1). Only for 2048 TLNs.	
LLN $\not{a}$a	Line link network.	
TLN $\not{a}$a	Trunk link network.	

8. MAKING BUSY OR IDLE A JUNCTOR GROUPING FRAME SHELF RC:JUNCT (RCJG, PR-1A334 OR PR-6A334)

8.01 Refer to Table F for keyword definitions.

A. Making Busy a Junctor Grouping Frame Shelf

8.02 *Initial Conditions:* The specified shelf may be busy or idle, but no other shelf can be busy.

8.03 *Results of Message:* The specified shelf number is written into call store (CS) word N4SHLF to make the shelf busy (if not already busied).

8.04 Make busy a junctor grouping frame shelf by entering the following message.

    RC:JUNCT: (Note 1)
    BSY a
    RSV $\not{b}\not{b}\not{b}$b! (Note 2, No. 1 ESS switch only)

Note 1: If the shelf is already busy, this message may be entered and will be accepted.

Note 2: No. 1 ESS switch only, $\not{b}\not{b}\not{b}$b equals the number of RC registers to be reserved for junctor redistribution messages.

B. Making Idle a Junctor Grouping Frame Shelf

8.05 *Initial Conditions:* The shelf is busy.

8.06 *Results of Message:* The shelf number is erased from CS word N4SHLF.

8.07 Make idle a junctor grouping frame shelf by entering the following message.

    RC:JUNCT:
    IDL a!

C. Verification

8.08 There is no verification format provided for this type of RC. The audit program acts immediately upon the reconfigured junctors, shelf-by-shelf, through the audit program facilities. The RC is a temporary RC.

TABLE F

**RC:JUNCT MAKING BUSY OR IDLE A JUNCTOR GROUPING FRAME
SHELF KEYWORD DEFINITIONS**

KEYWORD UNIT	DEFINITION
BSY a	Junctor grouping frame shelf to be made busy (0 through 7).
IDL a	Junctor grouping frame shelf to be made idle (0 through 7).
RSV bbbb	Number of reserved registers. This number should be 48 times the number of line link networks plus 32 times the number of trunk link networks (No. 1 ESS switch only).

9. ADDING, CHANGING, OR REMOVING A MASTER SCANNER NUMBER (MSN) RC:MSN (RCSN, PR-1A355 OR PR-6A355)

9.01 Refer to Table G for keyword definitions.

A. Adding or Changing a Master Scanner Number in Translation (Non-Trunk) (Fig. 9)

9.02 *Initial Conditions:* The master scanner point is unassigned.

9.03 *Results of Message:* The specified word or auxiliary block is built in the MSN translator.

9.04 ▶*Message Requirements and Considerations:* The following may be required or should be considered when using this RC message.

(a) If testing from the trunk and line test panel, supplementary trunk test position, or manual trunk test position is done using the new scan point immediately after a master scanner change, the nontrunk T2 bit audit must be requested first. (Refer to IM-1A001/IM-6A001.) If the audits are not requested, the new scan point is ignored until the routine audit is peformed.

(b) Scan points used for unit type 37 (RMB, GMB, STOH keys), unit type 47 (TMB key) or unit type 54 (PMB key) must be assigned in member number zero of the unit type auxiliary block. The RC programs do not check the validity of these unit type scan points. A manual check should be made.◀

RC:MSN:
MSN aaaaaa
NPI bbb

— TG aaa
— SFG bbbb
— UTY cc

— MEMN dddd
— SMEMN eef
— MLH mmmm (NOTE 1)

—○— BSR

— EHT hhhh
— RMB dd (NOTE 2)

— TERS (aaaa,bbbb,....,tttt)

○— POS cc

— TER aaaa
KTYP 2

— QN ddd
KTYP a
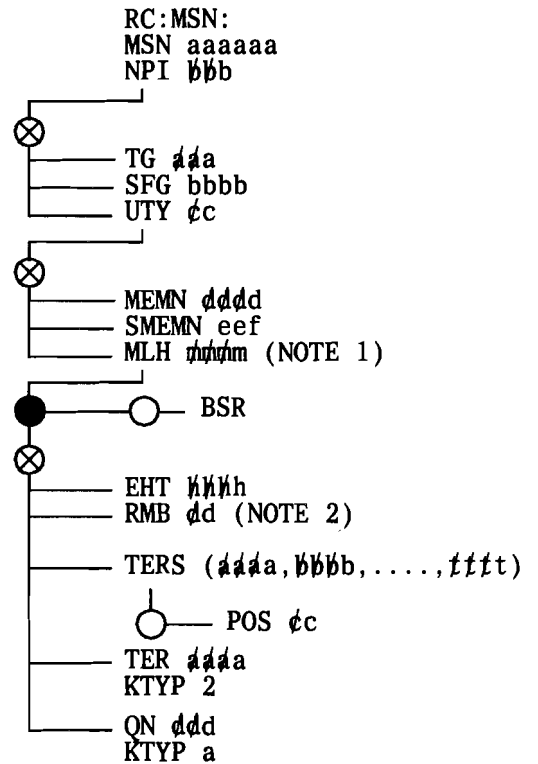
NOTES:
1. An MSN translation change for a multiline hunting group stop hunt key, random make-busy key, or terminal make-busy key is usually made in association with an RC service order message (RC:MLHG).
2. For random make-busy keys, dd must have a value of 1 to 10. For the group make-busy feature, use RMB 0.

Fig. 9—Adding or Changing a Master Scanner Number in Translation (Non-Trunk)

B. Removing a Master Scanner Number Translation (Non-Trunk)

9.05 *Initial Conditions:* The specified MSN is assigned.

9.06 *Results of Message:* The specified word is replaced with zeros. If an auxiliary block exists, it is released.

9.07 Remove a MSN by entering the following message.

RC:MSN;OUT:
MSN aaaaaa!

C. Verification

9.08 Refer to paragraph 2.08 for the verification procedure for RC:MSN. The RC:MSN messages are immediately effective in call processing.

TABLE G

RC:MSN KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	ᶜ FORM
BSR	Busy Sense Reversed (busy if scan point is not saturated).	ESS 1107 Col. 44
EHT hhhh	End Hunt Terminal (decimal).	ESS 1107 Cols. 36-39
KTYP a	Key Type: a = 1 with keyword QN for multiposition hunt (set automatically if POS entered). = 2 TER for ACD terminal make busy (associated with Attendant Interface Circuit SD-1A353-01). = 3 QN for inhibit intraflow. = 4 for unassigned. = 5 QN for local night transfer. = 6 QN for inhibit inflow.	ESS 1107 Cols. 4041
MEMN dddd	Member Number (decimal) for unit types other than unit types 12, 13, 14, 15, 16, 29, 37, and 54.	ESS 1600 Cols. 33-35
MLH mmmm	Multiline Hunt Group Number (decimal).	ESS 1107 Cols. 32-35
MSN aaaaaa	Master Scanner Number.	
NPI bbb	Nontrunk Program Index. (See PA-591003 or PA-6A002 for a listing of NPIs.): bbb = 0 through 255.	ESS 1600 Cols. 27-32
POS cc	Attendant Position Number in multiple position hunt arrangement: cc = 1 through 15.	ESS 1115 Cols. 20-23
QN ddd	Queue Number (for QTL features — queuing for trunks and lines).	ESS 1101 Cols. 27-29 or 51-56
RMB dd	Random Make-Busy Number (0 through 10 decimal): For dd ≠ 0 RMB dd must also be entered in RC:LINE messages. Inputting a RMB 0 in the RC:MSN message (with no RMB in any RC:LINE message) makes the entire MLG busy when the scan point is activated. In **all** cases, RMB must be entered in the RC:MLHG message: dd = 0 through 10.	ESS 1115 Cols. 48-49
SFG bbbb	Simulated Facilities Group number. May be used for restrictions of incoming or outgoing calls: bbbb = 0001 through 2047.	ESS 1210A Cols. 24-27
SMEMN eef	Special Member Number of Unit Types 12, 13, 14, 15, 16, 29, 37, and 54: ee = Decimal Number 0 through 15. f = Octal Number 0 through 7.	

10. ADDING OR DELETING A NETWORK MANAGEMENT TRUNK GROUP CONTROL PREPROGRAM RC:NMTGC (RCNM, PR-1A372 OR PR-6A372)

10.01 Refer to Table H for keyword definitions.

A. Adding a Network Management Trunk Group Control Preprogram (Fig. 10)

10.02 *Initial Conditions:* Unit type 46 subtranslator exists; the specified master scanner numbers MSN1 and MSN2 are unassigned. The specified trunk groups are assigned.

10.03 *Results of Message:* A 4-word member number auxiliary block is seized, linked, and built as specified. The MSN1 and MSN2 are assigned in the MSN translator.

10.04 ▶*Message Requirements and Considerations:* If the CSDC indicator is set in the trunk class code (TCC) that is associated with the trunk group (TG) from which calls are being rerouted, then the CSDC indicator must be set in the TCC associated with the TG that the calls are being rerouted to. If the "from" TG does not have CSDC then the "to" TG cannot have CSDC.◀


```
RC:NMTGC:
MEMN ǿǿa
TG ƀƀb
PTR ¢¢c
```
```
          CF ǿdd              RR ɳnn
          SKALT ¢ee    TTGA ѱѱw    IRDIR ƭƭt
          SKDIR ƒƒf    TTGB ӿӿx    IRALT ɣɣv
          CTALT ɦhh
          CTDIR ɭɭi    TTGC ɣɣy
```
```
          PRIOR m
          MSN1 rrrrrr
          MSN2 ssssss
```

Fig. 10—Adding a Network Management Trunk Group Control Preprogram

B. Deleting a Network Management Trunk Group Control Preprogram

10.05 *Initial Conditions:* The specified member number is assigned.

10.06 *Results of Message:* The specified member number's pointer in the subtranslator is replaced by zeros, the auxiliary block is released, and the MSNs are unassigned.

10.07 Delete a network management trunk group by entering the following message.

```
RC:NMTGC;OUT:
MEMN ǿǿa!
```

C. Verification

10.08 There is no verification format provided for this type of RC. ▶The RC:NMTGC messages are immediately effective in call processing. In a No. 1 ESS switch, unit type 46 is hunted all of the time and unit types 23, 29, 55, and 61 are hunted as soon as card writing is started.◀

TABLE H

RC:NMTGC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CF ddd	Cancel From. Overflow from the trunk group, cancel ddd percent: ddd = 50, 75, or 100.	ESS 1506 Cols. 41-42
CTALT ⱨhh	Cancel To Alternate. Alternate routed attempts to the trunk group, cancel ⱨⱨh percent: ⱨhh = 50, 75, or 100.	ESS 1506 Cols. 41-42
CTDIR ꙇꙇi	Cancel To Direct. First routed attempts to the trunk group, cancel ꙇꙇi percent: ꙇꙇi = 0, 75, or 100.	ESS 1506 Cols. 41-42
MEMN ꙇꙇa	Member Number.	ESS 1506 Cols. 33-35
MSN1 rrrrrr	Supervisory master scanner number associated with corresponding dynamic overload control (DOC) signal.	ESS 1600 Cols. 18-23
MSN2 ssssss	Directed master scanner number associated with corresponding DOC signal (same DOC signal as for MSN1).	ESS 1600 Cols. 18-23
PRIOR m	Priority. Assigns a priority of 1, 2, or 3 (1 being highest priority) to each preprogram that is assigned to trunk group: m =1, 2, or 3.	ESS 1506 Col. 45
PTR ꙇꙇc	Pointer. Index used to access network management data for trunk group to which this preprogram applies.	ESS 1506 Cols. 52-53
SKALT eee	Skip Alternate. Alternate routed attempts to the trunk group, skip eee percent: eee = 50, 75, or 100.	ESS 1506 Cols. 54-56
SKDIR ꝼꝼf	Skip Direct. First routed attempts to the trunk group, skip ꝼꝼf percent: ꝼꝼf = 0, 50, 75, or 100.	ESS 1506 Cols. 49-51
TG ꝏꝏb	Trunk Group number: ꝏꝏb = 1 through 999.	ESS 1506 Cols. 39-41
RR ꙇnn	Regular Reroute (% of overflow traffic to be rerouted): ꙇnn = 25, 50, 75, or 100.	ESS 1506 Cols. 37-38
IRDIR ꙇꙇt	Immediate Reroute Direct (% of direct traffic to be rerouted): ꙇꙇt = 0, 25, 50, 75, or 100.	ESS 1506 Cols. 37-38,57
IRALT ꙇꙇv	Immediate Reroute Alternate (% of alternate traffic to be rerouted): ꙇꙇv = 0, 25, 50, 75, or 100.	ESS 1506 Cols. 37-38,52
TTGA ꙡꙡw	To Trunk Group A (first TG to which a call is rerouted): ꙡꙡw = 1 through 999.	ESS 1506 Cols. 49-56
TTGB ꙡꙡx	To Trunk Group B (second TG to which a call is rerouted): ꙡꙡx = 1 through 999.	ESS 1506 Cols. 37-44
TTGC ꙡꙡy	To Trunk Group C (third TG to which a call is rerouted): ꙡꙡy = 1 through 999.	ESS 1506 Cols. 49-56

11. ADDING OR REMOVING PLANT MEASUREMENT (PLM) DESTINATION CODES RC:PLM (RCPM, PR-1A343 OR PR-6A343)

11.01 The RC:GENT message (Section 231-048-305) must be used to build or change other data in the PLM translator. Reference should be made to Section 231-120-302, which contains a description of the PLM translator. Refer to Table I for keyword definitions.

A. Adding Trunk Groups and Plant Measurement Destination Codes to Office Abbreviation List (Fig. 11)

11.02 *Initial Conditions:* The specified trunk group (TG) is assigned. The plant measurement translator exists with the specified TG not in the TG list and at least one spare word available for it. If the specified destination (DES) code is not already in the DES list, a suitable spare word must be available for it.

11.03 *Results of Message:* The TG is entered in the first available spare word in the TG list. If the DES code is not already in the DES list, it is added.

RC:PLM:

CONSEC   (NOTES 1 and 2)

TG áa
DES ccc   %
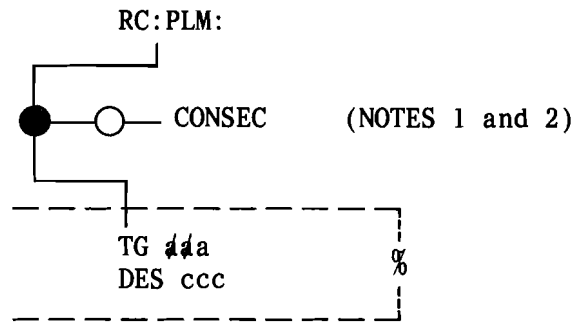
NOTES:
1. The arrangement of the office abbreviation list determines the order in which the corresponding call store peg counts are printed out. Thus, in order to assure that the destination codes in a given message or sequence of messages appear together in the consecutive order of their input, the keyword CONSEC should be used.
2. If the optional keyword CONSEC is entered, the alphanumeric destination code is placed in the office abbreviation list located in the plant measurements translator immediately following the last destination code. If keyword CONSEC is not entered, the code is placed in the first available position in the list and, thus, may fill a hole that precedes existing entries.

Fig. 11—Adding Trunk Groups and Plant Measurements Destination Codes to Office Abbreviation List

B. Removing Plant Measurement Destination Codes (Fig. 12)

11.04 *Initial Condition:* The specified TG appears in the TG number of the PLM translator.

11.05 *Results of Message:* The TG word is made a spare word (all zeros except in bit 22) and its DES code is removed (replaced by a 1 in bit 22 and three blank character codes unless it is used by other TGs).

RC:PLM;OUT:

```
┌──────────────────────────┐
│  TG ảảa              %   │
└──────────────────────────┘
```

Fig. 12—Removing Plant Measurement Destination Codes

C. Verification

11.06 There is no verification format provided for this type of RC. For the No. 1 ESS switch, this RC is not effective in call processing until the PS memory cards have been updated.
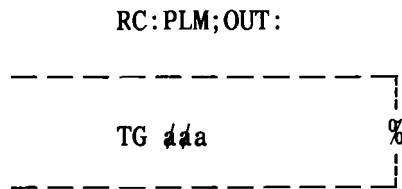
TABLE I

RC:PLM KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CONSEC	Consecutive table entries for following destination codes.	
DES ccc	Alphanumeric Destination Code.	ESS 1404 Cols. 28-30
TG ảảa	Trunk Group number.	ESS 1404 Cols. 25-27

12. ADDING, CHANGING, OR DELETING A MEMBER NUMBER FOR A REMOTE OFFICE TEST LINE (ROTL) FRAME RC:ROTL (RCRT, PR-1A370 OR PR-6A370)

12.01 Refer to Table J for keyword definitions.

A. Adding a Member Number for a Remote Office Test Line Frame (Fig. 13)

12.02 *Initial Conditions:* The automatic transmission measurement (ROTL head table unit type 53) exists, all master scanner points to be specified are assigned, and the trunks to be entered are equipped.

12.03 *Results of Message:* A ROTL auxiliary block is seized, linked to the head table, and the specified data is entered in the block. A TNN-trunk group number (TGN) auxiliary block is built for each TNN.
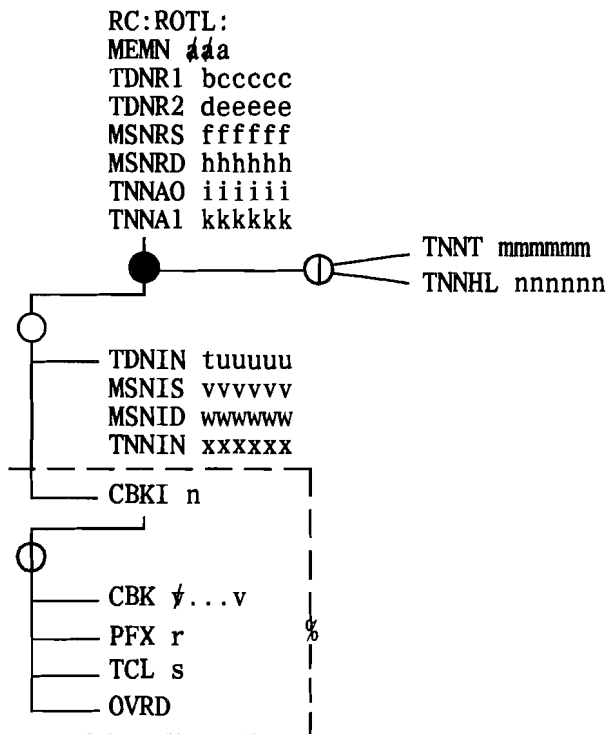
B. Changing Data for a ROTL Member Number (Fig. 14)

12.04 Refer to paragraphs 1.07 and 1.08.

12.05 In order to change an MSN or a TNN in the ROTL translator, the RC:ROTL;OUT message must be used to remove the entire member number. The new MSN and/or TNN to be assigned to the ROTL must be assigned or equipped, respectively, by using the RC:MSN and/or RC:TRK message. Then, the RC:ROTL message is used to enter the new or changed MSN and/or TNN along with the old information that was not changed.

12.06 *Initial Conditions:* The specified member number is assigned.

12.07 *Results of Message:* The specified data in the auxiliary block is replaced.

```
RC:ROTL:
MEMN ḋḋa
TDNR1 bccccc
TDNR2 deeeee
MSNRS ffffff
MSNRD hhhhhh
TNNAO iiiiii
TNNA1 kkkkkk
            ●━━━━━━○┤──── TNNT mmmmmm
                         └──── TNNHL nnnnnn
     ○
     ├──── TDNIN tuuuuu
     │     MSNIS vvvvv
     │     MSNID wwwwww
     │     TNNIN xxxxxx
     │
     └──── CBKI n
     ○
     ├──── CBK ḟ...v
     ├──── PFX r       %
     ├──── TCL s
     └──── OVRD
```

Fig. 13—Adding a Member Number for a ROTL Frame

```
RC:ROTL;CHG:
MEMN ḋḋa
  ○
  ├──── TDNR1 bccccc
  ├──── TDNR2 deeeee
  ├──── TDNIN tuuuuu
  └──── CBKI n
        ○
        ├──── CBK ḟ...v or NO     %
        ├──── PFX r or NO
        ├──── TCL s or NO
        └──── OVRD
```
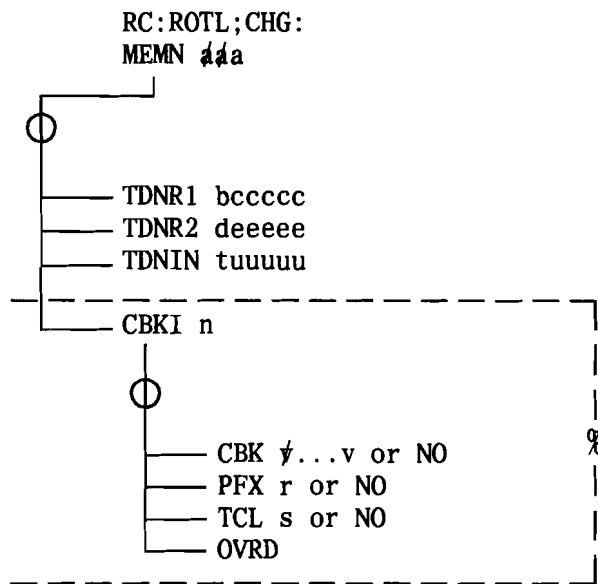
Fig. 14—Changing Data for a ROTL Member Number

C. Deleting a Member Number for a ROTL Frame

12.08 *Initial Conditions:* The specified member number is assigned.

12.09 *Results of Message:* The ROTL auxiliary block is released and the member number in the head table is unassigned (replaced with zeros). The TNN-TGN auxiliary block are released.

12.10 Delete a member number for a ROTL frame by entering the following message.

RC:ROTL;OUT:

MEMN áάa!

D. Verification

12.11 There is no verification format provided for this type of RC. For the No. 1 ESS switch , this RC is not effective in call processing until the PS memory cards have been updated.

TABLE J

RC:RQTL KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	'S⁵ FORM
CBK x...v	Call Back Number. A 7- or 10-digit directory number. These security call back directory numbers are used to verify the identify of a remote location attempting to make trunks busy in the ROTL office. The ROTL office calls the call back number associated with an index number (CBKI). The test center (TC) at that number will indicate by sending a call back verification tone if it was the remote location requesting the make-busy option. This is a safeguard to prevent saboteurs from falsely identifying themselves as an authorized TC.	ESS 1506 Cols. 38-47
CBKI n	Call Back Index. The security call back numbers must be entered sequentially according to the single digit code (n = 1 through 8) assigned to a particular user.	ESS 1506 Col. 37
MEMN aaa	Member Number: aaa = 0 through 7.	ESS 1600 Cols. 27-32
MSNID wwwwww	Master Scanner Number for Interrogator Port, Directed.	
MSNIS vvvvvv	Master Scanner Number for Interrogator Port, Supervisory.	ESS 1600 Cols. 18-23
MSNRD hhhhhh	Master Scanner Number for ROTL, Directed.	
MSNRS ffffff	Master Scanner Number for ROTL, Supervisory.	
OVRD	Override location identified by the call back number is allowed to override automatic trunk maintenance limit.	ESS 1506 Cols. 49-50
PFX r	Prefix Code: r = 0, if call back directory number is 8 digits. r = 1, if call back directory number is 11 digits.	ESS 1506 Col. 37
TCL s	Class of Make-Busy Control: s = 0, if call back location has made-busy control over all trunks s = 1, if location has control over trunks in administrative group A only. s = 2, if location has control over trunks in administrative group B only.	ESS 1506 Col. 51
TDNIN tuuuuu	Trunk Distributor Number of Processor Controlled Interrogator Port; SD-00 for ROTL Interrogator: t = Frame Type U, M, J, or S. uuuuu = Frame Number and Signal Distributor Point.	ESS 1602 Cols. 18-23
TDNR1 bccccc	Miscellaneous Trunk Distributor Number 1 for ROTL; SD-00 for ROTL applique (SD-1A314): b = Frame type U, M, J, or S. ccccc = Frame Number and Signal Distributor Point.	ESS 1602 Cols. 18-23

TABLE J (Contd)

RC:RQTL KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
TDNR2 deeeee	Miscellaneous Trunk Distributor Number 2 ROTL Interrupter Applique; IAO for ROTL applique (SD-1A314): d = Frame Type U, M, J, or S. eeeee = Frame Number and Signal Distributor Point.	ESS 1602 Cols. 18-23
TNNAO iiiiii	Trunk Network Number for ROTL Access Port 0.	ESS 1506 Cols. 49-54
TNNA1 kkkkkk	Trunk Network Number for ROTL Access Port 1.	
TNNHL nnnnnn	Trunk Network Number for HILO 4-wire ROTL Test Port.	
TNNIN xxxxxx	Trunk Network Number for the Processor Controlled Interrogator Port.	ESS 1506 Cols. 37-42
TNNT mmmmmm	Trunk Network Number for ROTL Test Port.	ESS 1506 Cols. 49-54

13. ADDING, CHANGING, OR DELETING A SIMULATED FACILITIES GROUP (SFG) RC:SIMFAC (RCSF, PR-1A351 OR PR-6A351)

13.01 Simulated facilities group is a software device used to restrict certain services sold on a limited access basis. The SFG simulates physical hardware facilities and is assigned on a per customer basis. The quantity of lines purchased is stored in memory and is used to identify and control the number of outgoing and incoming calls for a given service of a particular customer at a given time. Limited access to lines or trunks is provided rather than dedicating lines and trunks for these services. These services are as follows:

- Automatic Call Distribution (ACD) Interflow, Call Forwarding Don't Answer/Call Forwarding Busy Line (CFDA/CFBL)

- ACD Local Access DN

- Common Control Switching Arrangement (CCSA) Access from Centrex

- ▶Carrier Interconnection (CI); Interlata, Intralata, or International (1E8/1AE8 and later)◀

- CCSA Off-Network or Enhanced Private Switched Communication Service (EPSCS) Off-Network (No. 1 ESS switch only); Network Trunk Queuing; 2-way Trunk Group

- CCSA Network Access Line (NAL) (from CCSA)

- Inward Wide Area Telephone Service (INWATS)

- Outward Wide Area Telephone Service (OUTWATS); WATS Outgoing Trunk Queuing; Network Trunk Queuing, Outgoing Trunk Group

- Remote Call Forwarding.

13.02 The SFGN translator (Fig. 17) contains information associated with simulated facilities. The information is related to Form ESS 1210 (1E6/1AE6) or Form ESS 1225 (1E7/1AE7 and later). The SFGN translator consists of a head table, subtranslators, and auxiliary blocks. In the No. 1 ESS switch, the mnemonic address F3HHTP+28, or in the No. 1A ESS switch the fixed address 3724034 in the master head table contains the address of the first word in the SFGN head table. The head table con-

tains the addresses of the subtranslators. Each subtranslator has 16 (0 through 15) primary translation words. Each primary translation word contains the address of an auxiliary block or all zeros indicating the word is unassigned. The input parameter is the SFGN. The input parameter is divided into two parts: the selector and the index. The selector indicates the address of the subtranslator. The index indicates the address of the primary translation word in the subtranslator that contains the address of the auxiliary block with the SFG information. The auxiliary block consists of from 2 to 7 words. Words 0 and 1 are always required. Word 2 is required if word 3, 4, or 5 is built or if the SFG is associated with a trunk busy lamp, a simulated facility line number, or if a special terminal number access check is to be performed on this SFG, or if the SFG is to be a busy/idle status indicator (BISI) SFG. Word 3 is required if word 4 is built or if the SFG is associated with a data link group of a queuing trunks and lines (QTL) queue. Word 4 is required if word 5 or 6 is built or if the SFG is associated with a customer identification number, message detail recording, or a facility identifier. If word 5 is required word 6 should also be built even if the busy/idle bit number (BIBN) is not defined on the ESS 1225 form. In this case, word 6 would then be built to all zeros. Words 5 and 6 are built to implement the BISI feature and are available for 1E7/1AE7 and later generics only.

13.03 Refer to Table K for keyword definitions.

A. Adding a Simulated Facilities Group (Fig. 15)

13.04 *Initial Conditions:* The SFG subtranslator exists and the SFG number to be specified is unassigned.

13.05 *Results of Message:* An SFG auxiliary block (2 to 7 words) is seized, linked to the SFG subtranslator and built as specified by the input message. When specified the proper BISI translations are built.

RC:SIMFAC:
SFG aaaa
APP bb (NOTE 1)
SLEN ddddddd (See CAUTION)
(NOTE 2)
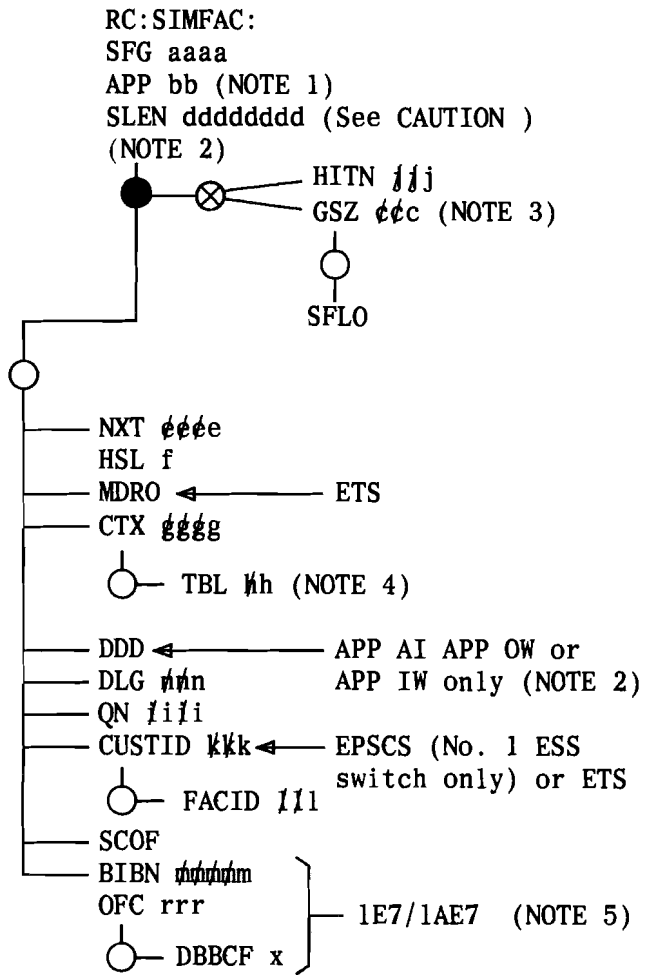
CAUTION: Billing errors will occur if DDD is inputted with APP IW. This combination specifies a special study AMA record. Keyword SLEN must be used with APP IW unless the special study AMA is desired. If both APP IW and DDD are inputted, SLEN must not be inputted as the message will be rejected.

▶Fig. 15 — Adding a Simulated Facilities Group (Sheet 1 of 2)◀

NOTES:

1. If APP CI (1E8/1AE8 and later) is inputted, then keyword SLEN is not valid and keyword NXT is valid only if the SFG is limited access.

2. A screening line equipment number (SLEN) may be assigned or unassigned for an INWATS SFG. If unassigned the SLEN must match the originating equipment number inputted with the RC:LINE message. A SLEN may be omitted for EPSCS queuing.

3. For carrier interconnect, if a limited SFG is indicated the limit chosen should not be set lower than the number of IC access trunks assigned to the associated IC in the access tandem. If an unlimited SFG is indicated there will be no per carrier usage counts for the shared TG.

4. Keyword TBL is not allowed for unlimited access SFGs or limited access SFGs with a trunk access code (TNAC) equal to 1.

5. The SFG must be an INWATS SFG (type = 3) if BISI keywords are input.
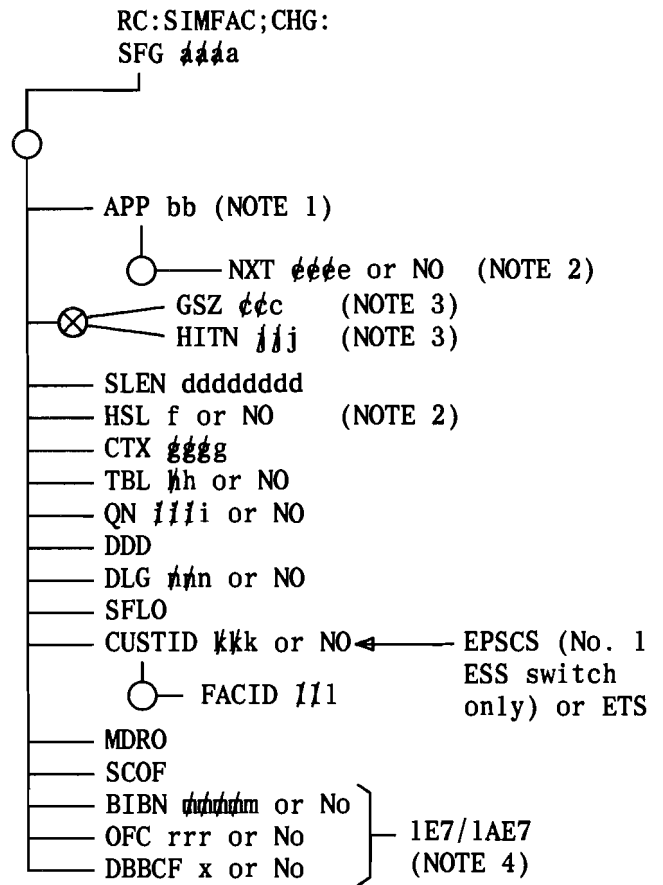
▶Fig. 15 — Adding a Simulated Facilities Group (Sheet 2 of 2)◀

```
RC:SIMFAC;CHG:
    SFG aaaa
```


▶Fig. 16 — Changing a Simulated Facilities Group (Sheet 1 of 2)◀

B. Changing a Simulated Facilities Group (Fig. 16)

13.06 Refer to paragraphs 1.07 and 1.08.

13.07 *Initial Conditions:* The SFG number is assigned and has the auxiliary block built.

13.08 *Results of Message:* The data specified in the input message replaces or deletes the existing data or is added to the auxiliary block. If a different size auxiliary block is required, one is seized and built and the existing block is returned to the idle link list.

NOTES:
1. If APP CI (1E8/1AE8 and later) is inputted then keyword SLEN is not valid, keyword HSL is valid only if a next SFG (keyword NXT) exists, and keyword NXT is valid only if the SFG is limited access.
2. If either keyword NXT NO or HSL NO is inputted, then both must be inputted and keyword APP is not required.
3. To replace GSZ keyword data with HITN keyword data or vice versa, use the RC:SIMFAC;OUT message; then use RC:SIMFAC to reenter the appropriate SFG data.
4. The SFG must be an INWATS (type = 3) if BISI keywords are inputted. If a BISI SFG is being modified or deleted, BISI must be deactivated by the RC:BISI message (see Part 22) before the SFG can be modified or deleted. The BISI SFG cannot be removed if item BML (BISI max. lines) set by the RC:LINE message (see Section 231-048-302) is greater than zero.

▶Fig. 16 — Changing a Simulated Facilities Group (Sheet 2 of 2)◀

C. **Deleting a Simulated Facilities Group**

13.09   *Initial Conditions:* The SFG number to be deleted is assigned in the SFG subtranslator.

13.10   *Results of Message:* The word in the SFG subtranslator for the specified SFG number is zeroed (unassigned) and the auxiliary block is returned to the idle link list.

13.11   Delete a SFG number by entering the following message.

   RC:SIMFAC;OUT:
   SFG aaaa!

D. **Verification**

13.12   Refer to paragraph 2.09 for the verification procedure for RC:SIMFAC. The RC:SIMFAC message is immediately effective in call processing.

♦TABLE K♦

RC:SIMFAC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
APP bb	Application. Used to identify the type of simulated facilities service. The simulated facilities type in WORD 1 of the SF auxiliary block is derived from the application. When applications CC, CL, CN, and OW are specified, both SFG and NXT (when used) must be ≤511: bb = AI for ACD Interflow; CFOA/CFBL — type 0. = AL for ACD Local Access DN — type 2. = CC for CCSA Access from Centrex — type 2. = CI for Carrier Interconnection; Interlata, Intralata, or International — type 0. = CL for CCSA or EPSCS (No. 1 ESS only) Off-network; Network Trunk Queuing; 2-way Trunk Group — type 1. = CN for CCSA NAL (from CCSA) — type 2. = IW for INWATS — type 3. = OW for OUTWATS; WATS Outgoing Trunk Queuing; Network Trunk Queuing; Outgoing Trunk Group — type 0. = RF for Remote Call Forwarding — type 1.	ESS 1210A Col. 44 (1E6/1AE6) ESS 1225 Col. 41 (1E7/1AE7 and later)
BIBN mmmm	Busy/Idle Bit Number: mmmm = 0 through 65,535.	ESS 1225 Cols. 75-79 (1E7/1AE7) and later)
CTX ggg	Centrex Group Number. Appearing in the centrex data link auxiliary (unit type = 29) for the primary console on which the TBL appears: ggg = 1 less than parameter limit.	ESS 1210A Cols. 45-48 (1E6/1AE6 ESS 1225 Cols. 42-45 (1E7/1AE7 and later)
CUSTID kkk	Private Network Customer Identification Number: kkk = 1 through 127 (PKG:CCI). kk = 1 through 163 (EPSCS, No. 1 ESS only). kkk = 64 through 127 (ETS).	ESS 1210A Cols. 51-53 (1E6/1AE6) ESS 1225 Cols. 54-56 (1E7/1AE7 and later)
DBBCF x	Data Base Busy Count Frequency. Indicates how often the terminating end office (TEO) will be receiving traffic counts for the INWATS data base: x = 0 through daily (default), 1 through 15 minutes and daily.	ESS 1225 Col. 80 (1E7/1AE7 and later)

TABLE K (Contd)

RC:SIMFAC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
DDD	Direct Distance Dialing or subscriber line usage study. Inputting DDD with APP AI or OW, indicates DDD charging should be used to complete the call if necessary. The AMA charge is made against the station DN. Inputting DDD with APP IW indicates a special study mark is to be placed on the AMA record.	ESS 1210A Col. 40 or 41 (1E6/1AE6) ESS 1225 Col. 37 or 38 (1E7/1AE7 and later)
DLG nnn	Data Link Group: nnn = 1 through 255.	ESS 1210A Cols. 61-63 (1E6/1AE6)
FACID lll	Facility Identifier (PKG:CCI). For FACID to be valid, CUSTID range must be from 64 to 127 (ETS): lll = 1 through 511.	ESS 1210A Cols. 64-65 (1E6/1AE6) ESS 1225 Cols. 57-59 (1E7/1AE7 and later)
GSZ ccc	Group size. Number of access lines purchased for this SFG: ccc = 0 through 127; 127 means unlimited size. 0 is used for special purposes such as making group inactive.	ESS 1210A Cols. 37-39 (1E6/1AE6) ESS 1225 Cols. 34-36 (1E7/1AE7 and later)
HITN jjj	Highest MLG Terminal Number. Designates the highest multiline group terminal number within an APP IW (INWATS) simulated facilities group. This keyword is required when access to the SFG is to be determined by checking multiline terminal numbers, rather than by checking usage counts: jjj = 1 through 127; 127 is unlimited size.	ESS 1210A Cols. 37-39 (1E6/1AE6) ESS 1225 Cols. 34-36 (1E7/1AE7 and later)
HSL f	Hunt Sequence Length. Maximum number of additional SFGs that may be hunted, not including the start SFG.	ESS 1210A Col. 36 (1E6/1AE6 ESS 1225 Col. 33 (1E7/1AE7 and later)

TABLE K (Contd)

RC:SIMFAC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
MDRO	Message Detail Recording on Outgoing facility (PKG:EMDR).	ESS 1210 Col. 62 (1E6/1AE6) ESS 1225 Col. 60 (1E7/1AE7 and later)
OFC rrr	Office Code of dialed INWATS number. The office code (digits 4, 5, and 6) of the INWATS routing number for the INWATS customer: rrr = 001 through 999.	ESS 1225 Cols. 72-74 (1E7/1AE7 and later)
SCOF	Selective Control Facilities with no access code (PKG:SCOF).	ESS1210A Cols. 68-73 (1E6/1AE6) ESS 1225 Cols. 61-66 (1E7/1AE7 and later)
NXT ¢¢¢e	Next SFG. Designates the next SFG in the hunt sequence: ¢¢¢e = 1 through 2047.	ESS 1210A Cols. 57-60 (1E6/1AE6) ESS 1225 Cols. 21-24 (1E7/1AE7 and later)
SFLO	Simulated Facility Line Number Output Indicator. Indicates that a portion of the simulated facility line number activity block will be associated with this SFG and a simulated facility line number will be outputted on the AMA tape.	ESS 1210A Col. 43 (1E6/1AE6) ESS 1225 Col. 40 (1E7/1AE7 and later)
QN ïïïi	QTL queue number: ïïïi = 1 — parameter limit.	ESS 1210A Cols. 54-56 (1E6/1AE6) ESS 1225 Cols. 48-50 (1E7/1AE7 and later)
SFG aaaa	Simulated Facilities Group Number. May be used for restrictions of incoming or outgoing calls: ¢¢¢a = 1 through 2047.	ESS 1210A Cols. 24-27 (1E6/1AE6) ESS 1225 Cols. 16-19 (1E7/1AE7 and later)

TABLE K (Contd)

RC:SIMFAC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
SLEN dddddddd	Screening LEN (also called pseudo LEN). LEN corresponding to no physical line appearance that is used to assign originating features (a billing number, major class, and chart class) for a simulated facility group.	ESS 1210A Cols. 25-36 (1E6/1AE6) ESS 1225 Cols. 25-32 (1E7/1AE7 and later)
TBL lⱡh	Trunk Busy Lamp Number. Used to indicate that SFG is busy by lighting a lamp when the last line in the group is used: TBL is not allowed for unlimited access SFGs with trunk network access code (TNAC) equaling 1: lⱡh = 0 through 59.	ESS 1210A Cols. 49-50 (1E6/1AE6) ESS 1225 Cols. 46, 47 (1E7/1AE7 and later)

MASTER HEAD TABLE

+28 | ADDRESS OF SFGN HEAD TABLE (NO. 1 ESS SWITCH)

MASTER HEAD TABLE

+28 | ADDRESS OF SFGN HEAD TABLE (3724028) (NO. 1A ESS SWITCH)

SFGN HEAD TABLE

ADDRESS OF SUBTRANSLATOR

INPUT PARAMETER = SFGN

10	4	3	0
SELECTOR		INDEX	

SUBTRANSLATOR

0

0 0 0 | AUXILIARY ADDRESS

ALL ZERO = UNASSIGNED

15

NOTE 1

SFGN AUXILIARY BLOCK

	23											
0	0	WORD NO. (22-18)		NEXT SFGN (17-7)				NO. OF LINES (6-0)				
1	0	DDD (22)	TYPE (21-20)	HSL (19-17)	SCREENING LEN (16-0)							
2	0	TRUNK BUSY LAMP (22-17)			PTNI	TNAC	0	BISI	0	0	CTXN (10-0)		
3	0	DLG MINI OR ZERO (22-15)		0————————0						QTLQN (7-0)			
4	0	SCOF	0	0	FACID (19-11)			0	MDRO	0	CUSTID (7-0)		
(NOTE 2) 5	0	ADB	BML (21-15)		0————————0			D8BCF (11-10)		OFC (9-0)			
(NOTE 2) 6	0	0————————0			BIBN (15-0)								

NOTES:
1. BIT 23 IS FOR NO. 1A ESS SWITCH ONLY.
2. 1E7/1AE7 AND LATER GENERICS.

LEGEND:
ADB - ACTIVATED/DEACTIVATED BISI STATUS INDICATOR
BIBN - BUSY/IDLE BIT NUMBER
BISI - BISI SFG INDICATOR
BML - BISI MAXIMUM LINES
CTNX - CENTREX NUMBER
CUSTID - PRIVATE NETWORK CUSTOMER IDENTIFICATION
DBBCF - DATA BASE BUSY COUNT FREQUENCY
DDD - DIRECT DISTANCE DIALING
DLG - DATA LINK GROUP
FACID - FACILITY IDENTIFIER [ONLY IF CUSTID RANGE IS 64-127(ETS)]
HSL - HUNT SEQUENCE LENGTH

LEN - LINE EQUIPMENT NUMBER
MDRO - MESSAGE DETAIL RECORDING INCOMING FACILITY INDICATOR
OFC - OFFICE CODE DIGITS 4, 5, AND 6 OF INWATS 800-XXX-XXX
PTNI - PSEUDO TRUNK NUMBER INDICATOR
QTLQN - QUEUING FOR TRUNKS AND LINES QUEUE NUMBER
SCOF - SELECTIVE CONTROL FACILITIES
SFGN - SIMULATED FACILITIES GROUP NUMBER
TNAC - TRUNK NUMBER ACCESS CODE

Fig. 17—Simulated Facilities Group Number Translator

14. ADDING OR DELETING TRUNKS TO HARDWARE CARRIER GROUP ALARM (CGA) OR TRUNK MAKE-BUSY (TMB) KEYS RC:TMBGCA (RCTC, PR-1A357 OR PR-6A357) Fig. 18

14.01 Refer to Table L for the keyword definitions.

14.02 *Initial Conditions:* The CGA or TMB member number auxiliary block of correct size exists, and is linked to its head table and contains in its first word (in addition to the auxiliary block size) the MSN to be associated with the specified CGA or TMB key and, if needed, the two digital carrier trunk (DCT) bits. This first word can only be changed by a RC:PSWD or RC:GENT message. All TNNs to be specified are equipped and assigned to the appropriate trunk group (Section 231-048-303).

14.03 *Results of Message:* For each segment specified, one word is built in the CGA or TMB auxiliary block. When keyword ATNN is entered, that TNN is placed in the first all-zero word in the specified member number auxiliary block. The index of that word and the member number are added to the TNN-TGN auxiliary block. When keyword DTNN is entered, that TNN is deleted from the specified member number auxiliary block, and the corresponding member number/key index word is removed from the TNN-TGN auxiliary block.
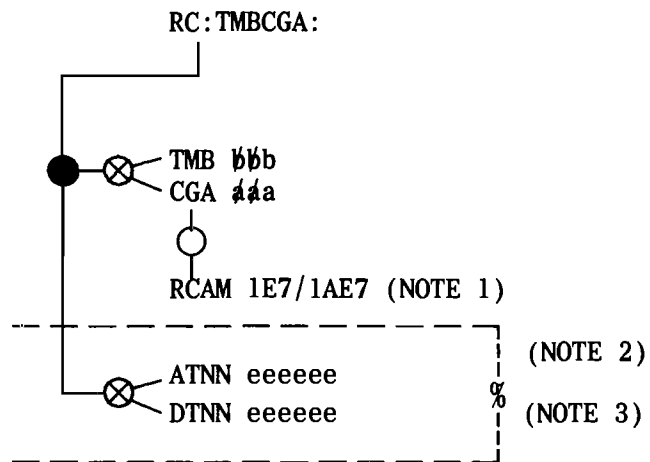
NOTES:
1. When RCAM is set, bit 22 in the PTW of the unit type 40 subtranslator will be set to 1.
2. When adding a TNN to a TMB or CGA unit type, the AUTOVON customer status (ACST) item in the TNN word should be set to 1 if the trunk has the AUTOVON customer status board (ACSB) feature (WRDFN = 0 in the TNN-TGN auxiliary block and the trunk group has the ACSB feature).
3. A trunk must first be deleted from the CGA or TMB member using the RC:TMBCGA message before it can be deleted from the trunk group using the RC:TGMEM message in Section 231-048-303.

Fig. 18—Adding or Deleting Trunks to Carrier Group Alarm or Trunk Make-Busy Keys RC:TMBGCA

14.04 *Verification:* Refer to paragraph 2.10 for the verification procedure for RC:TMBCGA. The RC:TMBCGA message is immediately effective in call processing.

TABLE L

RC:TMBCGA KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
ATNN eeeee	Add Trunk Network Number.	ESS 1506 Cols. 37-42
CGA ʍʍa	Carrier Group Alarm Key Member Number	ESS 1506 Cols. 27-32
DTNN eeeee	Delete Trunk Network Number.	ESS 1506 Cols. 37-42
RCAM	Radio Carrier Alarm Member. Indicates that the specified group is a radio carrier.	
TMB ʍʍb	Trunk Make-Busy Key Member Number.	ESS 1506 Cols. 27-32

15. COIN LINE ACTIVITY MONITORING (CLAM) RC:CLAM (RCCM, PR-1A380 OR PR-6A380)

15.01 The CLAM feature provides a periodic printout of selected coin lines (telephone numbers) that have not originated traffic within a telephone company specified time interval. The coin lines designated for study, as well as the study time interval, are assigned on the ESS 1409A/B form— CLAM Mask Index Record.

15.02 The CLAM is an optional feature and only those lines requiring the study are assigned to the ESS 1409A/B form. It is suggested that coin lines be assigned to a specific office code and dedicated thousands group series (ie, 696-9XXX) to minimize the CLAM mask block translators use of memory space.

15.03 A TTY message (CN03) of coin line activity is available on a 6-, 12-, and 24-hour basis. The hour and quarter-hour desired for the initial printout is specified using the input message CLAM-INT. *For a more flexible scheduling of coin line activity reporting, the input message TC-TIME in conjunction with TC-WORK can be used.* Refer to Input and Output Message Manuals (IM-1A001/IM-6A001 and OM-1A001/OM-6A001) for an interpretation of the messages.

15.04 Figure 20 gives a general flow of activity to be completed in coin line activity monitoring.

COIN LINE ACTIVITY INFORMATION

15.05 The coin line monitoring index (CMIDX) is a 4-bit item contained in bits 11 to 8 of an entry in the number group-to-rate center (NOG-to-RAC) translator (Fig. 21). The index is inserted into translations by using the RC:NOGRAC input message (Section 231-048-304). The CMIDX is used to:

(a) Access the CLAM call store tables through a fixed parameter word O6CMTP. The contents of O6CMTP is dependent on the parameter set card CMNGS which gives the quantity of NOGs (1 to 15) to be coin line activity monitored.

(b) Access the mask blocks in the CLAM mask translator Master Head Table Annex +31 in the No. 1 ESS switch, or octal 3724075 (1AE6) or 7720075 (1AE7 and later) in the No. 1A ESS switch. Each entry in the CLAM mask block translator will point to the first word of a CLAM mask block for a particular NOG and CLAM time interval of 6 hours, 12 hours, and/or 24 hours. (Each time interval is set with input message CLAM-INT.) If no mask block for that time interval has been defined, it will equal zero. The fourth entry

is presently zero (future use for time interval schedule not at 6 hours, 12 hours, and/or 24 hours).

15.06 The CLAM mask block (Fig. 21 and Table N) contains 44 words. Each mask block will have a 1 in every bit position which corresponds to a coin telephone number (TN) that is to be monitored at a time interval of a particular block. The CLAM block identifies, by having a 1 in the bit position, only those TNs in a NOG that are both coin and have a coin line monitoring assignment. The same bit position should not be set to 1 in more than one mask block for the same NOG (ie, a coin TN will be monitored at only one interval at a time).

15.07 Refer to Table M for keyword definitions.

A. Adding or Deleting Coin Lines from Activity Monitoring Schedules (Fig. 19)

15.08 *Initial Conditions:* The CLAM mask block translator exists, and NOG-to-RAC contains index for each input TN(s) NOG.

15.09 *Results of Message:* Bit corresponding to input TN(s) in specified interval schedule is set (set to a 1 for activity monitoring). No error check is made for a line monitored in more than one time interval schedule.

RC:CLAM:
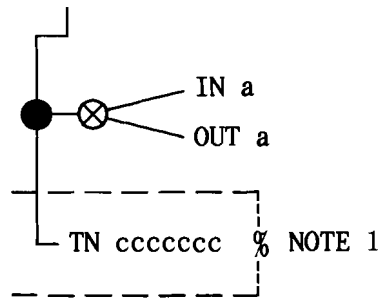
NOTE:
1. Telephone numbers must be removed from the CLAM mask block *before* they can be unassigned by the RC:LINE;OUT: message since RC:CLAM does not allow removal of unassigned TNs.

Fig. 19—Adding or Deleting Coin Lines from Activity Monitoring Schedules

B. Verification

15.10 Refer to paragraph 2.11 for the verification procedures for RC:CLAM. The RC:CLAM message is immediately effective in call processing.

TABLE M

RC:CLAM KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
IN a	Activate schedule monitoring of specified TN(s): a = 1 if 6-hour time interval schedule. = 2 if 12-hour time interval schedule. = 3 if 24-hour time interval schedule. = 4 (Future);	ESS 1409A
OUT a	Deactivate schedule monitoring of specified TN(s). a = 1 if 6-hour time interval schedule. = 2 if 12-hour time interval schedule. = 3 if 24-hour time interval schedule. = 4 (Future).	
TN ccccccc	Telephone number (D1, D2, D3, D4, D5, D6, D7).	D5, D6 and D7 ESS 1409A Cols. 25-27

START

DOES THE CLAM MASK BLOCK TRANSLATOR EXIST — NO → THE PROCEDURES ARE COVERED IN SECTION 231-048-305

OBTAIN A NEW PS BLOCK FOR CLAM MASK BLOCK TRANSLATOR (4M+1)

INITIALIZE PS WORDS OR MEMORY BLOCK TO ZERO

UPDATE PS CARDS NO. 1 ESS SWITCH ONLY

LINK TRANSLATOR TO MHT ANNEX (NO. 1 ESS SWITCH) OR TO MHT (NO. 1A ESS SWITCH).

UPDATE PS CARDS NO. 1 ESS SWITCH ONLY

VERIFY NEW INFORMATION (ON PS MEMORY CARDS - NO. 1 ESS SWITCH ONLY)

YES

IS QUANTITY OF NOGS INCREASED — YES → IS THE CLAM MASK BLOCK TRANSLATOR LENGTH SUFFICIENT — YES

NO

NO

MOVING THE CLAM MASK BLOCK TRANSLATOR IS COVERED IN SECTION 231-119-320 (NO. 1 ESS SWITCH) OR SECTION 231-318-320 (NO. 1A ESS SWITCH)

OBTAIN A NEW PS BLOCK OR MEMORY BLOCK FOR NEW SUBTRANSLATOR

COPY OLD SUBTRANSLATOR DATA INTO NEW SUBTRANSLATOR AND INITIALIZE ADDITIONAL WORDS TO ALL ZEROS

UPDATE PS MEMORY CARDS NO. 1 ESS SWITCH ONLY

VERIFY NEW INFORMATION ON PS MEMORY CARDS NO. 1 ESS SWITCH ONLY

LINK NEW SUBTRANSLATOR TO HEAD TABLE AND UPDATE UNIT TYPE LENGTH TABLE

UPDATE PS MEMORY CARDS NO. 1 ESS SWITCH ONLY

VERIFY NEW INFORMATION (ON PS MEMORY CARDS - NO. 1 ESS SWITCH ONLY)

RELEASE OLD PS OR MEMORY BLOCK

SET CARD CMNGS REQUIRED — QUANTITY OF NOGS WHICH WILL BE CLAM

FIXED PARAMETER WORD Ø6CMTP — EACH 44 CALL STORE SECTION PROVIDES A BIT PER LINE FOR ITS ASSOCIATED NOG

UPDATE PS CARDS NO. 1 ESS SWITCH ONLY

IS THE CMIDX NUMBER BUILT IN THE NOG-RAC TRANSLATOR — NO → USE RC-NOGRAC INPUT MESSAGE IN SECTION 231-048-304

YES

UPDATE PS CARDS NO. 1 ESS SWITCH ONLY

DOES THE CLAM MASK BLOCK EXIST — NO → SEIZE, INITIALIZE, AND LINK A 44 PS WORD BLOCK (RIGHT-HALF - NO. 1 ESS SWITCH)

THE PROCEDURES ARE COVERED IN SECTION 231-048-305

YES

USE RC:CLAM INPUT MESSAGE TO ADD OR DELETE COIN LINES → FINISH

Fig. 20—Coin Line Activity Monitoring Flowchart

MASTER HEAD TABLE + 29

POINTER TO NOG-TO-RAC
TRANSLATOR

NOTE 1

INDEX BY
MOG

0
127

23	22	21	20	19	18	12	11	8	7	6	5	0
0	CB1	CB2	CB3	0	0	0	CMIDX		0	0	RAC	

MASTER HEAD TABLE ANNEX + 31
OR MASTER HEAD TABLE +6I

POINTER TO CLAM
MASK BLOCK TRANSLATOR

CLAM MASK BLOCK TRANSLATOR

(INDEX = 4 * (CMIDX-I)

-1	LENGTH OF CLAM MASK BLOCK TRANSLATOR (4M+1)
0	ADDRESS OF 6-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = 1
1	ADDRESS OF 12-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = 1
2	ADDRESS OF 24-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = 1
3	FUTURE USE FOR TIME INTERVAL SCHEDULE NOT AT 6-HR, 12-HR, AND/OR 24-HR
4(M-1)	ADDRESS OF 6-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = M
4(M-1)+1	ADDRESS OF 12-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = M
4(M-1)+2	ADDRESS OF 24-HR TIME INTERVAL SCHEDULE BLOCK FOR INDEX = M
4(M-1)+3	FUTURE USE FOR TIME INTERVAL SCHEDULE NOT AT 6-HR, 12-H4, AND/OR 24-HR

CLAM MASK BLOCK FOR
6-HR TIME INTERVAL

0
43

SEE TABLE N
(NOTE 2)

44 PS WORDS
(RIGHT-HALF-
NO. 1 ESS SWITCH)

CLAM MASK BLOCK FOR
12-HR TIME INTERVAL

0
43

SEE TABLE N
(NOTE 2)

CLAM MASK BLOCK FOR
24-HR TIME INTERVAL

0
43

SEE TABLE N
(NOTE 2)

NOTES:
1. BIT 23 IS ALWAYS ZERO
2. THE SAME BIT POSITION SHOULD NOT BE SET (1) IN MORE THAN ONE CLAM MASK BLOCK IN THE SAME NOG. A COIN TELEPHONE NUMBER (D1 D2 D3 D4 D5 D6 D7) WILL BE MONITORED AT ONLY ONE TIME INTERVAL.

LEGEND:
CLAM - COIN LINE ACTIVITY MONITORING
CMIDX - COIN LINE MONITORING INDEX
NOG - NUMBER GROUP
NOG-TO-RAC - NUMBER GROUP-TO-RATE CENTER
M - MAXIMUM CMIDX WHICH EQUALS PARAMETER SET CARD CHNGS (1 TO 15)
RAC - RATE CENTER

Fig. 21—Coin Line Activity Monitoring Mask Block

TABLE N

LAYOUT OF BITS IN THE COIN LINE ACTIVITY MONITORING MASK BLOCK CORRESPONDING TO TELEPHONE NUMBERS (D5, D6, D7)

D5 D6 D7

111

| BIT POSITION	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
WORD 0	133	132	131	120	129	128	127	126	125	124	123	122	121	110	119	118	117	116	115	114	113	112	111
WORD 1	156	155	154	153	152	151	140	149	148	147	146	145	144	143	142	141	130	139	138	137	136	135	134
WORD 2	179	178	177	176	175	174	173	172	171	160	169	168	167	166	165	164	163	162	161	150	159	158	157
WORD 3	102	101	190	199	198	197	196	195	194	193	192	191	180	189	188	187	186	185	184	183	182	181	170
WORD 4	225	224	223	222	221	210	219	218	217	216	215	214	213	212	211	100	109	108	107	106	105	104	103
WORD 5	248	247	246	245	244	243	242	241	230	239	238	237	236	235	234	233	232	231	220	229	228	227	226
WORD 6	271	260	269	268	267	266	265	264	263	262	261	250	259	258	257	256	255	254	253	252	251	240	249
WORD 7	294	293	292	291	280	289	288	287	286	285	284	283	282	281	270	279	278	277	276	275	274	273	272
WORD 8	317	316	315	314	313	312	311	200	209	208	207	206	205	204	203	202	201	290	299	298	297	296	295
WORD 9	330	339	338	337	336	335	334	333	332	331	320	329	328	327	326	325	324	323	322	321	310	319	318
WORD 10	363	362	361	350	359	358	357	356	355	354	353	352	351	340	349	348	347	346	345	344	343	342	341
WORD 11	386	385	384	383	382	381	370	379	378	377	376	375	374	373	372	371	360	369	368	367	366	365	364
WORD 12	309	308	307	306	305	304	303	302	301	390	399	398	397	396	395	394	393	392	391	380	389	388	387
WORD 13	432	431	420	429	428	427	426	425	424	423	422	421	410	419	418	417	416	415	414	413	412	411	300
WORD 14	455	454	453	452	451	440	449	448	447	446	445	444	443	442	441	430	439	438	437	436	435	434	433
WORD 15	478	477	476	475	474	473	472	471	460	469	468	467	466	465	464	463	462	461	450	459	458	457	456
WORD 16	401	490	499	498	497	496	495	494	493	492	491	480	489	488	487	486	485	484	483	482	481	470	479
WORD 17	524	523	522	521	510	519	518	517	516	515	514	513	512	511	400	409	408	407	406	405	404	403	402
WORD 18	547	546	545	544	543	542	541	530	539	538	537	536	535	534	533	532	531	520	529	528	527	526	525
WORD 19	560	569	568	567	566	565	564	563	562	561	550	559	558	557	556	555	554	553	552	551	540	549	548
WORD 20	593	592	591	580	589	588	587	586	585	584	583	582	581	570	579	578	577	576	575	574	573	572	571
WORD 21	616	615	614	613	612	611	500	509	508	507	506	505	504	503	502	501	590	599	598	597	596	595	594
WORD 22	639	638	637	636	635	634	633	632	631	620	629	628	627	626	625	624	623	622	621	610	619	618	617
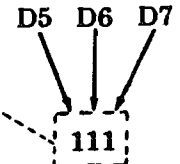
TABLE N (contd)

LAYOUT OF BITS IN THE COIN LINE ACTIVITY MONITORING MASK BLOCK CORRESPONDING TO TELEPHONE NUMBERS (D5, D6, D7)

	630	641	642	643	644	645	646	647	648	649	640	651	652	653	654	655	656	657	658	659	650	661	662
WORD 23	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662
WORD 24	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685
WORD 25	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708
WORD 26	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731
WORD 27	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754
WORD 28	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777
WORD 29	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800
WORD 30	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823
WORD 31	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846
WORD 32	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869
WORD 33	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892
WORD 34	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915
WORD 35	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938
WORD 36	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961
WORD 37	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984
WORD 38	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	000	001	002	003	004	005	006	007
WORD 39	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	026	027	028	029	030
WORD 40	031	032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047	048	049	050	051	052	053
WORD 41	054	055	056	057	058	059	060	061	062	063	064	065	066	067	068	069	070	071	072	073	074	075	076
WORD 42	077	078	079	080	081	082	083	084	085	086	087	088	089	090	091	092	093	094	095	096	097	098	099
WORD 43	090	001	002	003	004	005	006	007	008	009	000												

◄─── BITS 22 – 11 ARE UNUSED IN WORD 43 ───►

16. ADDING, CHANGING, OR DELETING A PERIPHERAL UNIT CONTROLLER (PUC) AUXILIARY BLOCK RC:PUC (RCPC, PR-1A386 OR PR-6A386)
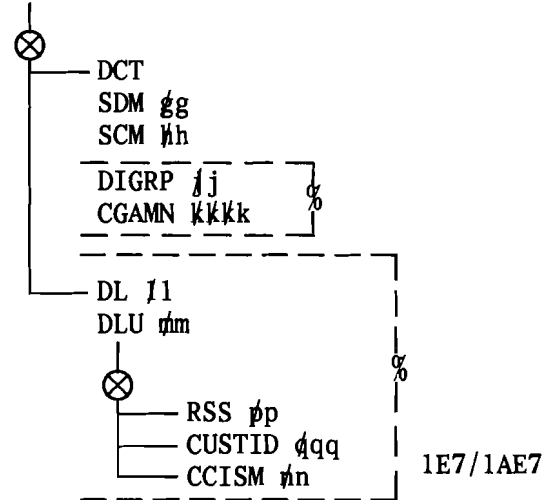
16.01 Refer to Table O for keyword definitions.

A. Adding a Peripheral Unit Controller Auxiliary Block (Fig. 22)

16.02 *Initial Conditions:* For data link application, unit type 61 subtranslator must exist and have an unassigned member. For DCT application, unit types 19, 20, and 61 subtranslators must exist and have sufficient unassigned members.

16.03 *Results of Message:* The PUC auxiliary block is seized, built, and linked. For DCT applications, there are four pointers (one from unit type 19, two from unit type 20, and one from unit type 61) to *one* auxiliary block. In the RC area, four copies of the auxiliary block are built with the same future program store address. For the data link application, one pointer is built from the PUC subtranslator.

```
RC:PUC:
PUCM ¢a
GROWTH
IOBEA bbbbb
ASMEA bbbbb
MCR   ccccc
PFC   ccccc
MSND  cccccc
MSNF  cccccc
MSNS  cccccc
PROM  ¢d ⎤
RAM   e  ⎬── PROM + 2 (RAM) ≤ 24
DEC   f  ⎦

⊗
├── DCT
│   SDM ¢g
│   SCM ¢h
│   ┌─────────────┐
│   │ DIGRP ¢j    ⌐%
│   │ CGAMN ¢¢¢k  ⌐%
│   └─────────────┘
│   ┌──────────────────┐
└── │ DL ¢1            │
    DLU ¢m             │
    ⊗                  ⌐%
    ├── RSS ¢p         │
    ├── CUSTID ¢qq     │   1E7/1AE7
    └── CCISM ¢n       │
    └──────────────────┘
```

Fig. 22—Adding a Peripheral Unit Controller Auxiliary Block

B. Changing a Peripheral Unit Controller Auxiliary Block (Fig. 23)

16.04 Refer to paragraphs 1.07 and 1.08.

16.05 *Initial Conditions:* The PUC member is assigned.

16.06 *Results of Message:* The specified PUC auxiliary block data is changed. The application (DL or DCT) *cannot* be changed.

```
RC:PUC;CHG:
PUCM ¢a
  ┌────────┘
  ○
  ├──── GROWTH
  ├──── IOBEA bbbbb
  ├──── ASMEA bbbbb
  ├──── MCR ccccc
  ├──── PFC ccccc
  ├──── MSND cccccc
  ├──── MSNF cccccc
  ├──── MSNS cccccc
  ├──── PROM ¢d
  ├──── RAM e
  ├──── DEC f
  ⊗
  ├──── DCT
       ○
       ├──── SDM ¢g
       ├──── SCM ¼h
       └──── DIGRP ¡j            ¢
             CGAMN ¼¼¼k or NO
  └──── DL ¡1
       ○
       ├──── DLU ¢m or NO        ¢
       ⊗
       ├──── RSS ¢p or NO
       ├──── CUSTID ¢qq or NO
       └──── CCISM ¢n or NO      1E7/1AE7
```

Fig. 23—Changing a Peripheral Unit Controller Auxiliary Block

C. Deleting a Peripheral Unit Controller Auxiliary Block

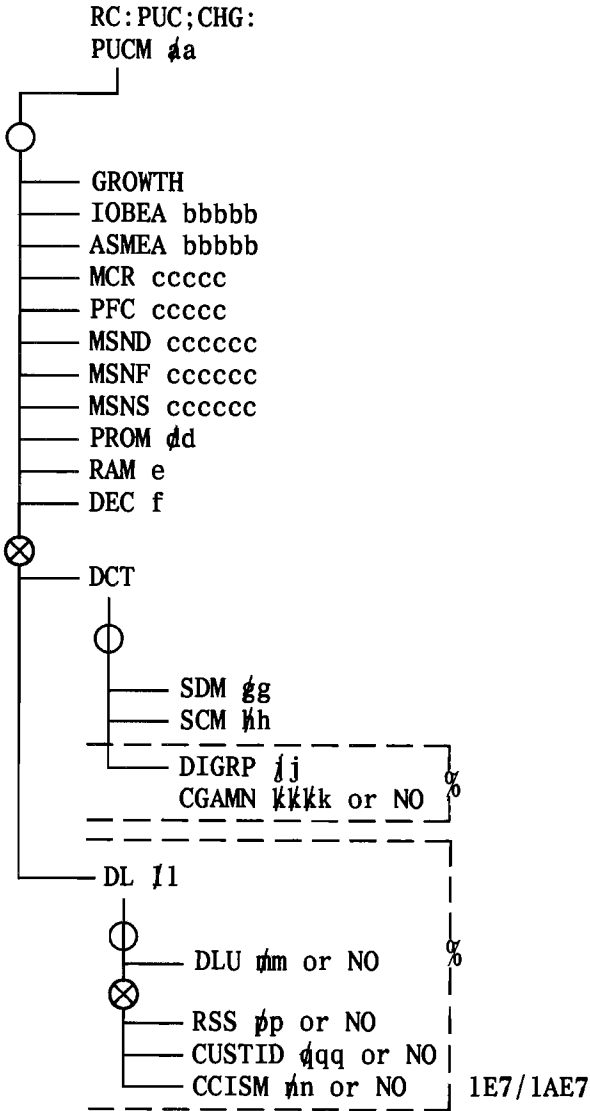**16.07** *Initial Conditions:* Same as changing a PUC auxiliary block.

16.08 *Results of Message:* The PUC auxiliary block is released.

16.09 Delete a PUC auxiliary block by entering the following message.

> RC:PUC;OUT:
> PUCM ¢a!

D. Verification

16.10 Refer to paragraph 2.12 for the verification procedures for RC:PUC. For the No. 1 ESS switch, this message is not effective in call processing until PS memory cards have been updated.

◆TABLE O◀

RC:PUC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
ASMEA bbbbb	PUC Auxiliary Scan Memory Enable Address.	
CCISM n̸n	CCIS Member number: n̸n = 0 through 15.	
CGAMN k̸k̸kk	Carrier Group Alarm (unit type 40) Member Number to which the PUC frame digroup is assigned: k̸k̸k̸k = 0 through 1023.	
CUSTID q̸qq	ETS Customer Identification for the customer to which the date link is assigned: q̸qq = 64 through 127.	
DCT	Digital Carrier Trunk frame.	
DEC f	Number of input/output decoders per controller.	ESS 1506 Cols. 27-32, 44
DIGRP j̸j	PUC Frame Digroup number; j̸j = 0 through 19.	
DL l̸l	Data Link.	
DLU m̸m	Data Link Usage: m̸m = 1 through 31. 1 = RSS. 2 = ETC (Dial up data, link-customer control). 3 = ETM — message detail recod (MDR). 4 = CCS — In service CCIS line interface unit. Used in CHG-type message only. 5 = CCS — CCIS PUC frame growth.	ESS 1506 Cols. 37-40, 42-44 or Cols. 49-52 54-56
GROWTH	Growth Bit Indicator. Sets bit 22 in all unit type subtranslators pointing to the PUC auxiliary block when the frame is in the growth state.	
IOBEA bbbbb	PUC I/O Buffer Enable Address.	ESS 1600 Cols. 19-23
MCR ccccc	First of unipolar CPD points for microcomputer resets.	ESS 1600 Cols. 19-23
MSND ccccc	First of 18 directed master scan points. The first 9 are assigned to controller 0; the last 9 to controller 1.	
MSNF ccccc	First of directed master scan points for the PUC F-scan functions.	ESS 1600 Cols. 18-23

TABLE O (Contd)

RC:PUC KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
MSNS ccccc	First of supervisoy master scan points.	ESS 1600 Cols. 18-23
PFC ccccc	First of bipolar CPD points for PUC frame state control. The first 5 are assigned to controller 0; the last 5 to controller 1.	ESS 1600 Cols. 19-23
PROM dd	Number of 2K bytes of programmable read only memory: dd = 2 through 24.	ESS 1506 Cols. 27-32 41-42
PUCM aa	Member number for PUC (unit type 61).	ESS 1506 Col. 27-32, 33-35
RAM e	Number of 4K bytes of random access memory per controller: e = 1 through 8.	ESS 1506 Cols. 27-32, 46
RSS pp	Remoe Switching System number: pp = 1 through 31.	ESS 1506 Cols. 42-44, 54-56
SCM hh	Member number for scanner (unit type 19).	
SDM gg	Member number (must be even) of universal trunk signal distributor (unit type 20) for PUC.	ESS 1506 Cols. 27-32, 37-39

17. ADDING OR DELETING ENTRIES IN THE PERIPHERAL UNIT CONTROLLER MAINTENANCE BUS (PUCMB)TRANSLATOR RC:PUCMB (RCMB, PR-1A8338 OR PR-6A838) (1E7/1AE7 AND LATER GENERICS)
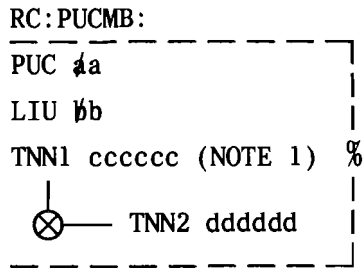
17.01 Refer to Table P for keyword definitions.

A. Adding Peripheral Unit Controller Maintenance Bus Translations (Fig. 24)

17.02 *Initial Conditions:* The PUCMB translator exists and the PUC-line interface unit (LIU) combination does not already exist in the translator. The PUC number must be assigned in the unit type 61 subtranslator and the LIU or data link must have common channel interoffice signaling (CCIS) application. The TNNs specified must be assigned.

17.03 *Results of Message:* For each segment specified, a 3-word entry is built in the translator. The first word contains PUC, LIU, and a valid entry indicator. The second word contains a TNN and the third word contains a TNN or zeros.

RC:PUCMB:
```
PUC ａa
LIU ｂb
TNN1 ccccc  (NOTE 1)   %
  ⊗── TNN2 ddddd
```
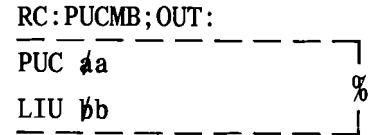
NOTE:
1. For 4-wire trunks there will be only one TNN (TNN1) associated with each PUC/LIU. For 2-wire trunks there will be two TNNs (TNN1 and TNN2) associated with each PUC/LIU.

Fig. 24—Adding Peripheral Unit Controller Maintenance Bus Translations

B. Deleting PUCMB Translations (Fig. 25)

17.04 *Initial Conditions:* The PUCMB translator exists and the PUC/LIU combination input exists in the translator.

17.05 *Results of Message:* For each segment specified a 3-word entry is zeroed in the translator and the following 3-word entries that contain data are moved up. The length of the translator is not changed.

RC:PUCMB;OUT:
```
PUC ａa
LIU ｂb              %
```

Fig. 25—Deleting PUCMB Translations

C. Verification

17.06 Refer to paragraph 2.13 for the verification procedure for RC:PUCMB. For the No. 1 ESS switch, this RC is not effective in call processing until PS memory cards have been updated.

TABLE P

RC:PUCMB KEYWORD DEFINITIONS

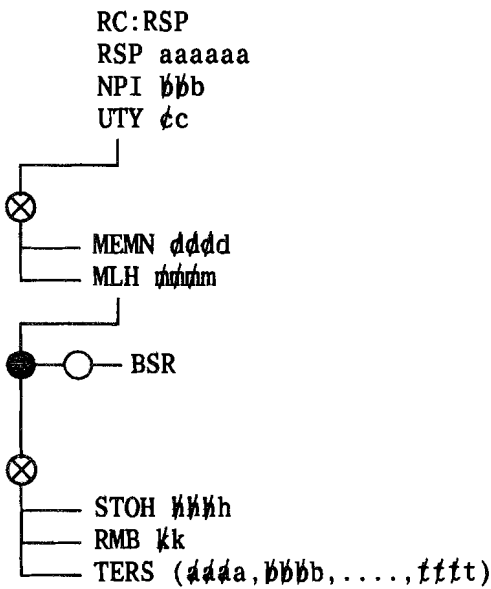| KEYWORD UNIT	DEFINITION	FORM
LIU ｂb	Line Interface Unit: ｂb = 0 through 15.	
PUC ａa	Peripheral Unit Controller: ａa = 0 through 63.	
TNN1 ccccc	Trunk Network Number	
TNN2 ddddd	Trunk Network Number.	

18. ADDING OR REMOVING A REMOTE SCAN POINT (RSP) RC:RSP (RCSR, PR-1A391 OR PR-6A391)

18.01 Refer to Table Q for keyword definitions.

A. Adding or Replacing a Remote Scan Number in Translation (Fig. 26)

18.02 *Initial Conditions:* The extended remote miscellaneous scan number (XRMSN) sub-translator exists and the RSP specified is unassigned.

18.03 *Results of Message:* An RSP auxiliary block or data primary translation word (PTW) is built for the specified RSP.

```
RC:RSP
RSP aaaaaa
NPI bbb
UTY cc
```

MEMN dddd
MLH mmmm

BSR

STOH hhhh
RMB kk
TERS (aaaa,bbbb,....,ttt)

Fig. 26—Adding or Replacing a Remote Scan Number in Translation

B. Removing A Remote Scan Point Is Assigned

18.04 *Initial Conditions:* The specified RSP number is assigned.

18.05 *Results of Message:* The specified word is replaced with zeros. If an auxiliary block exists, it is released.

18.06 Remove a RSP number by entering the following message.

```
RC:RSP;OUT:
RSP aaaaaa!
```

C. Verification

18.07 Refer to paragraph 2.14 for the verification procedure for RC:RSP. The RC:RSP message is immediately effective in call processing.

TABLE Q

RC:RSP KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
BSR	Busy Sense Reversed (busy if scan point is not saturated).	
MEMN dddd	Member Number (decimal) for unit type other than unit types 12, 13, 14, 15, 29, 37, and 54.	
MLH mmmm	Multiline Hunt Group Number (decimal).	ESS 1107 Cols. 32-35
NPI bbb	Nontrunk Program Index (See PA-591003, Section 007 or PA-6A002, Section 0007 for a listing of NPIs.): bbb = 0 through 255.	ESS 1603 Cols. 27-32
RMB kk	Random Make-Busy Number (0 through 10 decimal). For kk ≠ 0 RMB k k must also be entered in RC:LINE messages. RMB 0 in the RC:RSP message (with no RMB in any RC:LINE message) makes the entire MLG busy when the scan point is activated. In *all* cases, RMB must be entered in the RC:MLHG message: kk = 0 through 10.	ESS 1107 Cols. 42-43
RSP aaaaaa	Remote scan point number. Also known as XRMSN, extended remote miscellaneous scan number.	ESS 1107 Cols. 47-48, 50, 52, 54, 55
STOH hhhh	Stop Hunt Terminal: hhhh = 1 through 2047.	
TERS (aaaa,bbbb, ...,tttt)	Terminal Make-Busy Terminal Numbers. TERS lists terminal numbers for Terminal Make-Busy feature. Maximum of 20 terminals per RSP. SP aaaaaa must be entered in the RC:LINE message for each terminal.	ESS 1107 Cols. 36-39
UTY cc	Unit type: cc = 0 through 63.	

19. ADDING, CHANGING, OR REMOVING DATA IN THE REMOTE SWITCHING SYSTEM (RSS) COMMON BLOCK RC:RSSCB (RCRB, PR-1A390 OR PR-6A390)
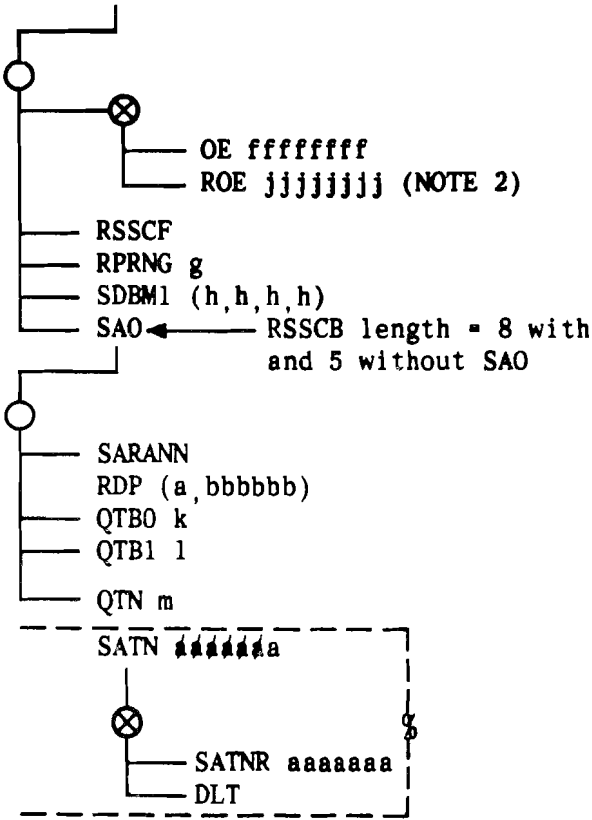
19.01 Refer to Table R for keyword definitions.

A. Adding RSS Common Block Translations for an RSS (Fig. 27)

19.02 *Initial Conditions:* The RSS head table exists and the specified RSS is unassigned.

19.03 *Results of Message:* An RSS common block is built for the specified RSS.

```
RC:RSSCB:
  RSS ¢a
  EQPG 0 (NOTE 1)
  SDBM0 (h,h,h,h)
  PUCDL0 ¢c
  PUCDL1 ¢c
  MEMN ¢¢d
  RALIT e
```

```
        ⊗
          ┌── OE ffffffff
          └── ROE jjjjjjjj (NOTE 2)
  ├── RSSCF
  ├── RPRNG g
  ├── SDBM1 (h,h,h,h)
  └── SAO ◄──── RSSCB length = 8 with
                 and 5 without SAO
```

```
  ├── SARANN
  │     RDP (a,bbbbbb)
  ├── QTB0 k
  ├── QTB1 l
  └── QTN m
```

```
  ┌─ SATN ¢¢¢¢¢¢a ──────────┐
  │                          │
  │   ⊗                      │%
  │     ├── SATNR aaaaaaa    │
  │     └── DLT              │
  └──────────────────────────┘
```

NOTES:
1. In a NEW type message, keyword EQPG must be zero.
2. If keyword ROE is used, then jjjjjjjj = XX000003 where XX is the RSS number (01 through 31).

Fig. 27—Adding RSS Common Block Translations for an RSS

B. Changing Translation Data in the RSS Common Block (Fig. 28)

19.04 Refer to paragraphs 1.07 and 1.08.

19.05 *Initial Conditions:* The specified RSS is assigned (RSS common block exists).

19.06 *Results of Message:* The RSS common block is modified as specified. If a new remote routing auxiliary block (pointed to by the RSS common block) is required, it is seized and built as specified. If the remote routing auxiliary block exists, it is modified as specified, or returned to the idle link list.
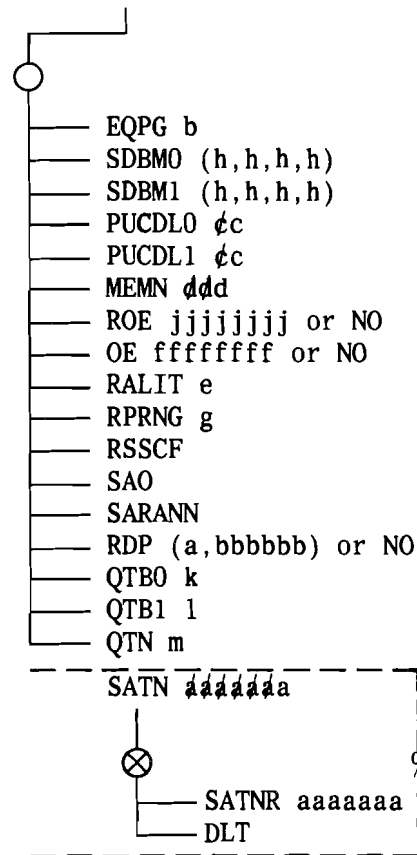
```
RC:RSSCB;CHG:
  RSS ¢a
```

```
  ├── EQPG b
  ├── SDBM0 (h,h,h,h)
  ├── SDBM1 (h,h,h,h)
  ├── PUCDL0 ¢c
  ├── PUCDL1 ¢c
  ├── MEMN ¢¢d
  ├── ROE jjjjjjjj or NO
  ├── OE ffffffff or NO
  ├── RALIT e
  ├── RPRNG g
  ├── RSSCF
  ├── SAO
  ├── SARANN
  ├── RDP (a,bbbbbb) or NO
  ├── QTB0 k
  ├── QTB1 l
  └── QTN m
```

```
  ┌─ SATN ¢¢¢¢¢¢a ──────────┐
  │                          │
  │   ⊗                      │%
  │     ├── SATNR aaaaaaa    │
  │     └── DLT              │
  └──────────────────────────┘
```

Fig. 28—Changing Translation Data in the RSS Common Block

C. Removing the RSS Common Block

19.07 *Initial Conditions:* The specified RSS is assigned (RSS common block exists) and the equipage (EQPG) of the common block is equal to zero.

19.08 *Results of Message:* The RSS common block associated with the specified RSS is unassigned and any existing auxiliary blocks are returned to the idle link list.

19.09 Remove the RSS common block by entering the following message.

RC:RSSCB;OUT:

RSS ⱥa!

D.   Verification

19.10   Refer to paragraph 2.15 for the verification procedure for RC:RSSCB. The RC:RSSCB message is immediately effective in call processing.

TABLE R

RC:RSSCB KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
DLT	Delete SATN — SATNR pair.	
EQPG b	RSS Equipage: b = 0 through 3. 　　0 = RSS assigned but unequipped (required in a new- 　　　　type message). 　　1 = Partially equipped module 0. 　　2 = Fully equipped module 0. 　　3 = Fully equipped common block.	ESS 1122 Col. 34
MEMN ddd	Unit type 61 member number of the PUC: ddd = 0 through 127.	ESS 1122 Cols. 42-44
QTB0 k	Quantity of tone boards equipped in module zero: k = 0 through 6.	ESS 1122 Col. 64
QTB1 n	Quantity of tone boards equipped in module one: n = 0 through 4.	ESS 1122 Col. 65
QTN m	Quantity of TN — TNR pairs which are to be inputted for standalone routing: m = 1 through 4	ESS 1122 Col. 66
PUCDL0 cc	Peripheral Unit Controller Data Link number for data link zero: cc = 0 through 15.	ESS 1122 Cols. 38-39
PUCDL1 cc	Peripheral Unit Controller Data Link number for data link one: cc = 0 through 15.	ESS 1122 Cols. 40-41
RALIT e	Resistance option for automatic line insulation test: e = 1 through 31.	ESS 1122 Col. 37
RDP (a, bbbbbb)	Quantity and base RSS distributor point for standalone recorded announcement.	ESS 1122 Cols. 66-72
ROE jjjjjjjj	Remote Line Test Equipment number.	ESS 1122 Cols. 45-52

RC:RSSCB KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
OE ffffffff	Metallic Line Test Equipment number.	
RPRNG g	RSS Multiparty Ringing.	ESS 1122 Col. 35
RSS ḋa	Remote Switching System number: ḋa = 01 through 31.	ESS 1122 Cols. 17-18
RSSCF	RSS Coin First Office with no coin TOUCH-TONE ® service fraud protection.	ESS 1122 Col. 33
SAO	Standalone Option: RSSCB size = 8 with SAO, 5 without.	ESS 1122 Col. 36
SARANN	Standalone Recorded Announcement.	ESS 1122 Col. 63
SATN ḋḋḋḋḋḋa	Dialed telephone number for standalone routing (must be one, three, or seven digits).	ESS 1122 (02) Cols. 25-31
SATNR aaaaaaa	Number to which call is routed during standalone: aaaaaaa = 7 digit assigned TN.	ESS 1122 (02) Cols. 32-38
SDBM0 (h,h,h,h)	Board Equipage for Mod 0.*	ESS 1122 Cols. 25-28
SDBM1 (h,h,h,h)	Board Equipage for Mod 1.*	ESS 1122 Cols. 29-32

* Boards must be equipped sequentially right to left. All zeros in mod 0 are invalid. If 1 is equipped then mod 0 must be fully equipped.

20. ADDING, CHANGING, OR DELETING A REMOTE SWITCHING SYSTEM CHANNEL RC:RCHAN (RCCL, PR-1A392 OR PR-6A392)

20.01 Refer to Table S for keyword definitions.

A. Adding an RSS Channel or Channel Circuit (Fig. 29)

20.02 *Initial Conditions:* The remote equipment number and line equipment number subtranslators exist, and the RSS equipment number of the channel (keyword ROE) and the ESS switching equipment numbers of the channel (keyword OE) are unassigned. The RSS common block exists.

20.03 ***Results of Message:*** The channel or channel circuit is assigned in translations with a circuit administration state.
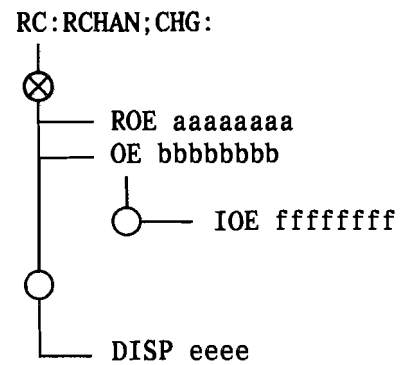
```
RC:RCHAN:
ROE aaaaaaaa
    |
    ⊗
    |――― OE bbbbbbbb
    |     |
    |     ○――CTYP c
    |
    └――― NCF d
```
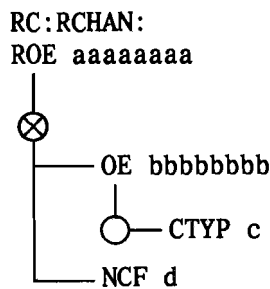
Fig. 29—Adding an RSS Channel or Channel Circuit

B. Changing the Disposition or Equipment Number of an RSS Channel (Fig. 30)

20.04 *Initial Conditions:* The channel is assigned in translations.

20.05 ***Results of Message:*** The changes specified are made and the channel is put on or left on the out-of-service list to allow for final testing before the channel is placed in service.
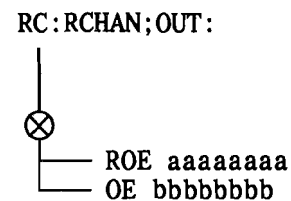
```
RC:RCHAN;CHG:
    |
    ⊗
    |――― ROE aaaaaaaa
    |――― OE bbbbbbbb
    |     |
    |     ○――― IOE ffffffff
    |
    ○
    |
    └――― DISP eeee
```

Fig. 30—Changing the Disposition or Equipment Number of an RSS Channel

C. Deleting an RSS Channel (Fig. 31)

20.06 ***Initial Conditions:*** The channel is assigned in translations and on the out-of-service list.

20.07 ***Results of Message:*** The channel is unassigned.

```
RC:RCHAN;OUT:
    |
    ⊗
    |――― ROE aaaaaaaa
    └――― OE bbbbbbbb
```

Fig. 31—Deleting an RSS Channel

D. Verification

20.08 Refer to paragraph 2.16 for the verification procedure for RC:RCHAN. The RC:RCHAN message is immediately effective in call processing.

TABLE S

RC:RCCHAN KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
CTYP c	Channel Carrier Type: c = 1 (digital) or 2 (analog).	ESS 1122 Cols. 53-62

DISP eeee	Channel Disposition: eeee = CADN or MTCE, where
	CADN = Circuit Administration Out of Service. The channel is
	    assigned and can be accessed for testing but cannot
	    be used in call processing;
	
	MTCE = Maintenance out of service. The channel is assigned and
	    can be accessed for testing but cannot be used in call
	    processing. The channel can be put in service manually.	

IOE ffffffff	New ESS Switch Equipment Number. Used when changing the line link network (LLN) location of a channel.	ESS 1124 Cols. 16-23
NCF d	Nonchannel Circuit Function: d = 1 through 3, where 1 = AC (milliwatt) tone. 2 = Receiver Off Hook (ROH) tone. 3 = A/C Continuity.	ESS 1124 Col. 33
OE bbbbbbb	ESS Switch Equipment Number of Channel.	ESS 1124 Cols. 25-32
ROE	RSS Switch Equipment Number of Channel.	ESS 1124 Cols. 16-23

21. BUILDING, CHANGING, OR DELETING LOOP RANGE EXTENSION (LRE) TEST LEN TRANSLATOR AUXILIARY BLOCK DATA RC:LRE (RCRE, PR-1A389 OR PR-6A389)

21.01   Refer to Table T for keyword definitions.

A.   Adding a New Group

21.02   *Initial Conditions:* The LRE test line equipment number (LEN) head table must be built and linked to the master head table annex at decimal 63 (No. 1 ESS switch) or the master head table at decimal 93 (No. 1A ESS switch). The test LENs to be used must be in the LRE multiline hunt (MLH) outdial list with a denied origination and denied termination major class.

21.03   *Results of Message:* The inhibit automatic testing (IAT) bit for the group will be set to 1 (inhibit automatic testing on this test LEN). If there are multipled B-links, a new auxiliary block is built with 5- to 8-test LENs defined. If there are nonmultipled B-links, a new auxiliary block may be built with 1- to 4-test LENs defined by typing only one message.

21.04   Add a new group by entering the following message.

> RC:LRE:
> FRAME áa
> UNIT b
> GROUP c
> OE (ddddddddd, ..., kkkkkkkk)

Note: When there are multipled B-links, all inputted test LENs (keyword OE) must be associated [each test LEN (keyword OE) in the frame, unit, and group connects to the same set of four junctor scanner frame (JSF) grids] with frame, unit, and group specified, and the correct number of test LENS (keyword OE) must be given.

B.   Changing a Nonmultipled B-Link Group

21.05   This message cannot be used to change a test LEN for a group. To change a test LEN, the RC:LRE;OUT: message must be used to remove the entire group and the RC:LRE: message must be used to rebuild the group.

21.06   *Initial Conditions:* The LRE group must be assigned.

21.07   *Results of Message:* The IAT bit for the group will be set accordingly.

21.08   Change a nonmultipled B-link group by entering the following message.

> RC:LRE;CHG:
> FRAME áa
> UNIT b
> GROUP c
> IAT!

C.   Changing a Multipled B-Link Group (Fig. 32)

21.09   *Initial Conditions:* If adding or changing a test LEN, the new test LEN to the group must be first assigned in the LRE MLH out dial list with denied origination and denied termination. If removing a test LEN, the LEN must first be removed from the LRE MLH out dial list.

21.10   *Results of Message:* If keyword IAT is inputted, the IAT bit will be set accordingly. If keyword DOE is inputted, the LEN(s) specified will be removed from the auxiliary block and the size of the auxiliary block will reflect that decrease. If keyword OE is inputted, the LEN(s) specified will be added to the bottom of the auxiliary block and the size of the block will reflect the true size of the group. The size of the auxiliary block or the number of test LENs in the group should be the same as the line-to-junctor (LJR) ratio in the office. For example, a 6:1 LJR would have six test LENs in an auxiliary block (per group). Changing a test LEN does not change the size of the auxiliary block. The LEN(s) specified by keyword DOE is removed and the LEN(s) specified by keyword OE is placed at the bottom of the auxiliary block.
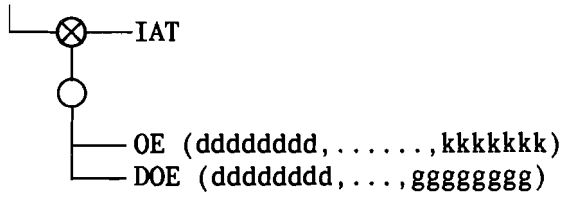
```
RC:LRE;CHG:
FRAME da
UNIT b
GROUP c
    └──⊗──IAT
        ○
        ├── OE  (dddddddd,......,kkkkkkk)
        └── DOE (dddddddd,...,gggggggg)
```

Fig. 32—Changing a Multipled B-Link Group

D. Removing a Group

21.11 *Initial Conditions:* The test LENs must be removed from the LRE MLH out dial list.

21.12 *Results of Message:* If removing a group in a multipled B-link office or if, in a nonmultipled B-link office, removing the only group in the auxiliary block, the auxiliary block is removed and returned to the available space link list. If in a nonmultipled B-link office where two or more groups are assigned in the auxiliary block, only the entry for the group to be removed is zeroed.

21.13 Remove a group by entering the following message.

```
RC:LRE;OUT:
FRAME da
UNIT b
GROUP C!
```

E. Verification

21.14 Refer to paragraph 2.17 for the verification procedure for loop range extension translations. Refer to Input Message Manual (IM-1A001/IM-6A001) for the V-LLNLRE message to verify LRE test LENs and the TAG-LRE message to verify the program store address of the PTW associated with the input LRE physical location number. For the No. 1 ESS switch, this message is not effective in call processing until PS memory cards have been updated.

TABLE T

RC:LRE KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
DOE (dddddddd ...,gggggggg)	Delete test line equipment numbers: (dddddddd, ...,gggggggg) = 1 through 4 test LENs.	ESS 1128 Cols. 27-58
FRAME da	LRE frame number: da = 0 through 51 (No. 1 ESS Switch). = 0 through 99 (No. 1A ESS Switch).	
GROUP c	LRE group number. Note that LRE group represents frame (64), unit (4), and group (5) for 320 maximum groups: c = 0 through 4.	ESS 1128 Cols. 18-20
IAT	Inhibit Automatic Testing.	
OE (dddddddd, ...kkkkkkkk)	Test Line Equipment numbers. (dddddddd,......,kkkkkkkk) = 1 through 8 test LENs.	ESS 1128 Cols. 27-58
UNIT b	LRE Unit number: b = 0 through 3.	

22. CHANGING BUSY/IDLE STATUS OF AN INWATS CUSTOMER LINE GROUP RC:BISI (RCBS, PR-1A395 OR PR-6A395) (1E7/1AE7 AND LATER GENERICS) Fig. 33

22.01 Refer to Table U for keyword definitions.

22.02 *Initial Conditions:* The SFG is assigned and is a BISI SFG.

22.03 *Results of Message:* If activated busy/idle reporting is initiated. If deactivated busy/idle reporting is terminated.

```
RC:BISI

ORD ńńńńńńn    (NOTE 1)

SFG ḿḿḿm        (NOTE 2)
 |
⊗
├──── ACT
└──── DACT
```
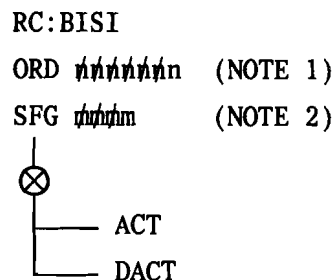
NOTES:
1. After use in an activate request message, keyword ORD should not be used in another activate request until a response has been received for the previous order number (maximum 20 minutes). A letter cannot be used in the order number.
2. Keyword ACT does not immediately change the activate/deactivate BISI (ADB) bit but requests the INWATS data base to activate BISI.

Fig. 33—Changing Busy/Idle Status of an INWATS Customer Line Group

22.04 *Verification:* To verify that the BISI has been initiated/terminated use the V-SFGN message shown in paragraph 2.09.

TABLE U

RC:BISI KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
ACT	Activate the busy/idle reporting status of the SFG.	
DACT	Deactivate the busy/idle reporting status of the SFG.	
ORD ńńńńńnn	Order Number (1 through 1, 048, 575).	
SFG ḿḿḿm	The SFGN that is to be activated or deactivated.	

23. ADDING, REPLACING, OR DELETING TRUNKS IN A SOFTWARE CARRIER GROUP RC:SCGA (RCSG, PR-1A399 OR PR-6A399) (1E7/1AE7 AND LATER GENERICS)

23.01 ▶Software carrier group alarm (SCGA) treatment is allowed only for common channel interoffice signaling (CCIS) trunks in a No. 1 ESS switch or a No. 1A ESS switch with the 1AE7 generic. In a No. 1A ESS switch with 1AE8 and later generics, SCGA treatment is available for CCIS trunks or per trunk signaling (PTS) trunks (carrier trunk conditioning recognition [CTCR] feature).◀

A. Adding Trunks in a Software Carrier Group (Fig. 34)

23.02 Refer to Table V for keyword definitions.

23.03 *Initial Conditions:* The software carrier group number (SCGN) is unassigned. The TNNs specified are equipped and assigned to a non-zero TG. The TNNs specified are not assigned to a SCG.
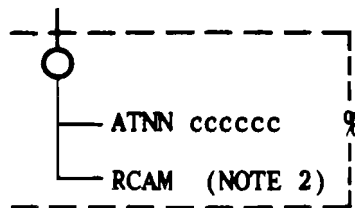
23.04 ▶*Results of Message:* For each segment specified for a multimember SCG, one word is built in the SCG-TNN auxiliary block. For a single member SCG (No. 1A ESS switch, 1AE8 and later), the PTW in the SCG-TNN head table is built to represent the single member SCG. No auxiliary block is seized. The index into the SCG-TNN auxiliary block (0 for single members) and the SCGN are added to the TNN-TGN auxiliary block. This word will have a word function of 1.

23.05 ▶*Message Requirements and Considerations:* For a No. 1A ESS switch (1AE8 and later) with a single SCG, bit 16 of the PTW in the SCG-TNN head table will be 0 for the CCIS trunks or 1 for PTS trunks. For a multimember SCG, bit 16 in word 0 of the SCG-TNN auxiliary block will indicate CCIS or PTS trunks. A SCG can contain only CCIS trunks or only PTS trunks, not both.◀

RC:SCGA:

SCGN ▮▮▮a

NTNN ▮b (NOTE 1)


```
  ─┼─ ─ ─ ─ ─ ─ ─ ─ ┐
   Ø                │
   │                │
   ├── ATNN ccccc   %
   │                │
   └── RCAM  (NOTE 2)│
  ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```

NOTES:
1. For a No. 1A ESS switch (1AE8 and later) bit 21 in the PTW of the SCG-TNN head table will be set to 1 for a single member SCG (keyword NTNN 1). The PTW then represents the single member SCG and is not the address of an auxiliary block.
2. When keyword RCAM is inputted, bit 22 in the PTW of the SCG-TNN head table is set to 1.

▶ Fig. 34– Adding Trunks in a Software Carrier Group◀

B. Changing Trunks in a Software Carrier Group (Fig. 35)

23.06 *Initial Conditions:* The SCGN is assigned. The TNNs to be added are equipped and assigned to a nonzero TG and are not assigned to a SCG. The TNNs to be deleted are assigned to the SCG.

23.07 ▶*Results of Message:* For each segment specified for a multimember SCG one word is built, replaced, or zeroed in the SCG-TNN auxiliary block. One word will be added (or deleted) from the TNN-TGN auxiliary block. When increasing the number of TNNs in multi or single member SCG (keyword NTNN) a new auxiliary block is seized. For a single member SCG (No. 1A ESS switch, 1AE8 and later) if keyword NTNN is inputted with a value greater than one, the PTW in the SCG-TNN head table is changed to indicate the address of an auxiliary block. If keyword NTNN is not inputted, the SCG-TNN head table entry remains a PTW only en-

try. It is possible to shrink the auxiliary block using the NTNN keyword as long as the value of NTNN is not less than the number of TNNs already assigned to the SCG. If a multimember SCG becomes a single member SCG, then the SCG-TNN auxiliary block is released and the PTW in the SCG-TNN head table is changed to represent the single member SCG.

23.08 *Message Requirements and Considerations:* See paragraph 23.05.◀
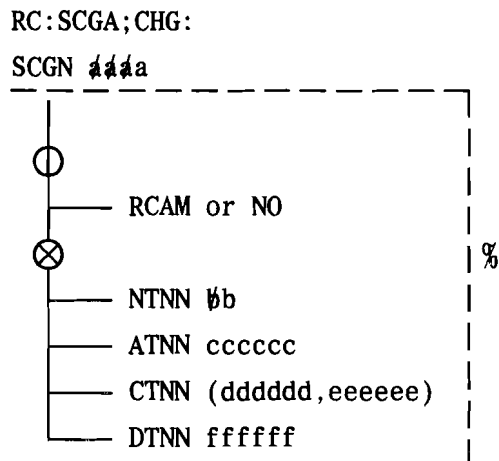
RC:SCGA;CHG:

SCGN ₫₫₫a

Fig. 35—Changing Trunks in a Software

C. Deleting a Software Carrier Group

23.09 *Initial Conditions:* The SCGN is assigned.
All words except the word number (WRDN) of word 0 are zero in the SCG-TNN auxiliary block. For a single member SCG, the PTW in the SCG-TNN head table is zero except for the PTW indicator.

23.10 *Results of Message:* The SCG is unassigned and the auxiliary block (multimember) is returned to the idle link list.

23.11 Delete a SCG by entering the following message.

RC:SCGA;OUT:
SCGA ₫₫₫a!

D. Verification

23.12 Refer to paragraph 2.18 for the verification procedure for RC:SCGA.

▶TABLE V◀

RC:SCGA KEYWORD DEFINITIONS

KEYWORD UNIT	DEFINITION	FORM
ATNN ccccc	TNN to be added.	ESS 1226 Cols. 25-30
CTNN (dddddd, eeeeee)	TNN to be changed: dddddd = TNN to be replaced. eeeeee = replacement TNN.	
DTNN ffffff	TNN to be deleted.	
NTNN ₫b	Number of TNNs in the SCG: ₫b = 2 through 12 (No. 1 ESS Switch and No. 1A ESS Switch, 1AE7 generic). ₫b = 1 through 12 (No. 1A ESS Switch, 1AE8 and later).	
RCAM	Radio Carrier Alarm Member.	ESS 1226 Col. 32
SCGN ₫₫₫n	Software Carrier Group Number: ₫₫₫n = 0 through 4095.	ESS 1226 Cols. 18-21

24. GLOSSARY OF ABBREVIATIONS AND ACRONYMS

24.01   The abbreviations and acronyms listed below are used in this section.

ACD	Automatic Call Distribution
ACSB	AUTOVON Customer Status Board
ACST	AUTOVON Customer Status
AIOD	Automatic Identified Outward Dialing
AMA	Automatic Message Accounting
ANI	Automatic Number Identification
BISI	Busy/Idle Status Indicator
CAMA	Centralized Automatic Message Accounting
CCIS	Common Channel Interoffice Signaling
CCSA	Common Control Switching Arrangement
CFBL	Call Forwarding Busy Line
CFDA	Call Forwarding Do Not Answer
CFG	Customer Facilities Group
CGA	Carrier Group Alarm
CI	Carrier Interconnect
CLAM	Coin Line Activity Monitoring
CMIDX	Coin Line Monitoring Index
CO	Central Office
CPD	Central Pulse Distributor
CS	Call Store
CSDC	Circuit Switched Digital Capability
CTCR	Carrier Trunk Conditioning Recognition
CTG	Centralized Automatic Message Accounting Trunk Group
DCT	Digital Carrier Trunk
DES	Alphanumeric Destination Code
DLU	Data Link Usage
DN	Directory Number
EPSCS	Enhanced Private Switched Communication Service
EQPG	Equipage
ETS	Electronic Tandem Switching
IAT	Inhibit Automatic Testing
IM	Input Message
INWATS	Inward Wide Area Telephone Service
JCN	Junctor Circuit Number
JNN	Junctor Network Number
JNNL	Junctor Network Number Line
JNNT	Junctor Network Number Trunk
JSF	Junctor Scanner Frame
JSN	Junctor Scanner Number
LEN	Line Equipment Number
LIU	Line Interface Unit
LJR	Line-to-Junctor

LLN	Line Link Network	RMSN	Remote Miscellaneous Scanner Number
LRE	Loop Range Extension	ROTL	Remote Office Test Line
MLH	Multiline Hunt	RSP	Remote Scan Point
MSN	Master Scanner Number	RSS	Remote Switching System
NAL	Network Access Line	SCG	Software Carrier Group
NOG	Number Group	SCGA	Software Carrier Group Alarm
NPA	Numbering Plan Area Code	SCGN	Software Carrier Group Number
OM	Output Message		
ORD	Order Number	SDN	Signal Distributor Number
OUTWATS	Outward Wide Area Telephone Service	SFG	Simulated Facilities Group
		SFGN	Simulated Facilities Group Number
PAC	Prefixed Access Code		
PF	Printout Follows	SLEN	Screening Line Equipment Number
Pident	Program Identification	TACK	TTY Acknowledgment
PLM	Plant Measurement	TCC	Trunk Class Code
PR	Program Record (Listing)	TG	Trunk Group
PS	Program Store	TGN	Trunk Group Number
PTS	Per Trunk Signaling	TLN	Trunk Link Network
PTW	Primary Translation Word	TMB	Trunk Make Busy
PUC	Peripheral Unit Controller	TN	Telephone Number
PUCMB	Peripheral Unit Controller Maintenance Bus	TNAC	Trunk Network Access Code
QTL	Queuing Trunks and Lines	TNN	Trunk Network Number
RAC	Rate Center	UNTY	Unit Type
RC	Recent Change	VFY	Verify
RCAM	Remote Carrier Alarm Number	WRDN	Word Number
REN	Remote Equipment Number	XRMSN	Extended Remote Master Scanner Number