1. GENERAL

1.01 This section provides a detailed description of the interactive language, displays, and reports used to effectively administer the metropolitan T-carrier network. Also, a brief description of the interactive devices used with the T-Carrier Administration System (TCAS) is given.

1.02 Whenever this section is reissued, the reason for reissue will be stated in this paragraph.
A. Interactive Devices

1.03 Extensive operator interaction is available with TCAS. This capability is provided by various TCAS central input/output devices, each serving a specific function. The following paragraphs briefly discuss the functions of the computer display terminal (CDT), the optional CDT printer (CP), the computer control console (CC), and the status and reports printers (SP and RP).

1.04 DATASPEED® 40/1 keyboard/display terminals, referred to as CDTs, are used at each maintenance control position. A maintenance controller (MC) at each position receives alarm information and interacts with the computer in resolving specific alarm situations. Interaction consists of requesting, via interactive language, real-time CDT displays which provide current status information, layout and summary information and entering administrative information, such as trouble location information. A typical screen display obtained from a CDT is shown in Fig. 1.

1.05 A TCAS installation may contain up to 12 CDTs used as MC terminals for coordination of T-carrier restoration and maintenance activities. A typical installation will have one terminal for about every 1500 systems monitored by the TCAS computer. The TCAS design is such that any one of these regular MC terminals (but only one at a time) may be converted to a data base controller (DBC) terminal for data base operations.

1.06 An optional DATASPEED 40/1 tractor-feed or friction-feed printer (CP) may be provided with each CDT. Nondynamic reports and lists may be outputted directly to the CP.

1.07 An HP 2645A keyboard/display terminal with an HP 9866A printer is used as the CC. This terminal serves as the operator interface to the manual functions of the telemetry tests and diagnostic modules. It is also used for initializing the system and changing system parameters.

1.08 Two DATASPEED 40/1 printers are used as the SP and RP. The primary function of the SP is to provide network status information necessary for the manual fallback operation of the TCAS-equipped T-carrier restoration control center (TRCC) in the event of a major TCAS failure. The RP produces various periodic reports and some demand reports and displays.

1.09 For a more detailed description of these devices, refer to Section 190-200-100.

2. INPUT MESSAGES

A. Introduction

2.01 All input messages use the same basic format. This consists of a verb and a key word, with a colon, semicolon, or comma separating them. One or more optional words may follow the key word to express more completely the intent of the message. A comma must precede each option. A sample message is \( ACP:TC,TCN=100X025,CDT=2 \). This means — **Accept trouble case number 100X025 if it belongs to CDT 2**. In the previous example, the verb is **ACP**, the keyword is **TC**, and the options are **TCN=100X025,CDT=2**.

2.02 The following paragraphs identify all input messages used with TCAS operations. The messages are grouped into three categories for easy reference. These categories are maintenance control, data base control, and computer control input messages. Also, each input message is cross-referenced to the appropriate paragraph number in Part 4, INDEX OF INPUT MESSAGES. The options associated with each input message are grouped into sets (refer to paragraph 2.09). For example, \( OP:ATC \) uses two option sets, where **P**, **TCN=xxx** is one set; and **CP, RP, SP** is another set. Only one option from each set may be used with the basic input message at any one time. In addition, many basic input messages permit a **default condition** where a detailed complete meaning is implied when no options are used.
with the basic message. For example, **OP:ATC** means output on the display screen all trouble cases associated with the current trouble case.

**Note:** The RETURN key on the CC or CDT keyboard must be depressed **before** and **after** each complete input message.

### B. Maintenance Control Input Messages

2.03 The following messages are used by the MC and are entered from those CDTs designated as maintenance control positions. For more detailed information on the functions and procedures of the MC, refer to Section 190-200-030.

2.04 **SET:CONTR**—Set controller for a terminal.

Options available: The option **INTLS=** must always be used with this input message.

**SET:CONTR,INTLS=xxx** (default condition)—Sign on to a CDT, as a maintenance controller; where xxx signifies your initials.

**,INTLS=xxx,DBC**—Sign on to a CDT as a data base controller; where xxx signifies your initials.

2.05 **CLR:CONTR**—Clear controller from a terminal.

Options available: None

2.06 **INIT**—Initialize an operator terminal.

Options available: None

2.07 **OP**—Output the next page of a multipage output on the CDT screen.

Options available: None

2.08 **STOP**—Stop the output of a multipage display if one is in progress.

Options available: None

2.09 **OP:ATC**—Output associated trouble case.

Options available:

**OP:ATC** (default condition)—Output, on the display screen, trouble cases (TC) associated with the current TC.

**,P**—Output, on the display screen, TCs associated with the highest priority TC.

**,TCN=xxx**—Output, on the display screen, TCs associated with a specific TC number; where xxx signifies the TC number.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous **OP:ATC** options. An example is **OP:ATC,TCN=100X027,RP**.

**,CP**—Output on printer associated with this terminal.
SECTION 190-200-101

,RP—Output on the reports printer.
,SP—Output on the status printer.

See Fig. 2 for a sample output display.

Note: The following maintenance control input messages (paragraphs 2.10 through 2.26) can also be entered from the CC.

2.10 OP:EQPTINV—Output equipment inventory.

Options available: The OFFID= option must always be used, unless the ALL option is used.

OP:EQPTINV,OFFID=xxx—Output, on display screen, the inventory of T1 terminals in the specific office (office identification [ID] code); where xxx signifies the office ID.

OP:EQPTINV,ALL—Output, on display screen, the inventory of T1 terminals in all offices.

To specify a certain type of equipment, the following option can be used with any of the previous OP:EQPTINV options. An example is OP:EQPTINV,OFFID=OKLDCA11,EQPTCL=T1OR.

,EQPTCL=xxx—Equipment class, as in the previous example, T1OR means T1 office repeaters; where xxx signifies the equipment class code.

The following equipment class codes are used with the ,EQPTCL= option:

T1TERM T1 terminal
T1OR T1 office repeater
T1PLR T1 patch line repeater
T1RSHLF T1 repeater shelf.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:EQPTINV options. An example is OP:EQPTINV,OFFID=OKLDCA11,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

See Fig. 3 for a sample output display.

2.11 OP:HS—Output history of an entity.

Options available:

OP:HS (default condition)—Output, on display screen, all available history on the entity in the current TC.
,P—Output, on display screen, all available history on the entity in the highest priority TC.
,TCN=xxx—Output, on display screen, all available history on the entity in the specified trouble case; where xxx signifies the TC number.

,PGN=xxx—Output, on display screen, all available history on the specified pattern group (PG); where xxx signifies the PG number.

,RK=xxx—Output, on display screen, all available history on the entity of specified rank (RK) in the current TC; where xxx signifies the rank.

,SRN=xxx—Output, on display screen, all available history on the system with the specified system reference number (SRN); where xxx signifies the SRN.

,SYSID=xxx—Output, on display screen, all available history on the system with the specified system ID code (SYSID); where xxx signifies the SYSID.

,CAID=xxx—Output, on display screen, all available history on pattern group containing the cable with the specified cable ID code (CAID); where xxx signifies the CAID.

,PLRN=xxx—Output, on display screen, all available history on the patch line with the specified patch line reference number (PLRN); where xxx signifies the PLRN.

,PUD=xxx—Output, on display screen, all available history on the patch line with the specified patch line ID code (PLID); where xxx signifies the PLID.

To select the history up to a certain date and time, the following option can be used with any of the previous OP:HS options. An example is OP:HS,TCN=100X027,DT=10-07-77 080000. If the DT= option is not used, the current date and time is automatically assumed.

,DT=xxx yyyy—Output all history from the oldest information available up to the specified date and time (DT); where xxx and yyyy signify the date and time, respectively.

To examine the history of an entity during a specific interval, one of the following options can be used with any of the previous OP:HS options. An example is OP:HS,TCN=100X027,DT=10-07-77 080000,HR=48.

,MIN=xxx—Output all history for the previous number of minutes specified; where xxx signifies the minutes.

,HR=xxx—Output all history for the previous number of hours specified; where xxx signifies the hours.

,DY=xxx—Output all history for the previous number of days specified; where xxx signifies the days.

,TCO—Output all history on the entity in the current TC since that TC was opened.

To output comments associated with an entity, the following option can be used with any of the previous OP:HS options. An example is OP:HS,TCN=100X027,CMTONLY.

,CMTONLY—Output only the comments associated with the entity in the current TC.

To specify that the output be printed as hard copy, one of the following options can be used with any of the above OP:HS options. An example is OP:HS,TCN=100X027,RP.

,CP—Output on printer associated with this terminal.
2.12 **OP:LO**—Output layout.

Options available:

- **OP:LO** (default condition)—Output, on display screen, layout of terminal offices of system in the current TC.
- **P**—Output, on display screen, layout of terminal offices of system in the highest priority TC.
- **TCN=xxx**—Output, on display screen, layout of terminal offices of system with the specified trouble case number; where **xxx** signifies the trouble case number.
- **SRN=xxx**—Output, on display screen, layout of terminal offices of system with the specified system reference number; where **xxx** signifies the system reference number.
- **SYSID=xxx**—Output, on display screen, layout of terminal offices of system with the specified system ID code; where **xxx** signifies the system ID.
- **PLRN=xxx**—Output, on display screen, layout of terminal offices for the patch line with the specified patch line reference number; where **xxx** signifies the patch line reference number.
- **PLID=xxx**—Output, on display screen, layout of terminal offices for the patch line with the specified patch line ID code; where **xxx** signifies the patch line ID.

To specify any two offices on the system or patch line, the following option can be used with **any** of the previous **OP:LO** options. An example is **OP:LO,PLRN=233P624,OFFPR=OKLDC11 LFYTCA11**.

- **OFFPR=xxx yyy**—Output layout for the specified office pair; where **xxx** and **yyy** signify the office pair.

To specify that the output be printed as hard copy, one of the following options can be used with **any** of the previous **OP:LO** options. An example is **OP:LO,TCN=100X027,RP**.

- **CP**—Output on printer associated with this terminal.
- **RP**—Output on the reports printer.
- **SP**—Output on the status printer.

See Fig. 7 and 8 for sample output displays.

2.13 **OP:NPL**—Output network portions list.

Options available:

- **OP:NPL** (default condition)—Output, on display screen, the network portions list for this CDT.
.CDT=xxx—Output, on display screen, the network portions list for the specified CDT; where xxx signifies the CDT number.

.ALL—Output, on display screen, the network portions list for all CDTs.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:NPL options. An example is OP:NPL,CDT=4,RP.

.CP—Output on printer associated with this terminal.

.RP—Output on the reports printer.

.SP—Output on the status printer.

See Fig. 9 for a sample output display.

2.14 OP:NTCL—Output notice list.

Options available:

OP:NTCL (default condition)—Output, on display screen, notices for the monitored or first-ranked entity in the current TC.

.P—Output, on display screen, notices for the monitored or first-ranked entity in the highest priority TC.

.TCN=xxx—Output, on display screen, notices for the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

.PGN=xxx—Output, on display screen, notices for the monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.

.RK=xxx—Output, on display screen, notices for the entity of specified rank in the current TC; where xxx signifies the rank.

.SRN=xxx—Output, on display screen, notices for the system with the specified system reference number; where xxx signifies the system reference number.

.SYSID=xxx—Output, on display screen, notices for the specified system; where xxx signifies the system ID.

.CAID=xxx—Output, on display screen, notices for the specified cable; where xxx signifies the cable ID.

.PLRN=xxx—Output, on display screen, notices for the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

.PLID=xxx—Output, on display screen, notices for the specified patch line; where xxx signifies the patch line ID.

.ALL—Output, on display screen, a list of all notices.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:NTCL options. An example is OP:NTCL,ALL,RP.
SECTION 190-200-101

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 10 and 11 for sample output displays.

2.15 OP:PATT—Output pattern list.

Options available:

OP:PATT (default condition)—Output, on display screen, a list of the cable patterns in the current TC.

.P—Output, on display screen, a list of cable patterns for the highest priority TC.

,TCN=xxx—Output, on display screen, a list of the cable patterns for the specified TC; where xxx signifies the TC number.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:PATT options. An example is OP:PATT,TCN=100X027,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 12 for a sample output display.

2.16 OP:PINFO—Output patch information.

Options available:

OP:PINFO (default condition)—Output, on display screen, two-way patch information on sectionalized portion of system in current TC and the most recently reserved patch line.

.P—Output, on display screen, two-way patch information on sectionalized portion of system in the highest priority TC and the most recently reserved patch line.

,TCN=xxx—Output, on display screen, two-way patch information on sectionalized portion of system with the specified trouble case number and the most recently reserved patch line; where xxx signifies the TC number.

,SRN=xxx—Output, on display screen, two-way patch information on the sectionalized portion of the specified system and the most recently reserved patch line; where xxx signifies the system reference number.

,SYSSID=xxx—Output, on display screen, two-way patch information on the sectionalized portion of the specified system, and the most recently reserved patch line; where xxx signifies the system ID.
To specify that the output be given for a certain direction of the system, the following options can be used with any of the previous OP:PINFO options. An example is OP:PINFO,AZ.

,AZ—Output patch information for direction A to Z.

,ZA—Output patch information for direction Z to A.

,BW—Output patch information both ways.

To specify a portion of the system between two offices, the following option can be used with any of the previous OP:PINFO options. An example is OP:PINFO,AZ,OFFPR=OKLDC\text{All} LFYTCA11.

,OFFPR=xxx vvv—Output patch information for the specified office pair; where xxx and vvv signify the office pair.

To specify that the output be given for a specific patch line, the following options can be used with any of the previous OP:PINFO options. An example is OP:PINFO,SRN=100S526,PLRN=233P624.

,PLRN=xxx—Output patch information for the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

,PLID=xxx—Output patch information for the patch line with the specified patch line identification code; where xxx signifies the patch line ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:PINFO options. An example is OP:PINFO,AZ,OFFPR=OKLDC\text{All} LFYTCA11,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 13 for a sample output display.

2.17 OP:PLSUM—Output patch line summary.

Options available: The option OFFID= must always be used with this input message.

OP:PLSUM,OFFID=xxx (default condition)—Output, on display screen, a summary of all patch lines terminating in the specified office; where xxx signifies the office ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:PLSUM options. An example is OP:PLSUM,OFFID=OKLDC\text{All},RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 14 and 15 for sample output displays.

2.18 OP:RPT—Output a report.

Options available: The option RPTNO= must always be used with this input message.
OP:RPT,RPTNO=xxx (default condition)—Output, on display screen, the specified report (see the following report numbers); where xxx signifies the report number.

There are six reports that can be requested by the MC. The reports and their respective report numbers are as follows:

1—Daily Failure Statistics by Control Office
2—Weekly Failure Statistics by Control Office
3—Backup List of Currently Open Trouble Cases
4—Backbone Usage Report
5—Maintenance Line Usage Report
6—TCAS Trouble-Type Statistics by Office.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:RPT options. An example is OP:RPT,RPTNO=S,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

2.19 OP:RS—Output route status.

Options available:

OP:RS (default condition)—Output, on display screen, the route status for the monitored or first-ranked entity in the current TC.
,P—Output, on display screen, the route status for the monitored or first-ranked entity in the highest priority TC.
,TCN=xxx—Output, on display screen, the route status for the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.
,PGN=xxx—Output, on display screen, the route status for the monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.
,RK=xxx—Output, on display screen, the route status for entity of specified rank in the current TC; where xxx signifies the rank.
,SRN=xxx—Output, on display screen, the route status for the system with the specified system reference number; where xxx signifies the system reference number.
,SYSID=xxx—Output, on display screen, the route status for the system with the specified system identification code, where xxx signifies the system ID.
,CAID=xxx—Output, on display screen, the route status for the specified cable; where xxx signifies the cable ID.
.PLRN=xxx—Output, on display screen, the route status for the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

.PUD=xxx—Output, on display screen, the route status for the patch line with the specified patch line identification code; where xxx signifies the patch line ID.

.OFFPR=xxx yyy—Output, on display screen, the route status for the specified office pair; where xxx and yyy signify the office pair.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:RS options. An example is OP:RS,TCN=100X027,CP.

.CP—Output on printer associated with this terminal.

.RP—Output on the reports printer.

.SP—Output on the status printer.

See Fig. 16 through 20 for sample output displays.

2.20 OP:SL—Output system list.

Options available:

OP:SL (default condition)—Output, on display screen, the systems currently failed for the monitored or first-ranked entity in the current TC.

.P—Output, on display screen, the systems currently failed for the monitored or first-ranked entity in the highest priority TC.

.TCN=xxx—Output, on display screen, the systems currently failed for the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

.PGN=xxx—Output, on display screen, the systems currently failed for the monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.

.RK=xxx—Output, on display screen, the systems currently failed for the entity of specified rank in the current TC; where xxx signifies the rank.

.SYSID=xxx—Output, on display screen, the systems currently failed for the specified system; where xxx signifies the system ID.

.CAID=xxx—Output, on display screen, the systems currently failed for the specified cable; where xxx signifies the office ID.

.OFFID=xxx—Output, on display screen, the systems currently failed for the specified office; where xxx signifies the office ID.

To specify the type of system, one of the following options can be used with any of the previous OP:SL options. An example is OP:SL,P,ALL.

.FALDTDY—Specifies systems failed today.

.MOND—Specifies monitored systems only.
To specify that the output be printed as hard copy, one of the following options can be used with any of the previous **OP:SL** options. An example is **OP:SL,TCN=100X027,MOND,CP**.

- **ALL**—Specifies all systems.

To specify the system for which the side system is desired, one of the following options can be used with the basic **OP:SS** message. An example is **OP:SS,OFFPR=OKLDCA11 LFYTCA11, TCN=100X027**.

**2.21 OP:SS—Output side system.**

Options available: The option **OFFPR=** must always be used with this input message.

**OP:SS,OFFPR=xxx yyy** (default condition)—Output, on display screen, the side systems for the system in the current trouble case between the specified office pair; where **xxx** and **yyy** signify the office pair.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous **OP:SS** options. An example is **OP:SS,OFFPR=OKLDCA11 LFYTCA11,P,CP**.

- **CP**—Output on printer associated with this terminal.
- **RP**—Output on the reports printer.
- **SP**—Output on the status printer.

See Fig. 26 for a sample output display.

**2.22 OP:ST—Output status of an entity.**

Options available:

**OP:ST** (default condition)—Output, on display screen, the status of the monitored or first-ranked entity in the current TC.
.P—Output, on display screen, the status of the monitored or first-ranked entity in the highest priority TC.

.TCN=xxx—Output, on display screen, the status of the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

.PGN=xxx—Output, on display screen, the status of the monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.

.RK=xxx—Output, on display screen, the status of the entity of specified rank in the current TC; where xxx signifies the rank.

.SRN=xxx—Output, on display screen, the status of the system with the specified system reference number; where xxx signifies the system reference number.

.SYSID=xxx—Output, on display screen, the status of the system with the specified system ID code; where xxx signifies the system ID.

.CAID=xxx—Output, on display screen, the status of the specified cable; where xxx signifies the cable ID.

.PLRN=xxx—Output, on display screen, the status of the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

.Plud=xxx—Output, on display screen, the status of the patch line with the specified patch line identification code; where xxx signifies the patch line ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:ST options. An example is OP:ST,SRN=1005526,RP.

.CP—Output on printer associated with this terminal.

.RP—Output on the reports printer.

.SP—Output on the status printer.

See Fig. 27 through 33 for sample output displays.

2.23 OP:TC—Output a trouble case.

Options available:

OP:TC (default condition)—Output, on display screen, the TC for the monitored or first-ranked entity in the current TC.

.P—Output, on display screen, the TC for the monitored on first-ranked entity in the highest priority TC.

.TCN=xxx—Output, on display screen, the TC for the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

.PGN=xxx—Output, on display screen, the TC for the monitored or first-ranked entity in specified pattern group; where xxx signifies the pattern group number.
,RK=xxx—Output, on display screen, the TC for the entity of specified rank in the current TC; where xxx signifies the rank.

,SRN=xxx—Output, on display screen, the TC for the system with the specified system reference number; where xxx signifies the system reference number.

,SYSID=xxx—Output, on display screen, the TC for the system with the specified system identification code; where xxx signifies the system ID.

,CAID=xxx—Output, on display screen, the TC for the specified cable; where xxx signifies the cable ID.

,PLRN=xxx—Output, on display screen, the TC for the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

,PLID=xxx—Output, on display screen, the TC for the patch line with the specified patch line identification code; where xxx signifies the patch line ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:TC options. An example is OP:TC,P,CP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 34 through 41 for sample output displays.

2.24 OP:TCL—Output trouble case list.

Options available:

OP:TCL (default condition)—Output, on display screen, the active and deferred TCs for this CDT.

,CDT=xxx—Output, on display screen, the active and deferred TCs for the specified CDT; where xxx signifies the CDT number.

,ALL—Output, on display screen, the active and deferred TCs for all CDTs.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:TCL options. An example is OP:TCL,ALL,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 42 for a sample output display.

2.25 OP:TLMASGN—Output telemetry assignments.

Options available: The options REMID= or DISPLID= must always be used with this input message.

Page 14
,REMTID=xxx—Output, on display screen, the telemetry assignments for all displays given a remote ID code; where xxx signifies the remote ID.

,DISPLID=xxx yy—Output, on display screen, the telemetry assignments for a specified display and remote; where xxx signifies the remote ID and yy signifies the display number.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:TLMASGN options. An example is OP:TLMASGN,DISPLID=OKLDCA03E01 8,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 43 for a sample output display.

2.26 OP:UNMONEQPT—Output unmonitored equipment.

Options available: The OFFID= option must always be used, unless the ALL option is used.

,OFFID=xxx—Output, on display screen, the unmonitored T1 terminals in the specified office; where xxx signifies the office ID.

,ALL—Output, on display screen, the unmonitored T1 terminals in all offices.

To specify a certain type of equipment, the following option can be used with any of the previous OP:UNMONEQPT options. An example is OP:UNMONEQPT,OFFID=OKLDCA11,EQPTCL=T1OR.

,EQPTCL=xxx—Equipment class; as in the previous example, T1OR means T1 office repeaters.

The following equipment class codes are used with the EQPTCL= option:

T1TERM T1 terminals
T1OR T1 office repeaters
T1PLR T1 patch line repeaters
T1RSHLF T1 repeater shelf.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:UNMONEQPT options. An example is OP:UNMONEQPT,OFFID=OKLDCA11,EQPTCL=T1OR,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 44 for a sample output display.

2.27 OP:PLL—Output patch line list.
Options available:

**OP:PLL** (default condition)—Output, on display screen, patch lines available for patching the system in the current TC from end to end, both ways.

,AZ—Output, on display screen, patch lines available for patching the system in the current TC from end to end in direction A to Z.

,ZA—Output, on display screen, patch lines available for patching the system in the current TC from end to end in direction Z to A.

To specify a span by the end offices, the following option can be used with any of the previous OP:PLL options. An example is **OP:PLL,AZ,OFFPR=OKLDCA11 LFYTCA11**.

,OFFPR=xxx yyy—Output patch lines available for patching between the specified office pair; where xxx and yyy signify the office pair.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:PLL options. An example is **OP:PLL,AZ,OFFPR=OKLDCA11 LFYTCA11,CP**.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 45 for a sample output display.

### 2.28 MON:ST—Monitor status of an entity.

Options available:

**MON:ST** (default condition)—Monitor the status of the monitored or first-ranked entity in the current TC.

,P—Monitor the status of the monitored or first-ranked entity in the highest priority TC.

,TCN=xxx Monitor the status of the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

,PGN=xxx—Monitor the status of the monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.

,RK=xxx—Monitor the status of the entity of specified rank in the current TC; where xxx signifies the rank.

,SRN=xxx—Monitor the status of the system with the specified system reference number; where xxx signifies the system reference number.

,SYSSID=xxx—Monitor the status of the system with the specified system ID code; where xxx signifies the system ID.

,CAID=xxx—Monitor the status of the specified cable; where xxx signifies the cable ID.
PLRN=xxx—Monitor the status of the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

PLID=xxx—Monitor the status of the patch line with the specified patch line ID code; where xxx signifies the patch line ID.

See Fig. 27 through 33 for sample output displays.

2.29 IN:NTC—Input a notice.

**Note:** The notice text is requested through a dialogue with the computer.

Options available:

IN:NTC (default condition)—Input a notice on the currently monitored entity.

SRN=xxx—Input a notice on the system with the specified system reference number; where xxx signifies the system reference number.

SYSID=xxx—Input a notice on the system with the specified system ID code; where xxx signifies the system ID.

CAID=xxx—Input a notice on the specified cable; where xxx signifies the cable ID.

PLRN=xxx—Input a notice on the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

PLID=xxx—Input a notice on the patch line with the specified patch line ID; where xxx signifies the patch line ID.

2.30 CLR:NTC—Clear a notice.

Options available: The option NTN= must always be used with this input message.

NTN=xxx—Clear the notice with the specified notice number; where xxx signifies the notice number.

2.31 OPN:TC—Open a trouble case, monitor it and make it the current case.

**Note:** If a trouble case is already open on a system, patch line or cable, then this message causes the existing trouble case to be monitored and made the current case.

Options available:

OPN:TC (default condition)—Manually open a trouble case on the entity whose status is being monitored.

SRN=xxx—Manually open a trouble case on the system with the specified system reference number; where xxx signifies the system reference number.

SYSID=xxx—Manually open a trouble case on the system with the specified system ID code; where xxx signifies the system ID.

CAID=xxx—Manually open a trouble case on the specified cable; where xxx signifies the cable ID.
,PLRN=xxx—Manually open a trouble case on the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

,PUD=xxx—Manually open a trouble case on the patch line with the specified patch line ID code; where xxx signifies the patch line ID.

See Fig. 34 through 41 for sample output of displays.

2.32 CLS:TC—Close the current TC.

Options available: None

2.33 MON:TC—Monitor a TC and make it the current case.

Options available:

MON:TC (default condition)—Monitor the TC for the monitored or first-ranked entity in the current TC.

,P—Monitor the TC for the monitored or first-ranked entity in the highest priority TC.

,TCN=xxx—Monitor the TC for the monitored or first-ranked entity in the specified TC; where xxx signifies the TC number.

,PGN=xxx—Monitor the TC for monitored or first-ranked entity in the specified pattern group; where xxx signifies the pattern group number.

,RK=xxx—Monitor the entity of specified rank in the current TC; where xxx signifies the rank.

,SRN=xxx—Monitor the TC currently open on the system with the specified system reference number; where xxx signifies the system reference number.

,SYSID=xxx—Monitor the TC currently open on the system with the specified system ID code; where xxx signifies the system ID.

,CAID=xxx—Monitor the TC currently open on the specified cable; where xxx signifies the cable ID.

,PLRN=xxx—Monitor the TC currently open on the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.

,PUD=xxx—Monitor the TC currently open on the patch line with the specified patch line ID code; where xxx signifies the patch line ID.

See Fig. 34 through 41 for sample output displays.

2.34 ACP:TC—Accept a trouble case.

Options available:

ACP:TC (default condition)—Accept the current TC on this CDT.

,TCN=xxx—Accept the specified TC on this CDT; where xxx signifies the TC number.
,PRMRY—Accept all trouble cases for which this CDT is primary.

,SCNDRY—Accept all trouble cases for which this CDT is secondary.

To specify a particular CDT as responsible for the trouble case, the following option can be used with any of the previous ACP:TC options. An example is ACP:TC,TCN=100X027,CDT=4.

,CDT=xxx—Specifies a specific CDT terminal as responsible for the trouble case. Thexxx signifies the CDT number.

2.35 UPD:AC—Update the action code in a trouble case.

Action codes available: One of the following action codes must always be used with the basic UPD:AC input message. Also, up to three initials must be supplied (eg, JSL). In the following action codes, the initials are represented by xxx. An example is UPD:AC=LMT JSL.

=LMT xxx—Line maintenance tests in progress. Use while verifying a trouble in a line. Standard deferral—2 hours.

=LSN xxx—Line sectionalization in progress. Use while locating a bad span after a backbone line is used to restore service. Standard deferral—4 hours.

=MSC xxx—Miscellaneous deferral. Use to defer a TC without implying a reason. Standard deferral—2 hours.

=NCC xxx—Indicates that the network control center has been notified concerning a major outage. TC is not deferred.

=OFR xxx—Office repair in progress. Use while a central office trouble is being cleared. Standard deferral—2 hours.

=OPD xxx—Span maintenance dispatch notified. Indicates that the trouble case has been referred to the span maintenance dispatcher. Standard deferral—8 hours.

=OPR xxx—Span maintenance repair. Indicates that the TC is now referred to the span maintenance forces. Standard deferral—24 hours.

=PDG xxx—Defers this TC while a pending associated (higher level) TC is worked on. Standard deferral—2 hours.

=REF yyy—Refer to yyy (initials of the person the TC has been referred to for resolution). Usually used to escalate or expedite the trouble clearing activity. Standard deferral—4 hours.

=REP yyy—Repair complete. No deferral; action complete.

=RSN xxx—Restoration patching in progress. Use if a short delay is expected while a system is being patched. Standard deferral—15 minutes.

=SFL xxx—Span fault location in progress. Use while the span control office obtains the fault locate information. Standard deferral—4 hours.

=SSN xxx—System sectionalization in progress. Use if a short delay is expected while the failure is being isolated to a span or office. Standard deferral—15 minutes.
=STC xxx—Indicates that the responsible serving test center has been notified that a system carrying digital data service is in trouble. No deferral; action complete.

To specify a particular trouble case, one of the following options can be used with any of the previous **UPD:AC** options. An example is **UPD:AC=SSN JSL,TCN=100X027**. If one of the following options is not used, the current trouble case is automatically assumed.

,P—Specifies the highest priority TC.

,TCN=xxx—Specifies a particular TC by the TC number; where xxx signifies the TC number.

To specify a specific deferral time other than the standard deferral, one of the following options can be used with any of the previous **UPD:AC** options. An example is **UPD:AC=SFL JSL,MIN=30.0**.

MIN=xxx—Defer for specific number of minutes rather than standard deferral; where xxx signifies the minutes deferred.

HR=xxx—Defer for specific number of hours rather than standard deferral; where xxx signifies the hours deferred.

### 2.36 **UPD:SCTN**—Update sectionalization information in a TC.

Options available:

**UPD:SCTN** (default condition)—Indicates trouble both ways end to end in the line in the current TC.

,OFFPR=xxx yyy—Indicates trouble both ways between the specified office pair in the current TC; where xxx and yyy signify the office pair.

,OFFID=xxx—Indicates trouble both ways in the specified office in the current TC; where xxx signifies the office ID.

To specify a trouble case other than the current TC, one of the following options can be used with any of the previous **UPD:SCTN** options. An example is **UPD:SCTN,OFFID=OKLDCA11,TCN=100X027**.

,P—Specifies the highest priority TC.

,TCN=xxx—Specifies a particular TC; where xxx signifies the TC number.

To specify a certain direction other than both ways, one of the following options can be used with any of the previous **UPD:SCTN** options. An example is **UPD:SCTN,OFFPR=OKLDCA11 LFYTCA11,AZ**.

,AZ—Specifies direction A to Z.

,ZA—Specifies direction Z to A.

### 2.37 **UPD:TI**—Update trouble identification in a trouble case.

Options available:

**UPD:TI** (default condition)—Indicates that no trouble was found in first-ranked entity in the current TC.
,TT=xxx—Trouble type for the entity in the current TC (see following trouble type list); where xxx signifies the trouble type.

The following codes are used with the TT= option:

- **COTERM**—Central office terminal (channel bank plug-in unit)
- **COPWRS**—Central office terminal power supply/fuse
- **CORPTR**—Central office repeater
- **COBAT**—Central office battery
- **COWRG**—Central office wiring/frame
- **COEQPT**—Central office other equipment
- **COLNFS**—Central office span powering/fuse
- **COCC**—Central office, came clear
- **COERR**—Central office, work error
- **COMISC**—Central office, miscellaneous
- **COMTCE**—Central office maintenance/rearrangements
- **COSPL**—Central office, reserved
- **LNCA**—Span line cable/splice
- **LNRPTR**—Span line repeater
- **LNAC**—Span line apparatus case
- **LNCC**—Span line, came clear
- **LNERR**—Span line work error
- **LNMISC**—Span line, miscellaneous
- **LNMTCE**—Span line maintenance/rearrangements
- **LNSPL**—Span line, reserved
- **LINECC**—Line, came clear
- **MISC**—System, miscellaneous
- **SYSSPL**—System, reserved
- **NTF**—No trouble found
- **OTHER**—Other than T1
TBL—Trouble found.

To specify the office with the trouble, the following option can be used with any of the previous UPD:TI options. An example is UPD:TI,TT=COTERM,OFFID=OKLDCA11.

OFFID=xxx—Office ID code; where xxx signifies the office ID.

To specify a particular trouble case, one of the following options can be used with any of the previous UPD:TI options. An example is UPD:TI,TT=LNRPTR,TCN=100X027. If one of the following options is not used, the current trouble case is automatically assumed.

,P—Specifies the highest priority TC.
,
,TCN=xxx—Specifies a particular TC by the TC number; where xxx signifies the TC number.

2.38 IN:CMT—Input a comment.

Note: The comment text is requested through a dialogue with the computer.

Options available:

IN:CMT (default condition)—Input a comment on the current TC.
,
P—Input a comment on the highest priority TC.
,
,TCN=xxx—Input a comment on the specified TC; where xxx signifies the TC number.
,
,PGN=xxx—Input a comment on the TC for a specified pattern group; where xxx signifies the pattern group number.
,
,RK=xxx—Input a comment on entity of specified rank in the current TC; where xxx signifies the rank.
,
,SRN=xxx—Input a comment on TC for the system with the specified system reference number; where xxx signifies the system reference number.
,
,SYSID=xxx—Input a comment on TC for system with the specified system ID code; where xxx signifies the system ID.
,
,CAID=xxx—Input a comment on TC for the specified cable; where xxx signifies the cable ID.
,
,PLRN=xxx—Input a comment on TC for the patch line with the specified patch line reference number; where xxx signifies the patch line reference number.
,
,PLID=xxx—Input a comment on TC for the patch line with the specified patch line ID code; where xxx signifies the patch line ID.

2.39 SET:PLRES—Set a patch line reservation.

Options available: The option PLRN= or PLID= must always be used with this input message.

,PLRN=xxx—Reserve the specified patch line for a restoration patch in both directions on sectionalized portion of the system in the current TC; where xxx signifies the patch line reference number of the reserved patch line.
PLID = xxx — Reserve the specified patch line for a restoration patch in both directions on sectionalized portion of the system in the current TC; where xxx signifies the patch line ID of the reserved patch line.

To specify a particular trouble case or system, one of the following options can be used with any of the previous SET:PLRES options. An example is SET:PLRES,PLRN=233P624,P.

P — Reserve a patch line for the system in the highest priority TC.

TCN = xxx — Reserve a patch line for the system in the specified TC; where xxx signifies the TC number.

SRN = xxx — Reserve a patch line for the system with the specified system reference number; where xxx signifies the system reference number.

SYSID = xxx — Reserve a patch line for the system with the specified system ID code; where xxx signifies the system ID.

To specify a patch type other than a restoration patch, the following option can be used with any of the previous SET:PLRES options. An example is SET:PLRES,PLRN=233P624,TCN=100X027,MPTCH.

MPTCH — Specifies a maintenance patch.

To specify a certain direction other than both ways, one of the following options can be used with any of the previous SET:PLRES options. An example is SET:PLRES,PLRN=233P624,P,MPTCH,AZ.

AZ — Specifies direction A to Z.

ZA — Specifies direction Z to A.

To specify a patch line to be reserved between a pair of offices, the following option can be used with any of the previous SET:PLRES options. An example is SET:PLRES,PLRN=233P624,AZ,OFFPR=OKLDCA11 LFYTCA11.

OFFPR = xxx yyy — Reserve the patch line for the specified office pair; where xxx and yyy signify the office pair.

To specify that the patch line is reserved regardless of the telemetry indications, the following option can be used with any of the previous SET:PLRES options. An example is SET:PLRES,PLRN=233P624,P,UCL.

UCL — Unconditional; means to reserve a patch line or to update its status regardless of what the telemetry indications are.

2.40 UPD:PTCH — Update and verify patch status for a system trouble case.

Options available: The option =UP or =DN must always be used with this input message. Also, the three initials of the patcher must be supplied (eg, JSL). In the following options, the initials are represented by xxx . An example is UPD:PTCH=UP JSL.

=UP xxx — Indicates a restoration patch put up by xxx for current TC, if it verifies.

=DN xxx — Indicates a restoration patch taken down by xxx for current TC, if it verifies.
To specify a particular system, one of the following options can be used with any of the previous \texttt{UPD:PTCH} options. An example is \texttt{UPD:PTCH=UP JSL,TCN=100X027}.

- \texttt{P}—Indicates a patch for the system in the highest priority TC.
- \texttt{TCN=xxx}—Indicates a patch for the system in the specified TC; where \texttt{xxx} signifies the TC number.
- \texttt{SRN=xxx}—Indicates a patch for the system with the specified system reference number; where \texttt{xxx} signifies the system reference number.
- \texttt{SYSID=xxx}—Indicates a patch for the system with the specified system ID code; where \texttt{xxx} signifies the system ID.

To specify a patch type other than a restoration patch, the following option can be used with any of the previous \texttt{UPD:PTCH} options. An example is \texttt{UPD:PTCH=DN JSL,TCN=100X027,MPTCH}.

- \texttt{MPTCH}—Specifies a maintenance patch.

To specify that the patch line is reserved regardless of the telemetry indications, the following option can be used with any of the previous \texttt{UPD:PTCH} options. An example is \texttt{UP:PTCH=UP JSL,MPTCH,UCL}.

- \texttt{UCL}—Unconditional; means to reserve a patch line or to update its status regardless of what the telemetry indications are.

2.41 \texttt{CLR:PLRES}—Clear a patch line reservation.

Options available:

- \texttt{CLR:PLRES} (default condition)—Release all restoration patch lines reserved for the system in the current TC.
- \texttt{MPTCH}—Release all maintenance patch lines reserved for the system in the current TC.
- \texttt{PLRN=xxx}—Release the patch line, with the specified patch line reference number, for the system in the current TC; where \texttt{xxx} signifies the patch line reference number.
- \texttt{PLID=xxx}—Release the patch line, with the specified patch line ID code, for the system in the current TC; where \texttt{xxx} signifies the patch line ID.

To specify a particular trouble case or system, one of the following options can be used with any of the previous \texttt{CLR:PLRES} options. An example is \texttt{CLR:PLRES,PLRN=233P624,TCN=100X207}.

- \texttt{P}—Release the patch line for the system in the highest priority TC.
- \texttt{TCN=xxx}—Release the patch line for the system in the specified TC; where \texttt{xxx} signifies the TC number.
- \texttt{SRN=xxx}—Release the patch line for the system with the specified system reference number; where \texttt{xxx} signifies the system reference number.
- \texttt{SYSID=xxx}—Release the patch line for the system with the specified ID code; where \texttt{xxx} signifies the system ID.

2.42 \texttt{EXEC:PLTST}—Execute a patch line test.
Options available:

**EXEC:PLTST** (default condition)—Execute a test on the patch line in the current TC in the AZ direction at Z.

,PLRN=xxx—Execute a test on the patch line, with the specified patch line reference number, in the current TC in the AZ direction at Z; where xxx signifies the patch line reference number.

,PLID=xxx—Execute a test on the patch line, with the specified patch line ID code, in the current TC in the AZ direction at Z; where xxx signifies the patch line ID.

To specify the ZA direction, the following option can be used with any of the previous **EXEC:PLTST** options. An example is **EXEC:PLTST,PLRN=233P624,ZA**.

,ZA—Specifies the ZA direction at A.

To execute a patch line test at a specified office, the following option can be used with any of the previous **EXEC:PLTST** options. An example is **EXEC:PLTST,PLRN=233P624,ZA,OFFID=OKLDC11**.

,OFFID=xxx—Specifies the office ID code; where xxx signifies the office ID.

2.43 **EXEC:LM**—Execute line measurements.

Options available:

**EXEC:LM** (default condition)—Execute a 20-second line measurement at the sectionalization access points, both ways, in all offices with DLMs for the entity in the current TC.

,P—Execute a 20-second line measurement at the sectionalization access points, both ways, in all offices with DLMs for the entity in the highest priority TC.

,TCN=xxx—Execute a 20-second line measurement at the sectionalization access points, both ways, in all offices with DLMs for the entity in the specified TC; where xxx signifies the TC number.

,SRN=xxx—Execute a 20-second line measurement at the sectionalization access points, both ways, in all offices with DLMs for the system with the specified system reference number; where xxx signifies the system reference number.

,SYSD=xxx—Execute a 20-second line measurement at the sectionalization access points, both ways, in all offices with DLMs for the system with the specified system ID code; where xxx signifies the system ID.

To execute line measurements in a specified office only, the following option can be used with any of the previous **EXEC:LM** options. An example is **EXEC:LM,OFFID=OKLDC11**.

,OFFID=xxx—Execute line measurements in the specified office; where xxx signifies the office ID.

To specify a certain direction other than both ways, one of the following options can be used with any of the previous **EXEC:LM** options. An example is **EXEC:LM,OFFID=OKLDC11,AZ**.

,AZ—Specifies direction A to Z.

,ZA—Specifies direction Z to A.
To execute line measurements from a given set of access points, one of the following options can be used with any of the previous EXEC:LM options. An example is EXEC:LM,OFFID=OKLDC11,XCON.

,XIN—Specifies the access points XIN.

,XOUT— Specifies the access points XOUT.

,XCON— Specifies the access point XCON (both XIN and XOUT).

To specify a particular line measurement interval other than a 20-second measurement, one of the following options can be used with any of the previous EXEC:LM options. An example is EXEC:LM,OFFID=OKLDC11,ZA,MIN=3.0.

,1SEC—Execute a 1-second line measurement.

,MIN=xxx—Execute line measurement for the specified number of minutes; where xxx signifies the number of minutes.

2.44 OP:LM—Output line measurements.

Options available:

OP:LM (default condition)—Output, on the display screen, the most recent line measurements on the entity in the current TC.

,P—Output, on the display screen, the most recent line measurements on the entity in the highest priority TC.

,TCN=xxx—Output, on the display screen, the most recent line measurements on the entity in the specified TC; where xxx signifies the TC number.

,SRN=xxx—Output, on the display screen, the most recent line measurements on the system with the specified system reference number; where xxx signifies the system reference number.

,SYSID=xxx—Output, on the display screen, the most recent line measurements on the system with the specified system ID code; where xxx signifies the system ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:LM options. An example is OP:LM,TCN=100X027,CP.

,CP—Output on the printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.

See Fig. 46 for a sample output display.

2.45 OP:LINKHS—Output link history showing SCCS data port failures.

Options available: The option DAPORTID= must always be used with the basic input message.

,DAPORTID=xxx—Output, on the display screen, the history of SCCS data port failures; where xxx signifies the data port ID.
To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:LINKHS options. An example is OP:LINKHS,DAPORTID=2,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

See Fig. 47 for a sample output display.

2.46 UPD:MANOTG—Update the T1 System outage time for the preceding month for manual offices.

Options available: The options OFFID=, TOTSYS=, OTG1HR=, and TOTOTG= must always be used with this input message. An example is UPD:MANOTG,OFFID=OKLDCA11,TOTSYS=46,OTG1HR=14, TOTOTG=112.6 The meaning of the options is as follows:

,OFFID=xxx—Signifies the office ID; where xxx is the office ID.
,TOTSYS=yyy—Signifies the total numbers of systems involved, where yyy is the actual number of systems.
,OTG1HR=zzz—Signifies the total number of systems with over 1 hour outage time; where zzz is the actual number of systems.
,TOTOTG=aaa—Signifies the total number of outage hours; where aaa is the actual number of outage hours.

2.47 UPD:MANREG—Update the CGA register readings for the preceding week for manual offices.

Options available: The options OFFID=, REGS=, REGWCGA=, and TOTCGA= must always be used with this input message. An example is UPD:MANREG,OFFID=OKLDCA11,REGS=84,REGWCGA=14, TOTCGA=213. The meaning of the options is as follows:

,OFFID=xxx—Signifies the office ID; where xxx is the actual office ID.
,REGS=yyy—Signifies the total number of registers read, where yyy is the actual number of registers read.
,REGWCGA=zzz—Signifies the total number of registers with CGA counts; where zzz is the actual number of registers with CGAs.
,TOTCGA=aaa—Signifies the total number of CGA counts for the registers that were read; where aaa is the actual number of CGAs.

2.48 UPD:SYSSTAT—Update the status of an unmonitored T1 System.

Options available: The option ALM or CLR must always be used with this input message.

,ALM—Update the status of the unmonitored system in the current TC to show alarmed, now.
,CLR—Update the status of the monitored system in the current TC to show cleared, now.
To specify a trouble case other than the current trouble case, one of the following options can be used with any of the previous **UPD:SYSSTAT** options. An example is **UPD:SYSSTAT,ALM,P**.

- `P`—Specifies the highest priority TC.
- `TCN=xxx`—Specifies a particular TC; where `xxx` signifies the TC number.
- `SRN=xxx`—Specifies a particular system by its system reference number; where `xxx` signifies the system reference number.
- `SYSID=xxx`—Specifies a particular system by its ID code; where `xxx` signifies the system ID.

To select a certain date and time other than the current date and time, the following option can be used with any of the previous **UPD:SYSSTAT** options. An example is **UPD:SYSSTAT,ALM,P,DT=10-07-77 080000**.

- `DT=xxx yyy`—Specifies a particular date and time; where `xxx` and `yyy` signify the date and time, respectively.

### 2.49 UPD:TASCOTG—Update the T1 System outage time for the preceding week for the Telecommunications Alarm Surveillance and Control (TASC) System monitored offices.

Options available: The options `OFFID=`, `TOTSYS=`, `OTG1HR`, and `TOTOTG=` must always be used with this input message. An example is **UPD:TASCOTG,OFFID=OKLDCA11,TOTSYS=46,OTG1HR=14, TOTOTG=112.6**. The meaning of the options is as follows:

- `OFFID=xxx`—Signifies the office ID; where `xxx` is the office ID.
- `TOTSYS=yyy`—Signifies the total number of systems involved; where `yyy` is the actual number of systems.
- `OTG1HR=zzz`—Signifies the total number of systems with over 1 hour outage time; where `zzz` is the actual number of systems.
- `TOTOTG=aaa`—Signifies the total number of outage hours; where `aaa` is the actual number of outage hours.

### 2.50 UPD:TASCREG—Update the CGA register readings for the preceding week for the TASC monitored offices.

Options available: The options `OFFID=`, `REGS=`, `REGWCGA=`, and `TOTCGA=` must always be used with this input message. An example is **UPD:TASCREG,OFFID=OKLDCA11,REGS=84,REGWCGA=14, TOTCGA=213**. The meaning of the options is as follows:

- `OFFID=xxx`—Signifies the office ID; where `xxx` is the actual office ID.
- `REGS=yyy`—Signifies the total number of registers read; where `yyy` is the actual number of registers read.
- `REGWCGA=zzz`—Signifies the total number of registers with CGA counts; where `zzz` is the actual number of registers with CGAs.
- `TOTCGA=aaa`—Signifies the total number of CGA counts for the registers that were read; where `aaa` is the actual number of CGAs.
C. Data Base Control Input Messages

2.51 The following messages are used by the data base controller (DBC) and are entered from that CDT designated as the data base controller position. For more detailed information on the functions and procedures of the DBC, refer to Section 190-200-310.

2.52 SET:CONTR—Set controller for a terminal.

Options available: The option INTLS= must always be used with the input message.

SET:CONTR,INTLS=xxx (default condition)—Sign on to a CDT, as a maintenance controller; where xxx signifies your initials.

,INTLS=xxx,DBC—Sign on to a CDT as a data base controller; where xxx signifies your initials.

2.53 CLR:CONTR—Clear controller for a terminal.

Options available: None

2.54 INIT—Initialize an operator terminal.

Options available: None

2.55 OP—Output the next page of the multipage output on the CDT screen.

Options available: None

2.56 OP:DF—Output the next page of a system add mask with a derived facility span format.

Options available: None

2.57 STOP—Stop the output of a multipage display if one is in progress, or clear a data base mask on the CDT screen.

Options available: None

Note: The following data base control input messages (paragraphs 2.58 through 2.75) can also be entered from the CC.

2.58 OP:SCCASGN—Output SCCS scan point assignments.

Options available: The option SWMACHID= must always be used with this input message.

OP:SCCASGN,SWMACHID=xxx (default condition)—Output, on display screen, a list of the SCCS scan point assignments for the specified switching machine; where xxx signifies the switching machine ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:SCCASGN options. An example is OP:SCCASGN,SWMACHID=OKLDCA11 OKLDCA15,RP.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.
SECTION 190-200-101

,SP—Output on the status printer.

2.59 **OP:CS**—Output corporate structure.

Options available:

**OP:CS** (default condition)—Output, on display screen, the corporate structure.

,CP—Output, on printer associated with this terminal, the corporate structure.

,RP—Output, on reports printer, the corporate structure.

,SP—Output, on status printer, the corporate structure.

2.60 **OP:DBL**—Output data base list.

Options available: The option **CAID=**, **OFFID=**, **ALLCA**, or **ALLOFF** must always be used with this input message.

,CAID=xxx—Output, on display screen, a list of controlled systems for the specified cable; where xxx signifies the cable ID.

,ALLCA—Output, on display screen, a list of all cables in the TCAS data base.

,OFFID=xxx—Output, on display screen, a list of controlled systems for the specified office, where xxx signifies the office ID.

ALLOFF—Output, on display screen, a list of all offices in the TCAS data base.

To specify that cables or patch lines be listed rather than systems, one of the following options can be used with any of the previous **OP:DBL** options. An example is **OP:DBL,OFFID=OKLDC11,CA**.

,CA—Specifies cables only.

,PL—Specifies patch lines only.

To specify that all or terminating entities be listed rather than those entities that are controlled, one of the following options can be used with any of the previous **OP:DBL** options. An example is **OP:DBL,OFFID=OKLDC11,CA,TERMG**.

,TERMG—Specifies terminating entities only.

,ALL—Specifies all entities.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous **OP:DBL** options. An example is **OP:DBL,OFFID=OKLDC11,CA,TERMG,RP**.

,CP—Output on printer associated with this terminal.

,RP—Output on the reports printer.

,SP—Output on the status printer.
2.61 OP:EQPTINV—Output equipment inventory.

Options available: The OFFID= option must always be used, unless the ALL option is used.

OP:EQPTINV,OFFID=xxx—Output, on display screen, the inventory of T1 terminals in the specified office, where xxx signifies the office ID.

OP:EQPTINV,ALL—Output, on display screen, the inventory of T1 terminals in all offices.

To specify a certain type of equipment, the following option can be used with any of the previous OP:EQPTINV options. An example is OP:EQPTINV,OFFID=OKLDCA11,EQPT=11OR.

,EQPT=xxx—Specifies the equipment class (as in the example above), T1OR means T1 office repeaters; where xxx signifies the equipment class code (see following).

The following equipment class codes are used with the ,EQPT= option:

T1TERM T1 terminal
T1OR T1 office repeaters
T1PLR T1 patch line repeaters
T1SHLF T1 repeater shelf.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:EQPTINV options. An example is OP:EQPTINV,OFFID=OKLDCA11,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

2.62 OP:NPL—Output network portions list.

Options available:

OP:NPL (default condition)—Output, on display screen, the network portions list for this CDT.

,CDT=xxx—Output, on display screen, the network portions list for the specified CDT; where xxx signifies the CDT number.

,ALL—Output, on display screen, the network portions list for all CDTs.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:NPL options. An example is OP:NPL,CDT=4,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.
2.63 OP:SWASGN—Output switch assignments.

Options available: The option REMID= must always be used with this input message.

OP:SWASGN,REMID=xxx—Output, on display screen, the switch assignments for the specified remote; where xxx signifies the remote ID.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:SWASGN options. An example is OP:SWASGN,REMID=OKLDCA03E01,CP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

2.64 OP:TLMASGN—Output telemetry assignments.

Options available: The option REMID= or DISPUD= must always be used with this input message.

OP:TLMASGN,REMID=xxx—Output, on display screen, the telemetry assignments for the specified remote, where xxx signifies the remote ID.

OP:TLMASGN,DISPUD=xxx yy—Output, on display screen, the telemetry assignments for a specified remote and display, where xxx signifies the remote ID and yy signifies the display number.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:TLMASGN options. An example is OP:TLMASGN,DISPUD=OKLDCA03E01 8,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

2.65 OP:UNMONEQPT—Output unmonitored equipment.

Options available: The option OFFID= must always be used, unless the ALL option is used.

OP:UNMONEQPT,OFFID=xxx—Output, on display screen, the unmonitored T1 terminals in the specified office; where xxx signifies the office ID.

OP:UNMONEQPT,ALL—Output, on display screen, the unmonitored T1 terminals in all offices.

To specify a certain type of equipment, the following option can be used with any of the previous OP:UNMONEQPT options. An example is OP:UNMONEQPT,OFFID=OKLDCA11,EQPTCL=T1OR.

,EQPTCL=xxx— Specifies the equipment class (as in the example above), T1OR means T1 office repeaters; where xxx signifies class code (see following).

The following equipment class codes are used with the ,EQPTCL= option.

T1TERM T1 terminals
T1OR T1 office repeaters
TIPLR  T1 patch line repeaters
T1RSHLF  T1 repeater shelf.

To specify that the output be printed as hard copy, one of the following options can be used with any of the previous OP:UNMONEQPT options. An example is OP:UNMONEQPT,OFFID=OKLDA11,EQPTCL=T1OR,RP.

,CP—Output on printer associated with this terminal.
,RP—Output on the reports printer.
,SP—Output on the status printer.

2.66 IN:DATA—Input data.

Note: This input message has two distinct meanings. The meaning is dependent upon the terminal position from where the message is entered. If the message is entered from the CC position, additional information is requested by dialogue with the computer. Refer to Section 190-200-300.

Options available (if entered from the CC position):

IN:DATA (default condition)—Input data from the beginning of the magnetic tape.

,RCDID=xxx yyy—Input data starting with the specified block and record; where xxx signifies the block and yyy signifies the record. For example below, input data from block 38, record 14.

Example—IN:DATA,RCDID=38 14.

Options available (if entered from the DBC position):

IN:DATA (default condition)—Input data in an add or change mask into the working files.

,ERROR—Input data in an add mask into the errors file.

,CHGBUF—Input data in a change mask into the change buffer.

2.67 OP:DATAERR—Output data errors.

Note: The basic input message has two distinct meanings. The meaning is dependent upon the terminal where the message is entered. The message will automatically deal with errors entered from magnetic tape input if the message is entered from the CC, and the message will automatically deal with errors entered via the data base terminal if the message is entered from the data base terminal.

If entered from the CC position, the meaning is as follows:

OP:DATAERR (default condition)—Output, on the reports printer, the magnetic tape data errors detected since the last CLR:DATAERR (paragraph 2.68) was entered.

If entered from the DBC position, the meaning is as follows:

OP:DATAERR (default condition)—Output, on the CDT printer, the most recent input data errors.
The following options are common to both terminals.

Options available:

,NR—Output all nonreported input data errors.

,ERN=xxx—Output input data errors with the specified error reference number; where xxx signifies the error reference number.

,DISPL—Output all telemetry display assignment input data errors.

,BIT—Output all telemetry bit assignment input data errors.

,SGRP—Output all directed line monitor (DLM) subgroup input data errors.

,PT—Output all DLM switch point input data errors.

,RAUSHLF—Output all DLM repeater access unit shelf input data errors.

,OFF—Output all office input data errors.

,CA—Output all cable input data errors.

,ALIAS—Output all alias input data errors.

,REM—Output all remote input data errors.

,NPOFF—Output all network portion office assignment input data errors.

,TELCO—Output all TELCO input data errors.

,CSDEPT—Output corporate structure department input data errors.

,CSART—Output all corporate structure area/region/territory input data errors.

,CSDIV—Output all corporate structure division input data errors.

,CSDIST—Output all corporate structure district input data errors.

,CSSUBD—Output all corporate structure subdistrict input data errors.

,CSOFF—Output all corporate structure office input data errors.

,DAPORT—Output all data port input data errors.

,CMSSYS—Output all CMS monitored system flag input data errors.

,E2APORT—Output all E2A telemetry port input data errors.

,SWMACH—Output all switching machine input data errors.

,SNPT—Output all scan point input data errors.

,SYS—Output all system input data errors.
.PL—Output all patch line input data errors.

.ALL—Output all input data errors.

.ALLDBC—Output all input data errors for DBCs.

To specify the terminal position where the input data errors were entered, one of the following can be used with any of the previous OP:DATAERR options. An example is OP:DATAERR,NR,DBC.

.DBC—Data base controller position.

.CC—Computer control position.

To specify that the hard copy output be routed to one of the line printers, one of the following options can be used with any of the previous OP:DATAERR options. An example is OP:DATAERR,NR,DBC,RP.

.RP—Output on the reports printer.

.SP—Output on the status printer.

2.68 CLR:DATAERR—Clear data errors.

Note: The basic input message has two distinct meanings. The meaning is dependent upon the terminal where the message is entered. The message will automatically deal with errors entered from magnetic tape input if the message is entered from the CC, and the message will automatically deal with errors entered via the data base terminal if the message is entered from the data base terminal.

Options available (if entered, from the CC position):

CLR:DATAERR (default condition)—Clear all magnetic tape input data errors.

Options available (if entered from the DBC position):

CLR:DATAERR (default condition)—Clear all reported DBC input data errors.

.ERN=xxx—Clear DBC input data errors with the specified error reference number; where xxx signifies the error reference number.

Note: If the following input messages (paragraphs 2.69 and 2.70) are entered from the CC, the resulting output is automatically routed to the reports printer, unless the operator specifies that the output be routed to the status printer. If the messages are entered from a CDT, the resulting output is routed to the printer associated with that CDT, unless the operator specifies that the output be routed to one of the line printers.

2.69 OP:CHGLOG—Output change log.

Options available:

OP:CHGLOG (default condition)—Output the nonreported entries in the change log.

.ALL—Output all entries in the change log.
To specify that the hard copy output be routed to one of the line printers, one of the following options can be used with any of the previous OP:CHGLOG options. An example is OP:CHGLOG,ALL,SP.

\[\text{RP} - \text{Output on the reports printer.}\]
\[\text{SP} - \text{Output on the status printer.}\]

2.70 **OP:DLTLOG**—Output delete log.

Options available:

**OP:DLTLOG** (default condition)—Output the nonreported entries in the delete log.

\[\text{ALL} - \text{Output all entries in the delete log.}\]

To specify that the hard copy output be routed to one of the line printers, one of the following options can be used with any of the previous OP:DLTLOG options. An example is OP:DLTLOG,ALL,SP.

\[\text{RP} - \text{Output on the reports printer.}\]
\[\text{SP} - \text{Output on the status printer.}\]

2.71 **OP:CHGBUF**—Output contents of data base change buffer.

Options available:

**OP:CHGBUF** (default condition)—Output, on the printer associated with this terminal, the contents of data base change buffer.

\[\text{RP} - \text{Output, on reports printer, the contents of data base change buffer.}\]
\[\text{SP} - \text{Output, on status printer, the contents of data base change buffer.}\]

2.72 **EXEC:CHGBUF**—Execute data base changes in change buffer.

Options available:

**EXEC:CHGBUF** (default condition)—Execute immediately all data base changes in change buffer.

\[\text{CHGRCD} = \text{xxx} \text{ yyy} - \text{Execute immediately data base changes from the first change record specified to the last change record specified; where xxx signifies the first change record, and yyy signifies the last change record. For example following, execute data base changes from record 5 through record 10.}\]

To specify that the execution of data base changes takes place at some time other than immediately, the following option can be used with any of the previous EXEC:CHGBUF options. An example is EXEC:CHGBUF,CHGRCD=5 10,SCHED.

\[\text{SCHED} - \text{Execute data base changes at the preset task intervals.}\]

2.73 **CLR:CHGBUF**—Clear data base change buffer.

Options available: None
2.74 **SET:DBQT**—Set data base quiet time.

Options available: None

*Note:* Confirmation is requested through a dialogue with the computer.

2.75 **CLR:DBQT**—Clear data base quiet time.

Options available: None

2.76 **OP:ADDMASK**—Output a data base add mask.

Options available:

**OP:ADDMASK** (default condition)—Output a data base add mask for adding a T1 System.

\texttt{,ERN=xxx}—Output a data base add mask for adding corrected information from the errors file; where \texttt{xxx} signifies the error reference number.

*Note:* For the options \texttt{,DISPL} and \texttt{,BIT}, supplemental dialogue responses are required following the basic mask request.

\texttt{,DISPL}—Output a data base add mask for adding a telemetry display.

\texttt{,BIT}—Output a data base add mask for adding a telemetry bit assignment.

\texttt{,SGRP}—Output a data base add mask for adding a DLM subgroup.

\texttt{,PT}—Output a data base add mask for adding a DLM switch point.

\texttt{,RAUSHLF}—Output a data base add mask for adding a DLM repeater access unit shelf.

\texttt{,OFF}—Output a data base add mask for adding an office.

\texttt{,CA}—Output a data base add mask for adding a cable.

\texttt{,ALIAS}—Output a data base add mask for adding an alias.

\texttt{,REM}—Output a data base add mask for adding a remote.

\texttt{,NPOFF}—Output a data base add mask for adding the network portion assignments for an office.

\texttt{,TELCO}—Output a data base add mask for adding a telephone company.

\texttt{,CSDEPT}—Output a data base add mask for adding the corporate structure assignment for a department.

\texttt{,CSART}—Output a data base add mask for adding the corporate structure assignment for an area, region, or territory.

\texttt{,CSDIV}—Output a data base add mask for adding the corporate structure assignment for a division.

\texttt{,CSDIST}—Output a data base add mask for adding the corporate structure assignment for a district.
.CSSUBD—Output a data base add mask for adding the corporate structure assignment for a subdistrict.

.CSOFF—Output a data base add mask for adding the corporate structure assignment for an office.

.DAPORT—Output a data base add mask for assigning a computer data port.

.CMSSYS—Output a data base add mask for flagging a system as CMS monitored.

.E2APORT—Output a data base add mask for assigning switching machines to E2A data ports.

.SWMACH—Output a data base add mask for assigning switching machines to TCAS terminal offices.

.SNPTID=xxx—Output a data base add mask for assigning switching machine scan points, beginning with a block of 16 which includes the scan point specified by xxx.

.PL—Output a data base add mask for adding a patch line.

2.77 **OP:CHGMSK**—Output a data base change mask.

Options available (one of the following options must always be used with the basic OP:CHGMSK input message):

.DISPLID=xxx—Output a data base change mask for changing the assignment of the specified telemetry display; where xxx signifies the telemetry display ID.

.BITID=xxx—Output a data base change mask for changing the assignment of the specified telemetry bit; where xxx signifies the telemetry bit ID.

.SGRPIDD=xxx—Output a data base change mask for changing the assignment of the specified DLM subgroup; where xxx signifies the subgroup ID.

.PTID=xxx—Output a data base change mask for changing the assignment of the specified DLM switch point; where xxx signifies the switch point ID.

.RAUSHLFID=xxx—Output a data base change mask for changing the assignment of the specified DLM repeater access unit shelf; where xxx signifies the repeater access unit shelf ID.

.OFFID=xxx—Output a data base change mask for changing the specified office; where xxx signifies the office ID.

.CAID=xxx—Output a data base change mask for changing the specified cable; where xxx signifies the cable ID.

.ALIASID=xxx—Output a data base change mask for changing the specified alias; where xxx signifies the alias ID.

.REMID=xxx—Output a data base change mask for changing the assignment of the specified remote; where xxx signifies the remote ID.

.NPOFFID=xxx—Output a data base change mask for changing the network portion assignments for the specified office; where xxx signifies the office ID.
TELCOID=xxx—Output a data base change mask for changing the specified telephone company; where xxx signifies the telephone company ID.

,CSDEPTID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified department; where xxx signifies the department ID.

,CSARTID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified area, region, or territory; where xxx signifies the area, region, or territory ID.

,CSDIVID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified division; where xxx signifies the division ID.

,CSDISTID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified district; where xxx signifies the district ID.

,CSBLACKDID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified subdistrict; where xxx signifies the subdistrict ID.

,CSOFFID=xxx—Output a data base change mask for changing the corporate structure assignment of the specified office; where xxx signifies the office ID.

,DAPORTID=xxx—Output a data base change mask for changing the specified computer data port assignment; where xxx signifies the computer data port number.

,E2APORTID=xxx—Output a data base change mask for changing the specified E2A data port assignment; where xxx signifies the E2A data port ID.

,SWMACHID=xxx—Output a data base change mask for changing the specified switching machine assignment; where xxx signifies the switching machine ID.

,SNPTID=xxx—Output a data base change mask for changing the specified ESS scan point assignment; where xxx signifies the ESS scan point ID.

,SYSDID=xxx—Output a data base change mask for changing the specified system; where xxx signifies the system ID.

,PLID=xxx—Output a data base change mask for changing the specified patch line; where xxx signifies the patch line ID.

2.78 EXEC:DLT—Execute a delete.

Options available (one of the following options must always be used with the basic EXEC:DLT input message):

,DISPLID=xxx—Delete the assignment for the specified telemetry display; where xxx signifies the telemetry display ID.

,BITID=xxx—Delete the assignment for the specified telemetry bit; where xxx signifies the telemetry bit ID.

,SGRPID=xxx—Delete the assignment for the specified DLM subgroup; where xxx signifies the subgroup ID.
,PTID=xxx—Delete the assignment for the specified DLM switch point; where xxx signifies the switch point ID.

,RAUSHLFID=xxx—Delete the assignment for the specified DLM repeater access unit shelf; where xxx signifies the repeater access unit shelf ID.

,OFFID=xxx—Delete the specified office; where xxx signifies the office ID.

,CAID=xxx—Delete the specified cable; where xxx signifies the cable ID.

,ALIASID=xxx—Delete the specified alias; where xxx signifies the alias ID.

,REMID=xxx—Delete the assignment for the specified remote; where xxx signifies the remote ID.

,NPOFFID=xxx—Delete the network portion assignments for the specified office; where xxx signifies the office ID.

,TELCOID=xxx—Delete the specified telephone company; where xxx signifies the telephone company ID.

,CSDEPTID=xxx—Delete the corporate structure assignment for the specified department; where xxx signifies the department ID.

,CSARTID=xxx—Delete the corporate structure assignment for the specified area, region, or territory; where xxx signifies the area, region, or territory ID.

,CSDIVID=xxx—Delete the corporate structure assignment for the specified division; where xxx signifies the division ID.

,CSDISTID=xxx—Delete the corporate structure assignment for the specified district; where xxx signifies the district ID.

,CSSUBDID=xxx—Delete the corporate structure assignment for the specified subdistrict; where xxx signifies the subdistrict ID.

,CSOFFID=xxx—Delete the corporate structure assignment for the specified office; where xxx signifies the office ID.

,DAPORTID=xxx—Delete the specified computer data port assignment; where xxx signifies the computer data port number.

,E2APORTID=xxx—Delete the specified E2A data port assignment; where xxx signifies the E2A data port ID.

,SWMACHID=xxx—Delete the specified switching machine assignment; where xxx signifies the switching machine ID.

,SNPTID=xxx—Delete the specified ESS scan point assignment; where xxx signifies the ESS scan point ID.

,SYSID=xxx—Delete the specified system; where xxx signifies the system ID.

,PLID=xxx—Delete the specified patch line; where xxx signifies the patch line ID.
D. Computer Control Console Input Messages

2.79 The following messages are used by the computer control operator and are entered from the CC. For more detailed information on operations relating to the CC, refer to Section 190-200-300.

Note: Some of the MC and DBC input messages are common to the CC position and can be entered from the CC position. For maintenance control input messages that can be entered at the CC, refer to paragraphs 2.10 through 2.26. For data base control input messages that can also be entered at the CC, refer to paragraphs 2.58 through 2.75.

2.80 CFR:DISCIM—Configure magnetic tape for disc image dump.

Note: Additional information is requested through a dialogue with the computer.

Options available: None

2.81 EXEC:DISCIM—Execute dump of disc image to magnetic tape.

Option available:

EXEC:DISCIM (default condition)—Execute dump of disc image to magnetic tape.

,DISCPRTN=OPSYS—Execute dump of disc image, of operating system and programs only, to magnetic tape.

2.82 STOP:DISCIM—Stop dump of disc image to magnetic tape.

Options available: None

2.83 OP:MTCON—Output magnetic tape table of contents.

Options available: None

2.84 STOP:MTCON—Stop output of magnetic tape table of contents.

Options available: None

2.85 EXEC:DLMTST—Execute a DLM test.

Options available: The option REMID= must always be used with this input message.

EXEC:DLMTST,REMID=xxx—Execute a DLM test on the DLM for the remote with the specified remote ID code; where xxx signifies the remote ID.

2.86 OP:TLMSTAT—Output telemetry status.

Options available:

OP:TLMSTAT (default condition)—Output, on display screen, the status of all TCTs and remotes out of service.

,REMID=xxx—Output, on display screen, the status of the specified remote and its associated TCT; where xxx signifies the remote ID.
SECTION 190-200-101

,TCT=xxx—Output, on display screen, the status of the specified TCT and its associated remotes; where xxx signifies the TCT number.

,ALL—Output, on display screen, the status of all TCTs and remotes.

2.87 **OP: TLMERR**—Output telemetry errors.

Options available: None

2.88 **CFR:TCTTST**—Configure TCT test.

*Note:* Additional information is requested through a dialogue with the computer.

Options available: None

2.89 **EXEC:TCTTST**—Execute a TCT test.

Options available: None

2.90 **CFR:TLMTST**—Configure a telemetry test.

*Note:* Additional information is requested through a dialogue with the computer.

Options available: None

2.91 **EXEC:TLMTST**—Execute a telemetry test.

Options available: None

2.92 **RMV:UN**—Remove a unit from service.

Options available (one of the following options must always be used with the basic RMV:UN input message):

,TCT=xxx—Remove the specified TCT from service; where xxx signifies the TCT number.

,REMID=xxx—Remove the specified remote from service; where xxx signifies the remote ID.

2.93 **RST:UN**—Restore a unit to service.

Options available (one of the following options must always be used with the basic RST:UN input message):

,TCT=xxx—Restore the specified TCT to service; where xxx signifies the TCT number.

,REMID=xxx—Restore the specified remote to service; where xxx signifies the remote ID.

2.94 **SET:WKDIST**—Set work distribution options.

Options available:

**SET:WKDIST** (default condition)—Set least load and network portions options for all CDTs.

,**NOLL**—Set network portions only, no least load, for all CDTs.

Page 42
,NONP—Set least load only, no network portions, for all CDTs.

,NOLL,NONP—Set no network portions or least load for all CDTs; thus, all work is directed to CDT 1.

To specify a particular CDT, the following option can be used with any of the previous SET:WKDIST options. An example is SET:WKDIST,NOLL,CDT=4.

,CDT=xxx—Specifies a specific CDT terminal; where xxx signifies the CDT number.

2.95 UPD:PRMTR—Update parameters.

Note: Additional information is requested through a dialogue with the computer.

Options available: None

2.96 OP:PRMTR—Output parameters.

Options available: None

2.97 SET:AUTOACO—Set automatic alarm cutoff, for all offices where data base entries premit alarm cutoff.

Options available: None

2.98 CLR:AUTOACO—Clear automatic alarm cutoff.

Options available: None

2.99 DU:DBRCD—Dump data base records.

Note: Additional information is requested through a dialogue with the computer.

Options available:

DU:DBRCD (default condition)—Dump data base records in the office file by index range.

,FILE=xxx—Dump data base records in the specified file by index range; where xxx signifies the file name.

To specify a particular key type, one of the following options can be used with any of the previous DU:DBRCD options. An example is DU:DBRCD,FILE=SYSTEM,AKEY.

,ADDR=xxx—Dump data base records with the specified record address; where xxx signifies the record address.

,ALL—Dump all data base records in a particular file.

,OKEY—Dump data base records using an octal key.

,AKEY—Dump data base records using an ASCII key.

2.100 STOP:DBRCD—Stop dump of data base records.
Options available: None

2.101 **EXEC:CMSADT**—Execute data base audit on CMS office.

Options available: The option **OFFID=** must always be used with this input message.

**EXEC:CMSADT,OFFID=xxx** (default condition)—Execute a data base audit on CMS at the specific office; where xxx signifies the office ID.

2.102 **EXEC:CMSTST**—Execute test on CMS telemetry link.

Options available: The option **OFFID=** must always be used with this input message.

**EXEC:CMSTST,OFFID=xxx** (default condition)—Execute a test on the CMS telemetry link for the specified office; where xxx signifies the office ID.

2.103 **SW:LANG**—Switch CC language to RTE command language.

*Note:* This command is provided for debugging purposes only and will not be used during normal TCAS operations.

Options available: None

2.104 **CFR:LGTTP**—Configure log tape to receive data.

*Note:* Additional information is requested through a dialogue with the computer.

Options available: None

2.105 **STOP:LGTTP**—Stop output of data to log tape and terminate data base log tape operations.

Options available: None

2.106 **UPD:MONSYSTEM**—Update status of a monitored T1 System.

Options available: The options **ALM** or **CLR**, and **P**, or **TCN=**, **SRN=** or **SYSID=** must always be used with this input message. An example is **UPD:MONSYSTEM,CLR,TCN=100X027**. The meaning of the options is as follows:

- **ALM**—Update the status of the monitored system to show alarmed.
- **CLR**—Update the status of the monitored system to show clear.
- **P**—Update the status of the monitored system in the highest priority TC.
- **TCN=xxx**—Update the status of the monitored system in the specified TC; where xxx signifies the TC number.
- **SRN=xxx**—Update the status of the specified system; where xxx signifies the system reference number.
- **SYSID=xxx**—Update the status of the specified system; where xxx signifies the system ID.

2.107 **EXEC:TASK**—Execute a task from the list of schedulable tasks.
Options available: None, but this input message must always be inputted to the computer as follows:

\textbf{EXEC:TASK} = xxx—Execute the specified task; where xxx signifies the task number from the scheduled task list (refer to paragraph 3.40).

\textit{Note:} Confirmation is requested through a dialogue with the computer.

2.108 \textbf{STOP:DATA}—Stop the execution of data base input from magnetic tape.

Options available: None

3. \textbf{DISPLAYS AND REPORTS}

A. Introduction

3.01 The CDT displays are the primary work aids for the MC. The CDT displays include the status of an entity, failure information, any recent activity, location of the trouble, patching information, equipment locations, plus other facts to aid in restoring failed systems or patch lines.

3.02 Also, a variety of reports can be generated with TCAS to provide a clear picture of the performance of the metropolitan digital network. These reports include the following information:

- Failure frequency and duration statistics by control office for various levels of the administrative hierarchy
- Failure statistics for each span
- Maintenance and backbone line utilization
- Breakdown of troubles isolated to a span line, terminal, work activity, etc.

3.03 One report that is generated every 2 hours on the status printer is the Backup List of Currently Open Trouble Cases. This report permits initiation of manual operations in the event of a TCAS central failure by always having reasonably current information available.

3.04 The reports printer produces the various periodic reports; also, some demand reports are automatically outputted from a predetermined schedule, but may also be requested at any time.

3.05 If a printer is \textit{busy}, all other reports requests will be \textit{stacked} until the printer is free.

B. \textbf{Maintenance Controller Displays}

3.06 The viewing screen of the CDT is divided into three areas: work, summary, and display. The work and summary areas are always displayed (Fig. 1). The work area, upper portion of the screen, is where the input messages are typed in and displayed. Immediately to the right of the input message, the status of the request is displayed. The status of the computer and the number of E-telemetry data facilities and remotes that are down are also shown. The summary area, bottom portion of the screen, consists of four lines of information. The first line lists the identification of the current trouble case. The second line lists the same information for the highest priority active trouble case for this CDT. The third line lists the number of active and deferred trouble cases assigned to this CDT. The fourth line lists the number of active and deferred trouble cases for all CDTs. The display area is located in the center portion of the screen (Fig. 2 through 47). For clarity, the work and summary areas have been omitted on these figures. The display area shows various information contained in the data.
base and operating files of the computer. These displays, requested by input messages, contain status or layout information used by the MC to analyze troubles and coordinate restoration. In the upper right of each display, a page number is listed. For multipage displays, the next page is obtained by using the OP input message (paragraph 2.07).

3.07 The displays shown in Fig. 1 and Fig. 27 through 41 are dynamic and are updated as changes occur. The other displays are nondynamic and are not updated as changes occur. In Fig. 27 through 41 if the OP:TC or OP:ST input messages are used, the normally dynamic displays become nondynamic.
1. Most recent input messages. Latest message on bottom line.

2. Status of each input message: (SCHEDULED, IN PROGRESS, COMPLETE, PAGE COMPLETE, REJECTED, STOPPED). A message reference number may also appear here on errors and certain input functions. "PAGE COMPLETE" indicates a multipage report is being displayed. Input message OP will display the next page. "COMPLETE" appears when the final page is displayed.

3. Status of the computer: ACTIVE. Number of E telemetry data facilities and remote stations that are down. Appropriate status and identification messages appear here briefly when E facilities or remotes fail or restore.

4. Start location for cursor. The cursor must be in this position for ALL input messages.

5. Current trouble case (CTC). In this example the CTC is a T1 system. System ID System reference number Trouble case number Priority.

6. Priority trouble case. If there is a higher level TC it appears here. Span offices for cable Trouble case number Priority.

7. Summary of active and deferred trouble cases for this CDT.

8. Summary of active and deferred trouble cases for all CDT's.

These fields are always displayed.

Fig. 1—Work and Summary Areas
NOTE: This sample display lists the cables in a selected Tl system route which are involved in cable pattern trouble cases.

1. Typical input message for this sample display.
2. Present date and time.
3. System ID or pattern group number for the selected TC.
4. Associated trouble case numbers.
5. Rank of each cable in its trouble case (if the associated TC is a cable TC).
6. Entity, ID's. This sample follows the route of the selected system.

Fig. 2—Associated Higher Level Trouble Cases
Typical input message for this sample display.

Present date and time.

Selected office.

Equipment locations and identifications.

Fig. 3—T1 Terminal Equipment Locations
1. Typical input message for this sample display.

2. Present date and time.

3. Reporting interval. In this example the input message specified the last 12 hours. If no interval is supplied with the input message, the event history for the last 14 days is displayed.


5. History of events. Date, time, and event description.

6. CGA and outage information. Total number of CGA'S. Total CGA'S under 30 seconds [HITS]. Total outage time.

---

**Fig. 4—T1 System Event History**
1. Typical input message for this sample display.

2. Present date and time.

3. Trouble type and office pair for the most likely trouble span.

4. Date and time the first threshold was exceeded.

   Pattern group number
   Trouble case number.

5. Date and time each cable in pattern exceeded a threshold.

6. System information for each cable at the time a threshold was exceeded.

   Cable, number failed. This number is not updated. It remains the number of systems failed at the time the threshold was exceeded. Number monitored.

7. Because the systems in this span (LFYTCA11 WNCKCA11) had more failures, it was picked as the most likely trouble span. The cable (500 LFYTCA11 WNCKCA11) will appear as the first rank cable in the cable trouble case.

**Fig. 5—Trouble Pattern Event History**
1. Typical input message for this sample display.
2. Present date and time.
3. Reporting interval. In this example the input message specified for the last hour. If no interval is supplied with the input message, the event history for the last 14 days is displayed.
4. Patch line ID, control office, and trouble case number.
5. History of events. Date, time, and event description.

INPUT MESSAGES - OP:HS
OP (for next page of multipage output)

Fig. 6—T1 Patch Line Event History
1. Typical input message for this sample display. If the office pair option (OFFPR=) is not used, the layout of the terminal offices is displayed.

2. Present date and time.

3. Selected system ID and control office.

4. Direction of transmission

5. Bank (terminal) relay rack bay number and unit/shelf.

6. Repeater relay rack bay number, unit/shelf, position, and side.

7. DSX-1 or BTA bay number, unit/shelf, and position, if so equipped.

8. Assigned cable information.

9. The above information is supplied for the other direction (ELSBCA11 CNCRCA01).

Fig. 7—Layout of a T1 System
1 Typical input message for this sample display.
2 Present date and time.
3 Selected patch line ID and control office.
4 Direction of transmission.
5 Repeater relay rack bay number, unit/shelf, position, and side.
6 DSX-1 or BTA bay number, unit/shelf, and position, if so equipped.
7 Assigned cable information.
8 The above information is supplied for the other direction (WNCKCA11 CNRCRA01).

Fig. 8—Layout of a T1 Patch Line
1. Typical input message for this sample display.
2. Present date and time.
3. Offices that are assigned to the selected CDT.
4. Level of responsibility this CDT has for the listed offices - primary or secondary. The offices shown as secondary for this CDT will be treated as primary if their normally assigned CDT is out-of-service.
5. Number of TCAS monitored systems controlled by each office.
6. Number of span lines in this office that are assigned to TCAS monitored systems.

Fig. 9—Network Portions Assignments
1. Typical input message for this sample display.
2. Present date and time.
3. Selected entity-cable, system or patch line.
4. Trouble case number of selected entity, if one is opened.
5. List of notices.

/OP:NTCL, SYSID=102 CNCRCA01 FRMTCA11

09-28-76 23:33:18

ASSOCIATED NOTICES

ASSOCIATED NOTICE
CABLE 504 CNCRCA01 WNOKCA11 WILL BE OPENED 09/28/76
CABLE 501 WNOKCA11 CNCRCA01 IS UNDER REPAIR

Fig. 10—Associated Notices
1. Input message for this sample display.
2. Present date and time.
3. List of all posted notices.

Fig. 11—Summary of Notices
1. Typical input message for this sample display.
2. Present date and time.
3. Selected pattern group number and trouble case number.
4. Cable IDs for the cables in the selected pattern group.
5. Number of systems monitored in each cable.
6. Number of monitored systems failed in each cable. Last 20 minutes, current day, present time.
7. Trouble type of each cable—trouble in this cable (CATBL) or trouble not in this cable (CANTF).

```
/OP:PATT,TCN=100X182

09-28-76--23:42:00-------- CABLE LIST FOR PATTERN GROUP --------------PAGE 1--

PATTERN GROUP NUMBER: 100G087 TROUBLE CASE NUMBER: 100X182
-NO. FAILED SYSTEMS IN CABLE-

<table>
<thead>
<tr>
<th>CABLE IDENTIFICATION</th>
<th>MONITORED SYSTEMS</th>
<th>LAST 20 MINUTES</th>
<th>CURRENT DAY</th>
<th>PRESENT TIME</th>
<th>TROUBLE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>504 WNCKCA11 CNCRCA01</td>
<td>78</td>
<td>30</td>
<td>47</td>
<td>47</td>
<td>CATBL</td>
</tr>
<tr>
<td>1AR OKLDCA03 OKLDCA11</td>
<td>93</td>
<td>28</td>
<td>40</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>504 CNCRCA01 WNCKCA11</td>
<td>78</td>
<td>10</td>
<td>12</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>1AR OKLDCA11 PKLDCA03</td>
<td>93</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>510 ORNDCA11 OKLDCA11</td>
<td>81</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>CANTF</td>
</tr>
<tr>
<td>7365 SMLNCA11 HYWRCA01</td>
<td>8</td>
<td>2</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
```

INPUT MESSAGES - OP:PATT
OP(for next page of multipage output)

Fig. 12—Cable List for a Pattern Group
NOTE: This is a multipage report.
The second page would show
the patching information for
the other direction. (In this example - WNCKCA11 to CNCRCA01)

1. Typical input message for this sample display.
2. Present date and time.
3. ID of system to be patched.
4. Control office of system.
5. System repeater and DSX-1 locations in
given direction.
6. ID of selected patch line.
7. Patch line control office.
8. Patch line repeater and DSX-1 locations
in given direction.

Fig. 13—Patching Information
NOTE: This is a multipage display.
See Fig. 16 for the next page.

1. Typical input message for this sample display.
2. Present date and time.
3. Selected office.
4. Terminating offices.
5. Patch lines installed.
   Total lines presently in use.
6. Completed usages for the month.
   Completed usage means a line that has been reserved SET:PLRES, used
   UPD:PTCH, UP, released UPD:PTCH, DN, and cleared CLR:PLRES.
7. Average usage time of all completed-usage lines for the month.

Fig. 14—First Patch Line Summary Display
NOTE: This is the second page of a multipage display. See FIG. 15 for the first page.

1. Typical input message for this sample display.
2. Present date and time.
3. Selected office.
4. IDs of failed or in-use patch lines.
5. Office pair (span) of each line.
7. Length of time each line was reserved or failed.

Fig. 15—Second Patch Line Summary Display
NOTE: This is a multipage display. See Fig. 18 for the next page.

1. Typical input message for this sample display.
2. Present date and time.
3. System ID.
4. CGA and outage information for the current day.
   Total CGA'S
   Total CGA'S under 30 seconds [HITS]
   Total outage time.
5. Trouble case number.
7. Cable ID for the cables the selected system uses.
8. Number of system monitored in each cable.
9. Number of monitored systems failed in each cable.
   Last 20 minutes, current day, present time.
10. Number of trouble cases located to each cable during the current day.

**Fig. 16—First Display of Failure Statistics for a System and Route**
NOTE: This is the second page of a multipage display. See FIG. 17 for the first page.

1. Input message for this sample display.
2. Present date and time.
3. Patch lines which have been reserved for use with the selected system. In the case of a backbone, such as this example, each span of the backbone portion that was reserved is listed separately.
4. Office pairs for each patch line or backbone segment.
5. Type of patch - Restoration or Maintenance.
6. Status of patch - In use, up, down, or failed.

---

**Failure Statistics for T1 System and Route**

<table>
<thead>
<tr>
<th>Patch Line Identification</th>
<th>Transmit Office</th>
<th>Receive Office</th>
<th>Patch Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB1 T1U CNCRCA01 SNFCCA01</td>
<td>CNCRCA01</td>
<td>WNCKCA11</td>
<td>REST</td>
<td>UP</td>
</tr>
<tr>
<td>BB1 T1U CNCRCA01 SNFCCA01</td>
<td>WNCKCA11</td>
<td>CNCRCA01</td>
<td>REST</td>
<td>UP</td>
</tr>
<tr>
<td>BB1 T1U CNCRCA01 SNFCCA01</td>
<td>WNCKCA11</td>
<td>LFYTCA11</td>
<td>REST</td>
<td>UP</td>
</tr>
<tr>
<td>BB1 T1U CNCRCA01 SNFCCA01</td>
<td>LFYTCA11</td>
<td>WNCKCA11</td>
<td>REST</td>
<td>UP</td>
</tr>
</tbody>
</table>

**Input Messages**

OP:RS

OP (for next page of multipage output)

---

Fig. 17—Second Display of Failure Statistics for a System and Route
1. Typical input message for this sample display.
2. Present date and time.
3. Side-system IDs and system reference numbers.
4. Cable IDs for common spans along system route.
5. Assigned manhole repeater case.
6. Assigned socket (slot).

Fig. 18—Common Spans for Side Systems
Typical input message for this sample display.

Present date and time.

Status of all the T1 cables in the span route between two offices.

Identification of cables in span.

Number of systems monitored in each cable.

Number of monitored systems failed in each cable.

Last 20 minutes
Current day
At present time.

Trouble case numbers for cable pattern trouble cases. Individual system trouble cases are not listed here.

Fig. 19—Cable Statistics for Office Route
1. Typical input message for this sample display.
2. Present date and time.
3. Selected patch line.
4. Patch line trouble case number, if one is opened.
5. List of office pairs (spans) along the route of the patch line.
6. Maintenance line status indicator (MLSI) availability.
7. Usage status of each patch line segment - AVAIL (not in use), INUSE (reserved, but not yet in service), PITCHUP (currently in service on a system), PITCHDN (patch has been taken down but patch line has not been released).
8. Alarm status - BLANK (not monitored), CLEAR (monitored and clear), ALARM (monitored and either failed or on patch).
9. Current day failures and outage time.
10. Trouble case numbers of any system trouble cases for which the patch line segment was reserved.

Fig. 20—Patch Line Status and Statistics
1. Typical input message for this sample display.

2. Present date and time.

3. Control office and number of monitored systems controlled by that office.

4. Individual system identification.

5. Total number of CGA'S for each system. Total CGA'S under 30 seconds [HITS] for each system.

6. Trouble case number for each system.

7. Current status of each system.

8. Totals for the office.

Fig. 21—Current Day Failure Statistics for a Control Office
NOTE 1: This is a multipage display. See FIG. 24 for the next page.

1. Typical input message for this sample display. (See NOTE 2)
2. Present date and time.
3. Cable ID for the selected cable.
4. Number of systems monitored in this cable.
5. Number of monitored systems failed.
6. Last 20 minutes
   Current day
   At present time.
7. Number of trouble cases located to this cable.
8. Individual system identification and manhole repeater [Apparatus] case number.
9. Total number of CGA'S for each system
   Total CGA'S under 30 seconds [HITS] for each system
   Total outage time for each system.
10. Trouble case number, if applicable, and current priority of each system.

NOTE 2: This display shows failed systems only. To display the status of all monitored systems,
       input OP: SL, MOND.

Fig. 22—First Display of Current Day Failure Statistics for a Cable
NOTE: This is the second page of a multipage display. See FIG. 23 for the first page.

1. Input message for this sample display.
2. Present date and time.
3. Individual system ID and manhole repeater case numbers.
4. Total number of CGA'S for each system. Total CGA'S under 30 seconds [HITS] for each system. Total outage time for each system.
5. Trouble case number, if applicable, and priority of each system.

Fig. 23—Second Display of Current Day Failure Statistics for a Cable
Typical input message for this sample display.

1. Present date and time.
2. High-capacity facility system identification.
3. High-capacity facility system reference number.
4. Individual system IDs in the high-capacity facility.
5. Current status of each system.
6. Trouble case number for each system (if applicable).

Fig. 24—High-Capacity Facility System List
1. Typical input message for this sample display.
2. Present date and time.
3. Office, relay rack bay number, and shelf in current repeater shelf trouble case.
4. Position (slot), side (if unidirectional repeater operation), and system IDs for suspect shelf.
5. Individual system trouble case numbers.
6. Status of each system

```
<table>
<thead>
<tr>
<th>POS</th>
<th>SIDE</th>
<th>SYSTEM IDENTIFICATION</th>
<th>TBL CSE NO</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>2</td>
<td>D2 LFYICA11</td>
<td>104</td>
<td>D2 RMDC11</td>
</tr>
<tr>
<td>02</td>
<td>2</td>
<td>D1A QRMDC11</td>
<td></td>
<td>FAILED</td>
</tr>
<tr>
<td>03</td>
<td>2</td>
<td>D10 ELSCBA01</td>
<td>128</td>
<td>FAILED</td>
</tr>
<tr>
<td>04</td>
<td>2</td>
<td></td>
<td></td>
<td>PATCHED</td>
</tr>
</tbody>
</table>
```

**INPUT MESSAGES** - OP:SL (when a repeater shelf TC is the current trouble case)
OP (for next page of multipage output)

**Fig. 25—T1 Systems Per Repeater Bays Shelf**
Typical input message for this sample display.

Present date and time.

Selected system and selected span.

Office side-system information.
- Office: Relay rack bay number
  - Unit/shelf
  - Position and side.
- Side-system:
  - System reference number
  - The above information is also supplied for the other span office (WNCKCA11).

Span line side-system information.
- Cable:
  - Direction
  - Manhole repeater case
  - Socket and side.
- Side-system:
  - System reference number
  - The above information is also supplied for the other direction of transmission (WNCKCA11 CNCRCA01)

---

**Fig. 26—Paired Systems for System/Span**

```
/OP:SS, SRN=1155068
-11-01-76-00:03:06-------SIDE-SYSTEMS FOR PATCHING SYSTEM/SPAN-------PAGE 1-
SYSTEM: 101  D1  CNCRCA01  OKLDCA03  SPAN:  CNCRCA01  WNCKCA11
OFFICE REPEATER SIDE-SYSTEMS
OFFICE: CNCRCA01  RR BAY NO.: 297.44  UN/SHLF: 0001  POS: 003  SIDE: 1
SIDE-SYSTEM: 102  01  CNCRCA01  OKLDCA03  SRN= 103S540
OFFICE: WNCKCA11  RR BAY NO.: 118.33  UN/SHLF: 0005  POS: 003  SIDE: 2
SIDE-SYSTEM: 102  01  CNCRCA01  OKLDCA03  SRN= 103S540
SPAN LINE REPEATER SIDE-SYSTEMS
CABLE  502  CNCRCA01  WNCKCA11  RH RPTER CASE: 1  SCKT: 03  SIDE: 1
SIDE-SYSTEM: 102  D1  CNCRCA01  OKLDCA03  SRN= 103S540
CABLE  507  WNCKCA11  CNCRCA01  RH RPTER CASE: 2  SCKT: 03  SIDE: 2
SIDE-SYSTEM: 102  D1  CNCRCA01  OKLDCA03  SRN= 103S540
```
1. Typical input message for this sample display.
2. Present status of system.
3. TCAS monitored.
4. The date and time the trouble case was opened.
5. If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.
6. Outage time.
8. Total outage today. "*" indicates this field was over threshold and caused a TC to be opened.
9. CGA information.
   Average CGA count per hour.
   Total CGA count for today.
   Total, time, in minutes, caused by CGA hits today.
   Total CGA count for the week.
10. The number of possibly related pattern TCs.
11. Number of DLMs on system route, and whether a measurement is in progress or not.
12. System control office.
13. TCAS deduced fail direction and the office pair related to that direction.
14. Office(s) where alarm cutoff was sent.
15. Notice: Information that is manually posted against a cable, system or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.
16. Comment: Information that is manually posted against this TC by the IN:CNT input message. This comment remains in the system history.
17. ID of this system.

INPUT MESSAGES: MON:ST
     OP:ST (non-dynamic)

This display is similar to Fig. 38 except that inputting either of the above messages will not cause the requested entity to become the current trouble case (CTC).

Fig. 27—T1 System Status
1. Typical input message for this sample display.

2. Higher level pattern group number. If the systems in this TC also appears on a repeater shelf or cable pattern trouble case; that trouble pattern group number will appear here.

3. Date and time this TC was opened.

4. If this TC has been previously deferred, the date and time that the deferral will elapse is shown here.

5. Systems in this TC, system IDs, present status, and individual system TC numbers.

6. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

7. ID of this terminal bay trouble case.

---

**Fig. 28—T1 Terminal Bay Status**

INPUT MESSAGES - NON:ST
OP:ST (non-dynamic)

This display is similar to Fig. 40 except that inputting either of the above messages will not cause the requested entity to become the current trouble case (CTC).

Note: The display is only available if a terminal bay trouble case is open.
Typical input message for this sample display.

Higher level pattern group number. If the systems in this TC also appears on a terminal bay, repeater shelf, or cable pattern trouble case; that trouble pattern group number will appear here.

Date and time this TC was opened

If this TC has been previously deferred, the date and time that the deferral will elapse is shown here.

Systems being monitored. System IDs, direction of trouble, present status, and individual system TC numbers.

Common direction of both systems, common office pair (this could be end to end), and common office ID.

Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

ID of this side system pair.

This display is similar to Fig. 34 except that inputting either of the above messages will not cause the requested entity to become the current trouble case (CTC).

Note: This display is only available if a paired system trouble case is open.

Fig. 29—T1 Paired System Status
1. Typical input message for this sample display.
2. Number of suspect shelves in this TC.
3. The date and time the trouble case was opened.
4. If the TC has been previously deferred. The date and time that the deferral will elapse is shown here.
5. Office, bay, and shelf ID for one of the suspect shelves in this TC.
6. Indicates if fuse has failed in bay listed in (5).
7. Rank of this shelf in this TC. To display a different suspect shelf, use the input message `MON:TC,RK=` (desired rank).
8. Higher level pattern group number. If the systems in this TC also appear on a cable pattern trouble case, that trouble pattern group number will appear here.
9. Number of systems failed in the shelf listed in (6).
10. Total number of systems failures patterned to this trouble.
11. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.
12. ID of this repeater shelf trouble.

Fig. 30—T1 Repeater Shelf Status
1. Typical input message for this sample display.

2. Number of suspect high-capacity systems and/or cables in this TC.

3. The date and time the trouble case was opened.

4. If the TC has been previously deferred. The date and time that the deferral will elapse is shown here.

5. Cable and span identification.

6. The rank this cable has in this TC. The most suspect cable is rank 1.

7. Information on the systems in the high-capacity system and/or cable. Number failed now. Number failed recently (last 20 minutes). Number failed today. Total number in high-capacity system and/or cable. Total number monitored by TCAS. "*" indicates this field was over threshold and caused a TC to be opened.

8. Span control office.

9. Notice: Information that is manually posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.

10. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

11. ID of this cable trouble.

**Fig. 31—T1 Cable Status**

**INPUT MESSAGES:**
- **MON:**ST
- **OP:**ST (non-dynamic)
- **NP:**ST

This display is similar to Fig. 35 except that inputting either of the above messages will not cause the requested entity to become the current trouble case (CTC).
1. Typical input message for this sample display.

2. Patch line class. Either backbone (B) or maintenance line (M).

3. The date and time the trouble case was opened.

4. If the TC has been previously deferred. The date and time that the deferral will elapse is shown here.

5. Total outage time today in each direction.

6. Total failures today in each direction.

7. Status of patch line in each direction.

8. Number of possibly related pattern TCs.

9. Patch line control office.

10. Notice: Information that is posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.

11. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the patch line history.

12. ID of this patch line trouble.

**Fig. 32—T1 Patch Line Status**

This display is similar to Fig. 37 except that inputting either of the above messages will not cause the requested entity to become the current trouble case (CTC).
Typical input message for this sample display.

2 Present status of system

3 The date and time the trouble case was opened.

4 If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.

5 Digital signal level.

6 Pattern group number.

7 Outage information. Number of system currently failed. Current outage time. Total outage today.

8 Number of high-capacity systems and/or cables in this trouble case.

9 Number of systems monitored by TCAS.

10 System control office.

11 Notice: Information that is posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.

12 Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the system history.

13 ID of this system.

Fig. 33—High-Capacity System Status
Typical input message for this sample display.

Higher level pattern group number. If the systems in this TC also appear on a terminal bay, repeater shelf, or cable pattern trouble case; that trouble pattern group number will appear here.

Date and time this TC was opened.

If this TC was previously deferred, the date and time that the deferral will expire is shown here.

Systems in this TC. System IDs, direction of trouble, present status, and individual system TC numbers.

Common direction of both systems, common office pair (this could be end to end) and common office ID.

Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the paired system history.

Sectionalization information manually posted by the UPD:SCTN input message.

Trouble type information manually posted by the UPD:TI,TT input message.

Most recent action that was manually posted by the UPD:AC input message.

Computer display terminal to which this TC is assigned.

ID of this trouble case.

Fig. 34—T1 Paired System Trouble Case
Typical input message for this sample display.

Number of suspect high-capacity systems and/or cables in this TC.

The date and time the trouble case was opened.

If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.

System ID.

Digital signal level.

Information on systems in the high-capacity system.
Number failed now.
Total number in high-capacity system and/or cable.
Total number monitored by TCAS.
"***" Indicates this field was over threshold and caused a TC to be opened.

The rank this high-capacity system has in the TC. The most suspect high-capacity system is rank 1.

Span control office.

Notice: Information that is posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.

Comment: Information that is manually posted against this TC by the IN:CNT input message. This comment remains in the pattern group history.

Trouble type information manually posted by the UPD:TT,TF input message.

Most recent action that was manually posted by the UPD:AC input message.

Computer display terminal to which this TC is assigned.

ID of this patch line trouble.

Fig. 36—High-Capacity Pattern Trouble Case (Systems)
Typical input message for this sample display.

Number of suspect high-capacity systems and/or cables in this TC.

The date and time the trouble case was opened.

If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.

Cable and span identification.

The rank this cable has in this TC. The most suspect cable is rank 1.

Information on systems in cable.
Number failed now.
Number failed recently (last 20 minutes).
Number failed today.
Total number in high-capacity system and/or cable.
Total number monitored by TCAS.
"**" Indicates this field was over threshold and caused a TC to be opened.

Span control office.

Notice: Information that is posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.

Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

Trouble type information manually posted by the UPD:TI,TT* input message.

Most recent action that was manually posted by the UPD:AC input message.

Computer display terminal to which this TC is assigned.

ID of this trouble case.

![Diagram](image)

Fig. 35—High-Capacity Pattern Trouble Case (Cables)
1. Typical input message for this sample display.
2. Patch line class. Either backbone (B) or maintenance line (M).
3. The date and time the trouble case was opened.
4. If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.
5. Total outage time today in each direction.
6. Total failures today in each direction.
7. Status of patch line in each direction.
8. Number of possibly related pattern TC's.
9. Patch line control office.
10. Notice: Information that is manually posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.
11. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.
12. Sectionalize information manually posted by the UPD:SCTN input message.
13. Trouble type information manually posted by the UPD:TI,TT= input message.
14. Most recent action that was manually posted by the UPD:AC input message.
15. Computer display terminal to which this TC is assigned.
16. ID of this trouble case.

Fig. 37—T1 Patch Line Trouble Case
Fig. 38—T1 or T1C System Trouble Case
1. Typical input message for this sample display.
2. Present status of system.
3. The date and time the trouble case was opened.
4. If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.
5. Digital signal level.
6. Pattern group number.
8. Total number of systems in high-capacity system TC and the number of systems monitored by TCAS.
10. Notice: Information that is posted against a cable, system, or patch line by the IN:NTC input message. It remains posted until cleared by the CLR:NTC message.
11. Comment: Information that is manually posted against this TC by the IN:CAT input message. This comment remains in the system history.
12. Restoration and Span patch line information. Shows lines verified UP and DOWN by the computer after the UPD:PTCH input message is used.
13. Sectionalization information manually posted by the UPD:SCTN input message.
14. Trouble type information manually posted by the UPD:TI,TT= input message.
15. Most recent action that was manually posted by the UPD:AC input message.
16. Computer display terminal to which this TC is assigned
17. ID of this trouble case.

Fig. 39—High-Capacity System Trouble Case
1. Typical input message for this sample display.

2. Higher level pattern group number. If the systems in this TC also appear on a repeater shelf or cable pattern trouble case, that trouble pattern group number will appear here.

3. Date and time this TC was opened.

4. If this TC was previously deferred, the date and time that the deferral will elapse is shown here.

5. Systems in this TC. System IDs, present status, and individual system TC numbers.

6. Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

7. Trouble type information manually posted by the UPD:TI,TT= input message.

8. Most recent action that was manually posted by the UPD:AC input message.

9. Computer display terminal to which this TC is assigned.

10. ID of this trouble case.

---

**Fig. 40—Terminal Bay Trouble Case**

Inputting any of the above messages will cause the requested entity to become the current trouble case (CTC).
Typical input message for this sample display.

Number of suspect cables in this TC

Data and time this TC was opened.

If the TC has been previously deferred, the date and time that the deferral will elapse is shown here.

Office, bay, and shelf ID for one of the suspect shelves in this TC.

Indicates if fuse has failed in bay listed in (5).

Rank of this shelf in this TC. To display a different suspect shelf, use the input message MON: TC, RK = (desired rank).

Higher level pattern group number. If the systems in this TC also appear on a cable pattern trouble case, that trouble pattern group number will appear here.

Number of systems failed in the shelf listed in (3).

Total number of system failures patterned to this trouble.

Comment: Information that is manually posted against this TC by the IN:CMT input message. This comment remains in the pattern group history.

Trouble type information manually posted by the UPD:TI, TT = input message.

Most recent action that was manually posted by the UPD:AC input message.

Computer display terminal to which this TC is assigned.

ID of this trouble case.

Fig. 41—T1 Repeater Shelf Trouble Case
1. Typical input message for this sample display.
2. Present date and time.
3. TCN-trouble case number of each entity.
4. Priority of trouble case.
5. First ranked entity ID.
6. Date and time that the TC was opened.
7. "**" indicates the current trouble case (CTC) for this CDT.
8. The deferred trouble case list will be outputted on a separate page. For the sake of simplicity, it is shown here on the same page. To obtain the second page, it is necessary to use the OP input message.
9. Date and time the deferral of the TC elapses.

---

<table>
<thead>
<tr>
<th>TCN</th>
<th>PRIORITY</th>
<th>ENTITY IDENTIFICATION</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>100X203</td>
<td>40</td>
<td>OKLCA22 WNKC57</td>
<td>09-08-76</td>
<td>16:31:24</td>
</tr>
<tr>
<td>100X182</td>
<td>40</td>
<td>SNSCA02 WNKC01</td>
<td>09-08-76</td>
<td>16:31:18</td>
</tr>
<tr>
<td>100X166</td>
<td>40</td>
<td>LFYCA01 SNFCA11</td>
<td>09-08-76</td>
<td>16:31:12</td>
</tr>
<tr>
<td>100X158</td>
<td>40</td>
<td>OKLCA01 WNKC11</td>
<td>09-08-76</td>
<td>16:31:12</td>
</tr>
<tr>
<td>100X123</td>
<td>40</td>
<td>CNRCA01 CNRCL02</td>
<td>09-08-76</td>
<td>16:31:08</td>
</tr>
<tr>
<td>100X101</td>
<td>40</td>
<td>ABCDEFG01 FEDCBA01</td>
<td>09-08-76</td>
<td>16:30:54</td>
</tr>
<tr>
<td>100X086</td>
<td>40</td>
<td>LFYTCA01 WNKC01</td>
<td>09-08-76</td>
<td>16:30:54</td>
</tr>
<tr>
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<td>24</td>
<td>SHELFC01 WNKC11</td>
<td>09-08-76</td>
<td>16:30:54</td>
</tr>
<tr>
<td>100X078</td>
<td>24</td>
<td>OKLCA01 OKLCA03 1204.01</td>
<td>09-08-76</td>
<td>16:30:42</td>
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</tbody>
</table>

---

*100X027 | 18       | CABLE ROUTE LFYTC01 WNKC11   | 09-08-76   | 16:28:06   |

---

<table>
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<th>PRIORITY</th>
<th>ENTITY IDENTIFICATION</th>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>101X118</td>
<td>40</td>
<td>HXWCA01 OKLCA03</td>
<td>09-09-76</td>
<td>09:37:06</td>
</tr>
<tr>
<td>101X009</td>
<td>40</td>
<td>SMFCA01 MFSCT12</td>
<td>09-09-76</td>
<td>09:37:00</td>
</tr>
</tbody>
</table>

---

**INPUT MESSAGES** OP:TCL
OP (For next page of multipage output)

---

Fig. 42—Trouble Case List for a Selected CDT
1. Typical input message for this sample display.
2. Present date and time.
3. Selected remote.
4. Telemetry assignments for the selected display.
5. For systems - the bay and unit number of the D-bank.
   For patch lines - the bay, shelf, position, and side of the repeater.
6. ID of each system or patch line.

```
/OP:TLMASGN,DISPLID=ORNDC11 7

06-13-76--13:04:42------T1 SYSTEM/PATCH LINE TELEMETRY ASSIGNMENTS------PAGE 1--
TELEMETRY REMOTE IDENTIFICATION: ORNDCA11

<table>
<thead>
<tr>
<th>E-TELEMETRY</th>
<th>UNIT/IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISPL WORD BIT</td>
<td>RR BAY NO SHELF POS SD</td>
</tr>
<tr>
<td>7 1 1</td>
<td>113.08 1</td>
</tr>
<tr>
<td>7 1 2</td>
<td>113.08 2</td>
</tr>
<tr>
<td>7 1 3</td>
<td>113.08 3</td>
</tr>
<tr>
<td>7 1 4</td>
<td>113.10 1</td>
</tr>
<tr>
<td>7 1 5</td>
<td>113.10 2</td>
</tr>
<tr>
<td>7 1 6</td>
<td>113.10 3</td>
</tr>
<tr>
<td>7 1 7</td>
<td>113.12 1</td>
</tr>
<tr>
<td>7 1 8</td>
<td>113.12 2</td>
</tr>
<tr>
<td>7 1 9</td>
<td>113.12 3</td>
</tr>
<tr>
<td>7 1 10</td>
<td>113.12 4</td>
</tr>
</tbody>
</table>

INPUT MESSAGES - OP:TLMASGN
OP (for next page of multipage output)
```

Fig. 43—T1 System and Patch Line Telemetry Assignments
1 Typical input message for this sample display.
2 Present date and time.
3 Selected office.
4 Unmonitored system IDs.
5 Location of each system in the selected office.

Fig. 44—Unmonitored T1 System Terminals
Typical input message for this sample display.

Present date and time.

Office A patch line office repeater locations.

Directions available for use (AZ, ZA, BW);
Status of line (Reserved, Eailed, Up or Down)
Class (Backbone, Maintenance).
Patch line reference number.

Office Z patch line office repeater locations.

Fig. 45—Patch Line List
1. Typical input message for this sample display.
2. Present date and time.
3. ID of system under test.
4. Deduced failure direction.
5. Offices where the system was accessed for test.
6. Direction of test.
7. Access point of test, (XIN, XOUT, or XCON).
8. Number of bipolar violations or absence violations (Events).
9. Number of error seconds.
10. Interval of test.
11. Signal disposition — Abnormal Condition, Absence Violations, All ones, or Quasi-Random Signal Source

```
/OP:LM, SYSID=015 D10 CNCRCA01 OKLDA03
10-15-76--11:14:36-------DLM MEASUREMENT RESULTS-----------------------------PAGE 1-
SYSTEM ID: 105 D10 CNCRCA01 OKLDA03
OFFICE ID DIRN ACCESS EVENTS ERR SEC INTVL AC ABV ALL 1'S QRSS
CNCRCA01 AZ XOUT ***** 20 20 SEC *
CNCRCA01 ZA XIN ***** 20 20 SEC *
```

**Fig. 46—DLM Measurement Results**
Typical input message for this sample display.

Present date and time.

Data port number and office ID.

History of events.
  Date, time, and event description.

Fig. 47—SCCS Data Port Failures
C. Data Base Reports

3.08 The data base reports are intended to aid the TCAS-equipped TRCC (hereon referred to as just TRCC) in examining the T-carrier network information stored in the TCAS data base. These reports serve two purposes. First, they enable the operating company to verify the information stored in the data base. Second, they enable the operating company to automatically summarize information on the layout of the T-carrier network.

3.09 Corporate Structure: Basic input message—OP:CS. This report displays the entire administrative corporate structure as defined by the TRCC. This structure is used to organize the TCAS administrative reports which summarize network failures and craft activity. The heading on each page is entitled DEPARTMENT, AREA/REGION/TERRITORY, and DIVISION. The subheadings are listed as DISTRICT, SUBDISTRICT, and OFFICE, each of which is in the DIVISION. The position of this information on the page indicates the location of each organization in the administrative hierarchy.
### Corporate Structure for TCAS Network

**Department:** PLT  
**Area:** HO  
**Division:** SW

<table>
<thead>
<tr>
<th><strong>District</strong></th>
<th><strong>Sub-District</strong></th>
<th><strong>Office</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>EAST</td>
<td>EAST-05</td>
<td>HSTNTXOR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXRE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXBW</td>
</tr>
<tr>
<td></td>
<td>EAST-02</td>
<td>HSTNTXDP</td>
</tr>
<tr>
<td></td>
<td>EAST-03</td>
<td>HSTNTXPE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXSE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXPR</td>
</tr>
<tr>
<td></td>
<td>EAST-04</td>
<td>HSTNTXGR</td>
</tr>
<tr>
<td></td>
<td>EAST-01</td>
<td>HSTNTXWA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXMI</td>
</tr>
<tr>
<td>WEST</td>
<td>WEST-01</td>
<td>HSTNTXMO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXPR</td>
</tr>
<tr>
<td></td>
<td>WEST-02</td>
<td>HSTNTXHO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXFA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HSTNTXWR</td>
</tr>
<tr>
<td></td>
<td>WEST-03</td>
<td>HSTNTXNA</td>
</tr>
<tr>
<td></td>
<td>WEST-04</td>
<td>HSTNTXOV</td>
</tr>
<tr>
<td>CENTRAL</td>
<td>CENTRAL-02</td>
<td>HSTNTXCL</td>
</tr>
<tr>
<td></td>
<td>CENTRAL-01</td>
<td>HSTNTXCA</td>
</tr>
</tbody>
</table>

### 3.10 Office List:

Basic input messages—**OP;DBL,ALLOFF**. This report lists each office in the TCAS database alphabetically and designates the parameters which have been applied to the office by the TRCC. The parameters specified are as follows:

- **FOREIGN OFFICE FLAG**
- **REPORT—DAILY FLAG**
- **REPORT—WEEKLY FLAG**
• REPORT—MONTHLY FLAG
• REPORT—QUARTERLY FLAG
• ACO—PERMITTED FLAG.

9-30-77 11:05:12
OFFICE IDENTIFICATION REPORT

<table>
<thead>
<tr>
<th>OFFICE IDENTIFICATION</th>
<th>FOREIGN OFFICE FLAG</th>
<th>REPORT INTERVAL FLAGS</th>
<th>ACO PM'T'D FLAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXMI</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>HSTNTXMO</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>HSTNTXNA</td>
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<td>Y</td>
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<tr>
<td>HSTNTXNE</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>HSTNTXOR</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>HSTNTXOV</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

END OF REPORT

3.11 Cable List: Basic input message—OP:DBL,ALLCA. This report lists each cable in the TCAS data base alphabetically (by transmit office and receive office). The report specifies the control office and span designation for each cable.

9-30-77 11:08:00
CABLE IDENTIFICATION REPORT

<table>
<thead>
<tr>
<th>TRMT OFF ID</th>
<th>RCVG OFF ID</th>
<th>CA DESIG</th>
<th>CONT OFF ID</th>
<th>SPN DESIG</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXJA</td>
<td>HSTNTXMC</td>
<td>322</td>
<td>HSTNTXJA</td>
<td>5048</td>
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<td>HSTNTXJA</td>
<td>HSTNTXMO</td>
<td>112</td>
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<td>HSTNTXJA</td>
<td>HSTNTXMO</td>
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<tr>
<td>HSTNTXJA</td>
<td>HSTNTXMO</td>
<td>89</td>
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<td>5054</td>
</tr>
<tr>
<td>HSTNTXJA</td>
<td>HSTNTXNA</td>
<td>298</td>
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<td>5054</td>
</tr>
<tr>
<td>HSTNTXJA</td>
<td>HSTNTXNA</td>
<td>273</td>
<td>HSTNTXJA</td>
<td>5056</td>
</tr>
</tbody>
</table>

3.12 Controlled Systems List: Basic input message—OP:DBL,OFFID=xxx (xxx signifies the office ID). This report lists each T1 System controlled by the specified office. The office is identified in the heading on each page. Also specified for each system is the number of monitored terminal banks (0, 1, or 2).
CONTROLLED SYSTEMS LIST
FOR OFFICE: HSTNTXCA

<table>
<thead>
<tr>
<th>SYSTEM IDENTIFICATION</th>
<th>MONITORED TERMINALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>117 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
<tr>
<td>116 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
<tr>
<td>115 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
<tr>
<td>114 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
<tr>
<td>113 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
<tr>
<td>111 D3 HSTNTXCA HSTNTXRE</td>
<td>2</td>
</tr>
</tbody>
</table>

3.13 **Terminating Systems List:** Basic input message—**OP:DBL,OFFID=xxx,TERMG** (xxx signifies the office ID). This report lists each T1 System which terminates in the specified office. The office is identified in the heading on each page. For each system, the type of monitoring is also given and will be one of the following:

- NONE for no monitor
- E2 for E-telemetry monitoring
- CMS for CMS monitoring via No. 4 ESS.
- SCCS for SCCS monitoring via No. 2 SCCS.

9-30-77 11:19:42

TERMINATING SYSTEMS LIST
FOR OFFICE: HSTNTXCA

<table>
<thead>
<tr>
<th>SYSTEM IDENTIFICATION</th>
<th>MONITOR TYPE</th>
</tr>
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<tbody>
<tr>
<td>103 D3 HSTNTXBW HSTNTXCA</td>
<td>CMS</td>
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<tr>
<td>102 D3 HSTNTXBW HSTNTXCA</td>
<td>CMS</td>
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<td>101 D3 HSTNTXBW HSTNTXCA</td>
<td>CMS</td>
</tr>
<tr>
<td>108 D1A HSTNTXBU HSTNTXCA</td>
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<td>CMS</td>
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<tr>
<td>106 D1A HSTNTXBU HSTNTXCA</td>
<td>CMS</td>
</tr>
</tbody>
</table>

3.14 **Controlled Patch Line List:** Basic input message—**OP:DBL,OFFID=xxx,PL** (xxx signifies the office ID). This report lists each T1 patch line controlled by the specified office. The office is identified in the heading.
3.15 **Controlled Cables List:** Basic input message—\texttt{OP=DBL,OFFID=xxx,CA} (xxx signifies the office ID). This report lists each T1 cable controlled by the specified office. The office is identified in the heading.

3.16 **Terminating Cables List:** Basic input message—\texttt{OP=DBL,OFFID=xxx,CA,TERMG} (xxx signifies the office ID). This report lists each cable terminating in the specified office. The office is identified in the heading.
TERMINATING CABLES LIST
FOR OFFICE: HSTNTXCA

CABLE IDENTIFICATION

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
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<td>HSTNTX01</td>
</tr>
<tr>
<td>26</td>
<td>HSTNTXCA</td>
<td>HSTNTXWA</td>
</tr>
</tbody>
</table>

END OF REPORT

3.17 Cable Cross Section (systems): Basic input message—OP:DBL,CAID=xxx (xxx signifies the cable ID). This report lists each T1 System which is in the specified cable. The cable is identified in the heading.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>D1B</td>
<td>HSTNTXUN</td>
</tr>
<tr>
<td>108</td>
<td>D1A</td>
<td>HSTNTXSA</td>
</tr>
<tr>
<td>102</td>
<td>D1A</td>
<td>HSTNTXPE</td>
</tr>
<tr>
<td>118</td>
<td>D1A</td>
<td>HSTNTXOV</td>
</tr>
<tr>
<td>117</td>
<td>D3D1D</td>
<td>HSTNTXOV</td>
</tr>
<tr>
<td>116</td>
<td>D3D1D</td>
<td>HSTNTXOV</td>
</tr>
</tbody>
</table>

Note: For multisegment patch lines, such as backbones, the terminal offices of the patch line need not be the same as the terminal offices of the cable.

3.18 Cable Cross Section (patch lines): Basic input message—OP:DBL,CAID=xxx,PL (xxx signifies the cable ID). This report lists each T1 patch line which is in the specified cable. The cable is identified in the heading.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>802B</td>
<td>BSPAREHSTNTXMI</td>
<td>HSTNTXUN</td>
</tr>
<tr>
<td>801B</td>
<td>BSPAREHSTNTXMI</td>
<td>HSTNTXUN</td>
</tr>
<tr>
<td>301M</td>
<td>MSPAREHSTNTXOA</td>
<td>HSTNTXUN</td>
</tr>
</tbody>
</table>

END OF REPORT
3.19 Equipment Inventory (by office): Basic input message—OP:EQPTINV,OFFID=xxx (xxx signifies the office ID). This equipment inventory lists all the T1 System terminals in a specified office (or in all offices; refer to paragraph 2.61). The terminal bay number and unit/shelf are identified. The T1 System which uses the terminal is also identified.

<table>
<thead>
<tr>
<th>BANK</th>
<th>RR</th>
<th>BAY NO</th>
<th>UN/SHLF</th>
<th>FOR OFFICE:</th>
<th>OKLDCA03 SYSTEM IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1400.11</td>
<td>205</td>
<td>105</td>
<td>T1</td>
<td>ELSBCA11</td>
<td>OKLDCA03</td>
</tr>
<tr>
<td>1400.11</td>
<td>207</td>
<td>101</td>
<td>T1</td>
<td>BRLNCA01</td>
<td>OKLDCA03</td>
</tr>
<tr>
<td>1400.11</td>
<td>0206</td>
<td>101</td>
<td>T1</td>
<td>OKLDCA03</td>
<td>SNVACA01</td>
</tr>
<tr>
<td>1400.12</td>
<td>210</td>
<td>106</td>
<td>T1</td>
<td>ELSBCA11</td>
<td>OKLDCA03</td>
</tr>
<tr>
<td>1400.12</td>
<td>0208</td>
<td>101</td>
<td>T1</td>
<td>MTVWCA11</td>
<td>OKLDCA03</td>
</tr>
<tr>
<td>1400.12</td>
<td>0209</td>
<td>109</td>
<td>T1</td>
<td>OKLDCA03</td>
<td>SNFCCA05</td>
</tr>
<tr>
<td>1400.13</td>
<td>212</td>
<td>102</td>
<td>T1</td>
<td>BRLNCA01</td>
<td>OKLDCA03</td>
</tr>
<tr>
<td>1400.13</td>
<td>0211</td>
<td>187</td>
<td>T1</td>
<td>OKLDCA03</td>
<td>SNLNCAll</td>
</tr>
<tr>
<td>1400.19</td>
<td>227</td>
<td>107</td>
<td>T1</td>
<td>ELSBCA11</td>
<td>OKLDCA03</td>
</tr>
</tbody>
</table>

3.20 Equipment Inventory (by equipment class): Basic input message—OP:EQPTINV,OFFID=xxx, EQPTCL=T1OR (xxx signifies the office ID). This equipment inventory lists all the T1 office repeaters. The repeater bay, shelf, position, and side, as well as the destination office are identified. The T1 System which uses the repeater is also identified.

02-22-77 04:07:18

<table>
<thead>
<tr>
<th>RR</th>
<th>BAY NO</th>
<th>SHELF</th>
<th>POS</th>
<th>SIDE</th>
<th>TO OFFICE</th>
<th>HSTNTXAI SYSTEM IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TR1</td>
<td>3</td>
<td>002</td>
<td>2</td>
<td>HSTNTXBA</td>
<td>102</td>
<td>D1A HSTNTXBA HSTNTXUN</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>002</td>
<td>1</td>
<td>HSTNTXBA</td>
<td>102</td>
<td>D1A HSTNTXBA HSTNTXUN</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>003</td>
<td>2</td>
<td>HSTNTXBA</td>
<td>101</td>
<td>D1A HSTNTXBA HSTNTXWA</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>003</td>
<td>1</td>
<td>HSTNTXBA</td>
<td>101</td>
<td>D1A HSTNTXBA HSTNTXWA</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>005</td>
<td>2</td>
<td>HSTNTXBA</td>
<td>101</td>
<td>D1A HSTNTXBA HSTNTXCA</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>005</td>
<td>1</td>
<td>HSTNTXBA</td>
<td>101</td>
<td>D1A HSTNTXBA HSTNTXCA</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>006</td>
<td>2</td>
<td>HSTNTXBA</td>
<td>102</td>
<td>D1A HSTNTXBA HSTNTXCA</td>
</tr>
<tr>
<td>TR1</td>
<td>3</td>
<td>006</td>
<td>1</td>
<td>HSTNTXBA</td>
<td>102</td>
<td>D1A HSTNTXBA HSTNTXCA</td>
</tr>
<tr>
<td>TR10</td>
<td>01</td>
<td>001</td>
<td>0</td>
<td>HSTNTXBA</td>
<td>101</td>
<td>D3 HSTNTXBA HSTNTXR1</td>
</tr>
</tbody>
</table>

3.21 These equipment inventory reports can be used to verify the TCAS data base for an office. The reports can also be used to obtain a list of T1 Systems, by terminal or repeater, for each office in the network.

3.22 Network Portions Assignments: Basic input message—OP:NPL,CDT=xxx (xxx signifies the CDT number). This lists all control offices for which a specified CDT (or all CDTs; refer to paragraph 2.62) has responsibility. The CDT is identified in the heading.
NETWORK PORTIONS ASSIGNMENTS
FOR CDT 1

<table>
<thead>
<tr>
<th>OFFICE</th>
<th>RESPONSIBILITY</th>
<th>CONTROLLED/MONITORED SYSTEMS</th>
<th>CONTROLLED/MONITORED SPAN LINES</th>
</tr>
</thead>
<tbody>
<tr>
<td>BKLYCA01T0</td>
<td>PRIMARY (ACO)</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>CNCRCA01T0</td>
<td>PRIMARY</td>
<td>59</td>
<td>0</td>
</tr>
<tr>
<td>ELSBCA11T0</td>
<td>PRIMARY (ACO)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>HYWRCA01T1</td>
<td>PRIMARY (ACO)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>HYWRCA02T0</td>
<td>PRIMARY (ACO)</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>LFYTCA11T0</td>
<td>PRIMARY</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

3.23 **Switch Point Assignments:** Basic input message—OP: SWASGN, REMID = xxx (xxx signifies the remote ID). This report lists the directed line monitor (DLM) and alarm cutoff (ACO) switch point assignments for a specified telemetry remote. The heading of the report specifies the office where the remote is installed, the RR bay number where the remote is mounted, and the TCAS identification of the remote.

3.24 The format for the ACO switch point assignments differs from the format for DLM switch assignments. For the ACO section of the report, the switch point (SW PT) is described as switch group (SW GR), switch subgroup (SW SGR), and SW PT. The column to the right of the SW PT column identifies the terminal bay that is controlled by the SW PT.

DIRECTED LINE MONITOR/ACO SWITCH ASSIGNMENTS

<table>
<thead>
<tr>
<th>SW GR</th>
<th>SW SGR</th>
<th>SW PT</th>
<th>RR BAY NO (ACO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
<td>1</td>
<td>TD121</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>2</td>
<td>TD122</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>3</td>
<td>TD123</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>4</td>
<td>TD124</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>5</td>
<td>TD125</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>6</td>
<td>TD126</td>
</tr>
</tbody>
</table>

3.25 For the DLM section of the report, the repeater access unit (RAU) is identified in terms of its RAU bay number, its unit designation within the bay, the shelf designation which represents a TCAS address within the RAU, and the switch point address (GR, SGR, PT) which selects that shelf address. To the right of the switch point address is the RR bay number and shelf, which is the identification of the monitored repeater bay shelf in the office. If the shelf is monitored for fuse failures, the telemetry assignments for repeater bay fuse monitoring follow. The format of the telemetry assignments is display (DISPL), word (WORD), and bit (BIT).
3.26 Telemetry Assignments: Basic input message—OP: TLMASGN. This report is used to verify the telemetry monitoring points for T1 Systems and patch lines and to verify the data base telemetry assignments. The telemetry remote is identified in the heading on each page. The format consists of an E2 display number, an E2 word number, an E2 bit number, and identification of the monitored entity. If the entity is a system, then the RR bay number and unit or the T1 terminal is identified. If the entity is a patch line, then the RR bay number, shelf, position, and side are identified.
### 3.27 Scan Point Assignments:

Basic input message—`OP:SCCASGN,SWMACHID=xxx` (xxx signifies the switching machine ID). This report identifies the SCCS scan points that are assigned to the terminal bays for those T1 Systems monitored via ESS. The switching machine is identified in the heading of the report. The format consists of the scan point number, office ID, RR bay number, unit, and the facility identification.

<table>
<thead>
<tr>
<th>Scan PT</th>
<th>Office</th>
<th>RR Bay No</th>
<th>Unit</th>
<th>Facility Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>HSTNTXFR</td>
<td>701.01</td>
<td>01</td>
<td>UNASSIGNED</td>
</tr>
<tr>
<td>1</td>
<td>HSTNTXFR</td>
<td>701.01</td>
<td>2</td>
<td>UNASSIGNED</td>
</tr>
<tr>
<td>2</td>
<td>HSTNTXFR</td>
<td>701.01</td>
<td>3</td>
<td>UNASSIGNED</td>
</tr>
</tbody>
</table>

### 3.28 Unmonitored Equipment:

Basic input message—`OP:UNMONEQPT,OFFID=xxx` (xxx signifies the office ID). This report lists all unmonitored T1 Systems or T1 patch lines in a specified office (or all offices; refer to paragraph 2.65). The office is identified in the heading on each page. The format for unmonitored T1 Systems consists of identification of each T1 System which terminates in the office but does not have its terminal in the office monitored. The bank RR bay number and unit of the terminal are also identified.
3.29 The format for unmonitored T1 patch lines consists of identification of each incoming T1 patch line that is not monitored by a maintenance line status indicator (MLSI). Also identified are the RR bay number, shelf, position, and side.

3.30 For detailed information on the data base masks involved in adding, deleting, and changing data in a TCAS data base, refer to Section 190-200-310.

D. Reports From the Computer Control Console

3.31 The reports available from the CC are related to the operating parameters and telemetry operations associated with TCAS. The following paragraphs give examples of reports available from the CC.

3.32 Directed Line Monitor (DLM) Test: Basic input message—EXEC:DLMTST,REMID=xxx (xxx signifies the remote ID). The execution of a DLM test is used to verify the operation of the DLMs located at the remote offices. When a DLM test is requested, a set of three tests is actually executed. These three tests are as follows:

- Low error test
• No errors test
• No pulse test (high errors).

The results of each test are compared to the required values of each test. If a disagreement exists, the results and required values of each test are outputted. If the message TEST OK is outputted for each test, then no disagreement exists between the test results and the required values.

EXEC:DLMTST,REMID = HSTNTXOX
15:58:30 EXEC:DLMTST,REMID = HSTNTXOX
15:58:30 EXEC:DLMTST,REMID = HSTNTXOX
12-11-76 16:00:12 DLMTST,REMID = HSTNTXOX

LOW ERROR TEST:

<table>
<thead>
<tr>
<th>EVENTS</th>
<th>ERR</th>
<th>SEC</th>
<th>INTVL</th>
<th>AC</th>
<th>ABV</th>
<th>ALL</th>
<th>1'S</th>
<th>QRSS</th>
<th>T1</th>
<th>MFIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED</td>
<td>63</td>
<td>1</td>
<td>1 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESULTS</td>
<td>OVFL</td>
<td>1</td>
<td>1 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NO ERROR TEST:

<table>
<thead>
<tr>
<th>EVENTS</th>
<th>ERR</th>
<th>SEC</th>
<th>INTVL</th>
<th>AC</th>
<th>ABV</th>
<th>ALL</th>
<th>1'S</th>
<th>QRSS</th>
<th>T1</th>
<th>MFIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED</td>
<td>0</td>
<td>0</td>
<td>20 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESULTS</td>
<td>20000</td>
<td>20</td>
<td>20 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NO PULSE TEST:

<table>
<thead>
<tr>
<th>EVENTS</th>
<th>ERR</th>
<th>SEC</th>
<th>INTVL</th>
<th>AC</th>
<th>ABV</th>
<th>ALL</th>
<th>1'S</th>
<th>QRSS</th>
<th>T1</th>
<th>MFIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED</td>
<td>51000</td>
<td>1</td>
<td>1 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESULTS</td>
<td>99000</td>
<td>19</td>
<td>20 SEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DLMTST COMPLETE

EXEC:DLMTST,REMID = HSTNTXOX
15:58:30 EXEC:DLMTST,REMID = HSTNTXOX
15:58:30 EXEC:DLMTST,REMID = HSTNTXOX
12-11-76 16:00:12 DLMTST,REMID = HSTNTXOX

TEST OK

DLMTST COMPLETE

3.33 Telemetry Status: Basic input message—OP: TLMSTAT. This report indicates the operational status of the data facilities and E remotes comprising the TCAS Telemetry System. The following report is a summary of all remotes and/or TCTs which have been placed out of service (OOS) and the time the action took place. Those remotes or TCTs listed as active (ACT) will not appear on subsequent outputs unless they are returned to the OOS state. To obtain the output, it is necessary to input at the CC—OP:TLMSTAT.
E-TELEMETRY STATUS
11-12-76 14:21:00

TCT NO   STATUS   TIME   DATE
01       OOS       14:03:06 11-12-76
         ACT      14:20:00 11-12-76
02       OOS       14:03:48 11-12-76
03       OOS       14:04:12 11-12-76

E-REMOTE STATUS            TIME          DATE
HSTNTXJA   OOS       14:19:30 11-12-76
HSTNTXPR   OOS       14:09:06 11-12-76
HSTNTXFA   OOS       14:05:48 11-12-76
         ACT      14:20:36 11-12-76

14:21:00 OP:TLMSTAT COMPLETE

3.34 The following report is a snapshot of the status of all remotes assigned to the TRCC at the time the request was initiated. To obtain the output, it is necessary to input at the CC—OP:TLMSTAT,ALL.

E-TELEMETRY STATUS
11-12-76 14:30:12

REMOTE NAME  NO  TCT STATUS  ADDR  REMOTE NAME  NO  TCT STATUS  ADDR  FAIL  ALARM
HSTNTXJA  04  ACT  123  OOS  YES  NO  NO
HSTNTXOX  05  ACT  132  ACT  NO  NO  NO
HSTNTXUN  01  ACT  138  ACT  NO  NO  NO
HSTNTXMI  06  ACT  126  ACT  NO  NO  NO
HSTNTXSU  03  OOS  137  ACT  NO  NO  NO
HSTNTXBA  05  ACT  115  ACT  NO  YES  NO
SPRNTXSO  05  ACT  147  ACT  NO  NO  NO
HSTNTXAD   05  ACT  145  ACT  NO  YES  NO
HSTNTXID  04  ACT  113  ACT  YES  NO  NO
HSTNTXWE  05  ACT  114  ACT  NO  NO  NO
HSTNTXGL  02  OOS  146  ACT  NO  NO  NO
HSTNTXCR  02  OOS  118  ACT  NO  NO  NO
HSTNTXMO  04  ACT  127  ACT  YES  NO  NO
HSTNTXAL  03  OOS  144  ACT  YES  NO  NO
HSTNTXPA  04  ACT  133  ACT  YES  NO  NO

14:30:24 OP:TLMSTAT COMPLETE

3.35 The following report gives the status of a specified remote only. To obtain the output, it is necessary to input at the CC—OP:TLMSTAT,REMID=xxx (xxx signifies the remote ID).
### E-TELEMETRY STATUS

#### 11-12-76 14:34:18

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT NO</th>
<th>TCT STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>NEW</th>
<th>ANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXWA</td>
<td>02</td>
<td>OOS</td>
<td>141</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

14:34:18 OP:TLMSTAT

**COMPLETE**

#### 3.36 The following report gives the status of all remotes assigned to a specified TCT. To obtain the output, it is necessary to input at the CC—**OP:TLMSTAT,TCT=xxx** (xxx signifies the TCT number).

### E-TELEMETRY STATUS

#### 11-12-76 14:31:54

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT NO</th>
<th>TCT STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>NEW</th>
<th>ANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXUN</td>
<td>01</td>
<td>ACT</td>
<td>138</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXOV</td>
<td>01</td>
<td>ACT</td>
<td>131</td>
<td>ACT</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXHO</td>
<td>01</td>
<td>ACT</td>
<td>143</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXFA</td>
<td>01</td>
<td>ACT</td>
<td>117</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

14:31:54 OP:TLMSTAT

**COMPLETE**

#### 3.37 Telemetry Errors: Basic input message—**OP:TLMERR.** This report contains the invalid reply rate (IRR) history of the TCAS data facilities and a listing of the outstanding errors for each E remote. The invalid reply rate history consists of the latest six values which exceed 1 per 1000 words. If no E remotes indicate an unreported error, the word **none** will be printed under the heading ERROR.
3.38 Removing a Unit From Service: Basic input message—RMV:UN. If it is necessary to perform maintenance on a TCT or E remote, it is desirable to inhibit polling to that TCT or E remote. When a TCT or E remote is placed out of service, the status report for that TCT or E remote is automatically outputted to confirm the action taken.
**E-TELEMETRY STATUS**

**11-12-76 14:47:18**

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT</th>
<th>STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXUN</td>
<td>01</td>
<td>OOS</td>
<td>138</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXOV</td>
<td>01</td>
<td>OOS</td>
<td>131</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXHO</td>
<td>01</td>
<td>OOS</td>
<td>143</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXFA</td>
<td>01</td>
<td>OOS</td>
<td>117</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

M 47:18 RMV:UN,TCT = 1

**E-TELEMETRY STATUS**

**11-12-76 14:50:06**

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT</th>
<th>STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXUN</td>
<td>01</td>
<td>ACT</td>
<td>143</td>
<td>OOS</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

M 50:06 RMV:UN,REMid = HSTNTXHO

**E-TELEMETRY STATUS**

**11-12-76 14:50:06**

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT</th>
<th>STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXHO</td>
<td>01</td>
<td>ACT</td>
<td>143</td>
<td>OOS</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

M 50:06 RMV:UN,REMid = HSTNTXHO

**3.39 Restoring a Unit to Service:** Basic input message—**RST:UN.** When a TCT or E remote is restored to service, the status report for the TCT or E remote is automatically outputted.

**RST:UN,TCT = 1**

**M 49:12 RST:UN,TCT = 1**

**E-TELEMETRY STATUS**

**11-12-76 14:49:12**

<table>
<thead>
<tr>
<th>REMOTE NAME</th>
<th>TCT</th>
<th>STATUS</th>
<th>ADDR</th>
<th>REMOTE STATUS</th>
<th>FAIL</th>
<th>ALARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXUN</td>
<td>01</td>
<td>ACT</td>
<td>138</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXOV</td>
<td>01</td>
<td>ACT</td>
<td>131</td>
<td>ACT</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>HSTNTXHO</td>
<td>01</td>
<td>ACT</td>
<td>143</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>HSTNTXFA</td>
<td>01</td>
<td>ACT</td>
<td>117</td>
<td>ACT</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

M 49:12 RST:UN,TCT = 1
/RST:UN,REMID = HSTNTXHO

M 50:42 RST:UN,REMID = HSTNTXHO
E-TELEMETRY STATUS
11-12-76 14:50:54

REMOTE NAME TCT NO STATUS REMOTE ADDR STATUS FAIL ALARM
HSTNTXHO 01 ACT 143 ACT NO NEW ANY

M 50:54 RST:UN,REMID = HSTNTXHO

3.40 Scheduled Task List: Basic input message—OP:PRMTR. This report is a list of all scheduled tasks available with TCAS. Examples of scheduled tasks are the periodically scheduled reports and the daily scheduled disc image dump. The scheduled tasks are divided into two types. The first type is a required or key task and depends on no other prerequisite task fulfillment before it may be carried out. The second is a dependent task, which may not be carried out until some time after the execution of a key task. Required tasks are defined in terms of a beginning date and time, an interval between automatic executions, and a status (eg, scheduled or inhibited). Dependent tasks are defined in terms of status and offset time only. The offset time is a scheduled period following the execution of a required task before a dependent task can be executed. Asterisks in a date or time field indicate that the TELCOs cannot change their values. For example, in the following task list, task 17 must follow task 2 and is offset from task 2 by 600 minutes. Dependent tasks may be inhibited or allowed at any time; but if allowed, they will not be executed until the required tasks are carried out. There are 98 tasks included in the scheduled task list for TCAS.
TASK LIST (PRMTRS MARKED * AREN'T CHANGEABLE.)

TASK: 001 STATUS: SCHED
   DESCR: BI-HOURLY REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: (DAYS, MINS): 0, 120.0 ******
   BEGINNING DATE & TIME: 12-21-79, 12:00:00

TASK: 002 STATUS: SCHED
   DESCR: DIALY REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: (DAYS, MINS): 1, 0 ******
   BEGINNING DATE & TIME: 12-22-79, 00:00:00

TASK: 003 STATUS: SCHED
   DESCR: WEEKLY REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: WEEKLY *********************
   BEGINNING DATE & TIME: 12-24-79, 00:00:00

TASK: 004 STATUS: SCHED
   DESCR: MONTHLY REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: MONTHLY *********************
   BEGINNING DATE & TIME: 01-01-80, 00:00:00

TASK: 005 STATUS: SCHED
   DESCR: QUARTERLY REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: QUARTERLY *********************
   BEGINNING DATE & TIME: 01-01-80, 00:00:00

TASK: 006 STATUS: SCHED
   DESCR: INDEX MONTH REPORT KEY
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: MONTHLY *********************
   BEGINNING DATE & TIME: 12-24-79, 00:00:00

TASK: 007 STATUS: SCHED **********************
   DESCR: R117: ACCUMULATE STATISTICS FOR TRCC REPORT
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: (DAYS, MINS): 1, 0 ******
   BEGINNING DATE & TIME: 12-20-79, 00:00:06 ***

TASK: 008 STATUS: SCHED **********************
   DESCR: R116: ACCUMULATE MANUAL WORK ACTIVITY STATISTICS
   REQD TASK: REQD TASK STATUS: NONE
   INTERVAL: (DAYS, MINS): 1, 0 ******
   BEGINNING DATE & TIME: 12-20-79, 00:00:06 ***
TASK: 009 STATUS: SCHED ******************************
DESCR: R111: ACCUMULATE T1 CGA STATISTICS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 1, 0 ***********
BEGINNING DATE & TIME: 12-20-79, 00:00:06 ***

TASK: 010 STATUS: SCHED ******************************
DESCR: R193: ACCUMULATE PATCHING STATISTICS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 1, 0 ***********
BEGINNING DATE & TIME: 12-20-79, 00:00:06 ***

TASK: 011 STATUS: SCHED ******************************
DESCR: R175: ACCUMULATE WEEKLY INDEX STATISTICS (CGA READINGS)
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: WEEKLY ******************************
BEGINNING DATE & TIME: 12-24-79, 00:00:06 ***

TASK: 012 STATUS: SCHED ******************************
DESCR: R176: ACCUMULATE MONITORED STATISTICS FOR INDEX MONTH
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: MONTHLY ******************************
BEGINNING DATE & TIME: 12-23-79, 00:00:06 ***

TASK: 013 STATUS: SCHED
DESCR: R103: BACK-UP LIST OF TROUBLE CASES
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 0, 120.0
BEGINNING DATE & TIME: 12-20-79, 16:00:00

TASK: 014 STATUS: SCHED
DESCR: R106: SUMMARIZE OPEN T1 SYSTEM TROUBLE CASES
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 0, 120.0
BEGINNING DATE & TIME: 12-20-79, 16:00:00

TASK: 015 STATUS: SCHED
DESCR: R109: TCAS CENTER SUMMARY REPORT – I
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 0, 600.0
BEGINNING DATE & TIME: 12-20-79, 16:00:00

TASK: 016 STATUS: SCHED
DESCR: R109: TCAS CENTER SUMMARY REPORT – II
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: (DAYS, MINS): 0, 600.0
BEGINNING DATE & TIME: 12-20-79, 16:00:00
TASK: 017 STATUS: SCHED
  DESCR: R101: DAILY OFFICE LIST OF FAILED SYSTEMS
  REQD TASK:  002 REQD TASK STATUS: SCHED
  OFFSET FR TASK 002 (DAYS, MINS):  0,  600.0

TASK: 018 STATUS: SCHED
  DESCR: R102: WEEKLY OFFICE LIST OF FAILED SYSTEMS
  REQD TASK:  003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS):  0,  605.0

TASK: 019 STATUS: SCHED
  DESCR: R190: WEEKLY CGA INDEX REGISTER READINGS – CURRENT MO
  REQD TASK:  003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS):  0,  605.0

TASK: 020 STATUS: SCHED
  DESCR: R189: T1 SYSTEMS OVER 1 HOUR IN INDEX MONTH
  REQD TASK:  REOD TASK STATUS: NONE
  INTERVAL: MONTHLY
  BEGINNING DATE & TIME: 12-23-79, 10:30:00

TASK: 021 STATUS: SCHED
  DESCR: R177: ACCUMULATE MANUAL STATISTICS FOR INDEX
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0

TASK: 022 STATUS: SCHED
  DESCR: R178: TABULATE INDEX RESULTS
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0

TASK: 023 STATUS: SCHED
  DESCR: R185: TCAS INDEX TABLES
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0

TASK: 024 STATUS: SCHED
  DESCR: R186: WEEKLY CGA READINGS FOR PREVIOUS INDEX MONTH
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0

TASK: 025 STATUS: SCHED
  DESCR: R188: STATISTICS USED IN INDEX REPORTS
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0

TASK: 026 STATUS: SCHED
  DESCR: R187: SUMMARY OF OFFICE INDICES
  REQD TASK:  006 REQD TASK STATUS: SCHED
  OFFSET FR TASK 006 (DAYS, MINS):  0,  600.0
TASK: 027 STATUS: SCHED
  Descr: R179: MONTHLY CONTROL OFFICE INDEX RESULTS
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 028 STATUS: SCHED
  Descr: R181: SUB-DISTRICT LEVEL INDEX SUMMARY
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 029 STATUS: SCHED
  Descr: R180: DISTRICT LEVEL INDEX SUMMARY
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 030 STATUS: SCHED
  Descr: R182: DIVISION LEVEL INDEX SUMMARY
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 031 STATUS: SCHED
  Descr: R183: AREA LEVEL INDEX SUMMARY
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 032 STATUS: SCHED
  Descr: R184: TOTAL NETWORK INDEX SUMMARY
  Req'd Task: 006 Req'd Task Status: SCHED
  Offset Fr Task 006 (Days, Mins): 0, 600.0

TASK: 033 STATUS: SCHED
  Descr: R121: WEEKLY SUB-DISTRICT STATISTICS SUMMARY
  Req'd Task: 003 Req'd Task Status: SCHED
  Offset Fr Task 003 (Days, Mins): 0, 605.0

TASK: 034 STATUS: SCHED
  Descr: R122: MONTHLY SUB-DISTRICT STATISTICS SUMMARY
  Req'd Task: 004 Req'd Task Status: SCHED
  Offset Fr Task 004 (Days, Mins): 0, 605.0

TASK: 035 STATUS: SCHED
  Descr: R123: QUARTERLY SUB-DISTRICT STATISTICS SUMMARY
  Req'd Task: 005 Req'd Task Status: SCHED
  Offset Fr Task 005 (Days, Mins): 0, 605.0

TASK: 036 STATUS: SCHED
  Descr: R124: WEEKLY DISTRICT STATISTICS SUMMARY
  Req'd Task: 003 Req'd Task Status: SCHED
  Offset Fr Task 003 (Days, Mins): 0, 605.0
TASK: 037 STATUS: SCHED
  DESCR: R125: MONTHLY DISTRICT STATISTICS SUMMARY
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 038 STATUS: SCHED
  DESCR: R126: QUARTERLY DISTRICT STATISTICS SUMMARY
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 039 STATUS: SCHED
  DESCR: R127: WEEKLY DIVISION STATISTICS SUMMARY
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 040 STATUS: SCHED
  DESCR: R128: MONTHLY DIVISION STATISTICS SUMMARY
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 041 STATUS: SCHED
  DESCR: R129: QUARTERLY DIVISION STATISTICS SUMMARY
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 042 STATUS: SCHED
  DESCR: R130: WEEKLY AREA STATISTICS SUMMARY
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 043 STATUS: SCHED
  DESCR: R131: MONTHLY AREA STATISTICS SUMMARY
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 044 STATUS: SCHED
  DESCR: R132: QUARTERLY AREA STATISTICS SUMMARY
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 045 STATUS: SCHED
  DESCR: R133: WEEKLY OFFICE STATISTICS/NETWORK
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 046 STATUS: SCHED
  DESCR: R134: MONTHLY OFFICE STATISTICS/NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0
TASK: 047 STATUS: SCHED
  DESCR: R135: QUARTERLY OFFICE STATISTICS/NETWORK
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 048 STATUS: SCHED
  DESCR: R136: WEEKLY SUB-DISTRICT STATISTICS/NETWORK
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 049 STATUS: SCHED
  DESCR: R137: MONTHLY SUB-DISTRICT STATISTICS/NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 050 STATUS: SCHED
  DESCR: R138: QUARTERLY SUB-DISTRICT STATISTICS/NETWORK
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 051 STATUS: SCHED
  DESCR: R139: WEEKLY DISTRICT STATISTICS/NETWORK
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 052 STATUS: SCHED
  DESCR: R140: MONTHLY DISTRICT STATISTICS/NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 053 STATUS: SCHED
  DESCR: R141: QUARTERLY DISTRICT STATISTICS/NETWORK
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 054 STATUS: SCHED
  DESCR: R142: WEEKLY DIVISION STATISTICS/NETWORK
  REQD TASK: 003 REQD TASK STATUS: SCHED
  OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 055 STATUS: SCHED
  DESCR: R143: MONTHLY DIVISION STATISTICS/NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 056 STATUS: SCHED
  DESCR: R144: QUARTERLY DIVISION STATISTICS/NETWORK
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0
TASK: 057 STATUS: SCHED
DESCR: R145: WEEKLY AREA STATISTICS/NETWORK
REQD TASK: 003 REQD TASK STATUS: SCHED
OFFSET FR TASK 003 (DAYS, MINS): 0, 605.0

TASK: 058 STATUS: SCHED
DESCR: R146: MONTHLY AREA STATISTICS/NETWORK
REQD TASK: 004 READ TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 059 STATUS: SCHED
DESCR: R147: QUARTERLY AREA STATISTICS/NETWORK
REQD TASK: 005 REQD TASK STATUS: SCHED
OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 060 STATUS: SCHED
DESCR: R151: CO TBL ISOLATION FOR DISTRICTS
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 061 STATUS: SCHED
DESCR: R152: CO TBL ISOLATION FOR SUB-DISTRICTS
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 062 STATUS: SCHED
DESCR: R153: CO TBL ISOLATION FOR DIVISIONS
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 063 STATUS: SCHED
DESCR: R154: CO TBL ISOLATION FOR AREAS
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 064 STATUS: SCHED
DESCR: R156: CO TBL ISOLATION FOR OFFICES/NETWORK
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 065 STATUS: SCHED
DESCR: R157: CO TBL ISOLATION BY SUB-DISTRICT/NETWORK
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 066 STATUS: SCHED
DESCR: R158: CO TBL ISOLATION BY DISTRICTS/NETWORK
REQD TASK: 004 REQD TASK STATUS: SCHED
OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0
TASK: 067  STATUS: SCHED
  DESCR: R159: CO TBL ISOLATION BY DIVISIONS/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 068  STATUS: SCHED
  DESCR: R155: CO TBL ISOLATION FOR AREAS/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 069  STATUS: SCHED
  DESCR: R162: CONSTRUCTION ACTIVITY FOR AREAS/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 070  STATUS: SCHED
  DESCR: R161: CONSTRUCTION ACTIVITY FOR DISTRICTS
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 071  STATUS: SCHED
  DESCR: R163: CONSTRUCTION ACTIVITY FOR DIVISIONS
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 072  STATUS: SCHED
  DESCR: R164: CONSTRUCTION ACTIVITY FOR AREAS
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 073  STATUS: SCHED
  DESCR: R166: CONSTRUCTION ACTIVITY BY OFFICES/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 074  STATUS: SCHED
  DESCR: R167: CONSTRUCTION ACTIVITY BY SUB-DISTRICTS/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 075  STATUS: SCHED
  DESCR: R168: CONSTRUCTION ACTIVITY BY DISTRICT/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 076  STATUS: SCHED
  DESCR: R169: CONSTRUCTION ACTIVITY BY DIVISIONS/NETWORK
  REQD TASK: 004  REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0
TASK: 077 STATUS: SCHED
  DESC: R165: CONSTRUCTION ACTIVITY BY AREAS/NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 078 STATUS: SCHED
  DESC: R104: BACKBONE USAGE
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 079 STATUS: SCHED
  DESC: R105: MAINTENANCE LINE USAGE
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 080 STATUS: SCHED
  DESC: R107: TROUBLE-TYPE STATISTICS BY OFFICE
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 081 STATUS: SCHED
  DESC: R108: TROUBLE-TYPE STATISTICS BY NETWORK
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 082 STATUS: SCHED
  DESC: R172: MONTHLY TRCC REPORT
  REQD TASK: 004 REQD TASK STATUS: SCHED
  OFFSET FR TASK 004 (DAYS, MINS): 0, 605.0

TASK: 083 STATUS: SCHED
  DESC: R171: QUARTERLY PERFORMANCE ASSESSMENT RESULTS
  REQD TASK: 005 REQD TASK STATUS: SCHED
  OFFSET FR TASK 005 (DAYS, MINS): 0, 605.0

TASK: 084 STATUS: SCHED
  DESC: R171: PARTIAL PERFORMANCE ASSESSMENT RESULTS
  REQD TASK: REQD TASK STATUS: NONE
  INTERVAL (DAYS, MINS): 7, 0
  BEGINNING DATE & TIME: 12-26-79, 00:00:00

TASK: 085 STATUS: SCHED
  DESC: R112: CLEAR DAILY STATISTICS BANKS
  REQD TASK: REQD TASK STATUS: NONE
  INTERVAL: (DAYS, MINS): 1, 0
  BEGINNING DATE & TIME: 12-20-79, 20:00:00

TASK: 086 STATUS: SCHED
  DESC: R112: CLEAR WEEKLY STATISTICAL DATA
  REQD TASK: REQD TASK STATUS: NONE
  INTERVAL: WEEKLY
  BEGINNING DATE & TIME: 12-24-79, 20:00:00
TASK: 087 STATUS: SCHED ***************************
DESCR: R112: CLEAR MONTHLY STATISTICS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: MONTHLY ***************************
BEGINNING DATE & TIME: 01-01-80, 20:00:00 ***

TASK: 088 STATUS: SCHED ***************************
DESCR: R191: CLEAR INDEX MONTH AUTOMATED STATISTICS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: MONTHLY ***************************
BEGINNING DATE & TIME: 12-23-79, 20:00:00 ***

TASK: 089 STATUS: SCHED ***************************
DESCR: R112: CLEAR QUARTERLY STATISTICS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: QUARTERLY ***************************
BEGINNING DATE & TIME: 01-01-80, 20:00:00 ***

TASK: 090 STATUS: SCHED ***************************
DESCR: R112: CLEAR CURRENT-DAY STATISTICS
REQD TASK: 140 REQD TASK STATUS: NONE
OFFSET FR TASK 140 (DAYS, MINS): 0, .0 **

TASK: 091 STATUS: SCHED
DESCR: DELETE EVENT RECORDS AND PG RECORDS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL (DAYS, MINS): 1, .0
BEGINNING DATE & TIME: 12-21-79, 20:00:00

TASK: 092 STATUS: SCHED
DESCR: R114: CLEAR TROUBLE-TYPE BANKS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: MONTHLY ***************************
BEGINNING DATE & TIME: 01-01-80, 20:00:00

TASK: 093 STATUS: SCHED
DESCR: R115: CLEAR OFFICE-PAIR PATCH STATISTICS BANKS
REQD TASK: REQD TASK STATUS: NONE
INTERVAL: MONTHLY ***************************
BEGINNING DATE & TIME: 01-01-80, 20:00:00

TASK: 094 STATUS: SCHED
DESCR: REQUEST CONFIG:DISCIM
REQD TASK: REQD TASK STATUS: NONE
INTERVAL (DAYS, MINS): 1, .0
BEGINNING DATE & TIME: 12-21-79, 16:00:00
### TASK: 095 STATUS: SCHED
- **DESCR:** REQUEST EXEC:DISCIM
- **REQD TASK:** REQD TASK STATUS: NONE
- **INTERVAL (DAYS, MINS):** 1, .0
- **BEGINNING DATE & TIME:** 12-22-79, 01:00:00

### TASK: 096 STATUS: SCHED
- **DESCR:** EXECUTE DATA BASE CHANGE BUFFER
- **REQD TASK:** REQD TASK STATUS: NONE
- **INTERVAL (DAYS, MINS):** 1, .0
- **BEGINNING DATE & TIME:** 12-22-79, 01:00:00

### TASK: 097 STATUS: SCHED
- **DESCR:** R173: UNRECOGNIZED CMS FACILITY IDENTIFICATIONS
- **REQD TASK:** REQD TASK STATUS: NONE
- **INTERVAL (DAYS, MINS):** 7, .0
- **BEGINNING DATE & TIME:** 12-26-79, 20:00:00

### TASK: 098 STATUS: SCHED
- **DESCR:** R192: UNRECOGNIZED SCCS SCAN POINTS
- **REQD TASK:** REQD TASK STATUS: NONE
- **INTERVAL (DAYS, MINS):** 7, .0
- **BEGINNING DATE & TIME:** 12-26-79, 02:00:00

**END OF LIST**

**M 24:00 OP:PRMTR**

#### 3.41 Common Block Constants List:  
Basic input message—OP:PRMTR. This report provides a list of the threshold parameters used to control TCAS operations. These parameters specify threshold levels which when exceeded cause a trouble case to be opened by the computer. These parameters can be altered by the TELCO to meet special needs of a particular T-Carrier network.
E. Periodic Reports

3.42 The periodic reports summarize system failure and patching statistics for the T-carrier network. These reports include the following:

- Daily trouble summaries to aid the central office in recognizing chronic problems
- A bihourly backup report to support manual operation of the TRCC following a failure of the TCAS central
- Long-range periodic reports which summarize failure and patching statistics on a network basis. These reports are produced weekly, monthly, and quarterly. The heading of each report contains a report number which is also shown in the scheduled task list (paragraph 3.40). This permits correlation of a scheduled task with the appropriate resulting report.

The Statistical Data Banks

3.43 The information presented in the periodic reports is based upon the accumulated statistics from preceding days. The statistics which provide this information are stored in daily, weekly, monthly,
and quarterly statistical data banks. There are data banks associated with each system, patch line, and control office in the TCAS data base.

3.44 Statistics are processed each night at midnight and for a short period thereafter. During this time, outage and usage statistics from the previous day are collected from each monitored system and patch line. They are accumulated in data banks associated with the control office having responsibility for that system or patch line. Periodic reports should not be run during this accumulating process.

3.45 When the accumulating process is complete, the date and time associated with the current reporting intervals (daily, weekly, monthly, and quarterly) will be changed to include the previous day.

3.46 When the accumulation process has been completed, a short report (see following) will appear on the reports printer to indicate that periodic reports may now be run.

05-29-76 01 :03 :00

ACCUMULATE OFFICE STATISTICS
FOR PERIOD BEGINNING 04-01-76 20:00:00 ENDING 04-02-76
END OF REPORT

3.47 All monitored T1 System and patch line outage and usage statistic banks are automatically cleared by a family of reports. These reports are run at 8:00 p.m. on the day following the end of the period (daily, weekly, monthly, and quarterly) whose statistics they clear. The format of the reports is as follows:

05-29-76 10:27:00

CLEAR STATISTICS DATA BANKS
FOR PREVIOUS WEEK
END OF REPORT

3.48 These reports will run at the first opportunity after 8:00 p.m., when the reports printer is free. However, if they are not run before midnight, an additional report will be run to clear the current-day outage and usage statistics. The format for this special report is as follows:

05-29-76 10:27:50

CLEAR CURRENT-DAY STATISTICS
END OF REPORT

3.49 The statistic banks for the system and patch line outage and usage reports are automatically cleared at 8:00 p.m. However, only one set of statistic banks is used for the data. Therefore, the statistics which are accumulated after producing the reports and before clearing the data banks will be omitted from the next report. The bank-clearing reports should be scheduled to run as soon as a good copy of the summary-type reports is obtained. The format for these bank-clearing reports is as follows:

CLEAR TROUBLE-TYPE STATISTICS
CLEAR OFFICE-PAIR PATCHING STATISTICS
Scheduling Periodic Reports

3.50 The periodic reports are automatically scheduled according to one of the following intervals:

- An interval specified in hours, minutes, and seconds.
- Daily—The hour during the day at which the report occurs may be arbitrarily selected.
- Weekly—The week is assumed to end on Sunday. Reports that are scheduled weekly will be run on Monday (in order to have one full week's statistics available).
- Semimonthly—These reports are scheduled on the first and 16th of each month. (No reports have currently been scheduled at this interval.)
- Monthly—These reports are scheduled on the first of each month and reflect the statistics of the previous month. Leap year, etc, is taken into account.
- Quarterly—These reports are scheduled on the first day of each quarter (3 months) reflecting statistics of the previous quarters. Leap year, etc, is taken into account.
- Index Month—This interval runs from the 23rd of one month to the 22nd of the following month.

3.51 During the interval between accumulation of statistics (midnight) and clearing statistics (8:00 p.m. the next day), it is appropriate to run any statistical summary-type reports.

Note: If a statistical report is begun at the same time the banks are being accumulated or cleared, the reporting interval specified in the heading will be blank.

Reports

3.52 The TCAS periodic reports summarize statistical data which has been collected in the TCAS statistical data banks. Each report normally represents data for a specific reporting interval (previous day, week, month, or quarter). The following paragraphs describe typical periodic reports available with TCAS.

3.53 Backup Report: The purpose of this report is to provide information to support manual operation of the TRCC in the event of a TCAS central failure. This report also provides a status summary of open trouble cases, and is produced automatically on the reports printer every 2 hours, on the hour. The information contained in the report is organized, per trouble case, as follows:

- Trouble case number (TCN)
- Priority assigned to the trouble case
- CDT which is responsible for the trouble case
- Date and time the trouble case was opened
\* Type of trouble, which will be one of the following:
  
  - System (SYSTEM)
  - Cable (CABLE)
  - Patch line (PTCH LN)
  - Office repeater bay shelf (RPR SHELF)
  - Office terminal bay (TERM BAY)
  - Side system (SIDE SYS)

\* The \textit{last action} entered by the operator (indicates an action that was performed to locate the failure or to restore service)

\* Trouble-type code to identify the cause of failure

\* Identification of the failed entity

\* Location of the problem, if determined

\* Primary office route for cable patterns.
### BACK-UP LIST OF CURRENTLY-OPEN TROUBLE CASES

<table>
<thead>
<tr>
<th>TC TYPE</th>
<th>TIME OPENED</th>
<th>TCN</th>
<th>CDT STATUS</th>
<th>SECT’L OFFICE PAIR</th>
<th>LAST ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>TERM BAY 07-06-79 16:27:36</td>
<td>100X027 01</td>
<td>TERM BAY: HSTNTXAL</td>
<td>TD21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIDE SYS 07-06-79 16:34:06</td>
<td>100X078 01</td>
<td>SYSTEM 07-06-79 16:34:36</td>
<td>100X086 01 CLEAR</td>
<td>101 D1A HSTNTXMI HSTNTXOV</td>
<td></td>
</tr>
<tr>
<td>SHELF 07-06-79 16:40:00</td>
<td>100X107 01</td>
<td></td>
<td></td>
<td>SHELF: HSTNTXAL TR2 04</td>
<td></td>
</tr>
<tr>
<td>SIDE SYS 07-06-79 16:51:42</td>
<td>100X123 01</td>
<td>SYSTEM 07-06-79 17:03:12</td>
<td>100X158 01 CLEAR</td>
<td>901 T1C HSTNTXJA HSTNTXWA</td>
<td></td>
</tr>
<tr>
<td>CABLE/HC 07-06-79 17:08:18</td>
<td>100X166 01</td>
<td>CABLE: 316 HSTNTXJA HSTNTXCL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CABLE/HC 07-06-79 17:10:18</td>
<td>100X182 01</td>
<td>CABLE: 991 HSTNTXHU HSTNTXGR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TERM BAY 07-06-79 17:30:12</td>
<td>100X203 01</td>
<td></td>
<td></td>
<td>TERM BAY: HSTNTXNA TD34</td>
<td></td>
</tr>
<tr>
<td>PTCH LN 07-06-79 19:30:36</td>
<td>100X238 01</td>
<td></td>
<td></td>
<td>802B BSPARE HSTNTXJA HSTNTXMI</td>
<td></td>
</tr>
</tbody>
</table>

#### 3.54 Failure Statistics by Control Office:

This report provides a list, by control office, of each T1 System which was failed during the reporting interval. This report aids the office personnel in locating bad-actor systems. It also enables them to assess their own performance in terms of their T1 System outages. The TRCC must specify in the data base those offices which should be included in this report. Those offices which are selected should be flagged as REPORT-YES; refer to Section 865-201-102. The report contains the following information:

- Identification of the reporting interval.
- Identification of the control office.
- The number of controlled, monitored systems for the control office.
- A list of systems that sustained outage time during the specified reporting interval. The following information is given for each system:
  - Identification of the system.
Number of CGA alarms which began during the reporting interval. If the system was already failed at the beginning of the reported interval, no CGA would be logged (unless the system cleared and failed again). Thus, a CGA count of zero is valid even if the system shows outage time.

30-second CGAS; all CGAs with a duration of 30 seconds or less. This helps to identify systems that are suffering repeated hits.

The outage minutes accumulated for the system during the reported interval.

The trouble case number of a trouble case which is currently open on the system at the time the report is produced. It is not necessarily the same trouble case number which existed at the time the system accumulated CGAs and outage time. The trouble case number is provided for reference between the TRCC and the control office concerning a system which is still in trouble.

A summary (total) of the statistics for the control office.

This report is available in two versions—a daily summary and a weekly summary. An example of the daily version is as follows:

12-05-76 23:31:00

DAILY T1 FAILURE STATISTICS BY CONTROL OFFICE
CONTROL OFFICE REPORTING INTERVAL
HSTNTEX01 12-03-76 00:00:00 TO 12-04-76 00:00:00
t1 SYSTEM FAILURE STATISTICS FOR 497 CONTROLLED SYSTEMS

<table>
<thead>
<tr>
<th>SYSTEM IDENTIFICATION</th>
<th>TOTAL CGA'S</th>
<th>30 SEC CGA'S</th>
<th>OUTAGE MINUTES</th>
<th>TROUBLE CASE NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>152 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X705</td>
</tr>
<tr>
<td>151 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X721</td>
</tr>
<tr>
<td>144 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X465</td>
</tr>
<tr>
<td>143 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X449</td>
</tr>
<tr>
<td>142 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X422</td>
</tr>
<tr>
<td>141 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X406</td>
</tr>
<tr>
<td>139 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X385</td>
</tr>
<tr>
<td>138 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X369</td>
</tr>
<tr>
<td>137 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X326</td>
</tr>
<tr>
<td>136 D3 HSTNTXOV HSTNTX01</td>
<td>0</td>
<td>0</td>
<td>1440.0</td>
<td>100X342</td>
</tr>
</tbody>
</table>

TOTAL (10 SYSTEMS FAILED) | 0 | 0 | 1440.00 |

END OF REPORT

3.55 Control Offices by Subdistrict: This report provides a summary of control offices by subdistrict. Each subdistrict is reported on a new page so that the report can be distributed to the appropriate subdistrict management. The report contains the following information:

- Identification of the reporting interval.

- Number of controlled, monitored systems (for the control offices responsible to the administrative group being reported).
• Average number of CGAs per controlled, monitored system per week. This statistic depends upon the number of controlled systems and the duration of the reporting interval.

• Average outage duration obtained from total outage time divided by the number of CGAs.

• The number of controlled span lines. This number corresponds to span lines for monitored systems only.

• The number of controlled span lines that are currently patched.

• The average patch duration. This helps to assess the ability of the office personnel to repair failed systems and restore them to service. Note that some companies recommend leaving systems on patch for long periods. Thus, this statistic is meaningless under these circumstances.

• A summary (totals) of the statistics.

This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

05-29-79 11:15:42

WEEKLY T1 FAILURE STATISTICS BY SUB-DISTRICT
REPORTING INTERVAL 05-23-79 00:00:00 TO 05-28-79 00:00:00

SUB-DISTRICT OPTNRBYSFSN

<table>
<thead>
<tr>
<th>OFFICE NAME</th>
<th>STATISTICS FOR CONTROLLED T1 SYSTEMS</th>
<th>CONTROLLED SPAN LINES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MONIT</td>
<td>CGA/SYS</td>
</tr>
<tr>
<td></td>
<td>SYS/WK</td>
<td>CGAS</td>
</tr>
<tr>
<td></td>
<td>SPAN</td>
<td>PTCHD</td>
</tr>
<tr>
<td>SNFCCA21T0</td>
<td>184</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA21</td>
<td>11</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA17</td>
<td>61</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA01T3</td>
<td>51</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA01T1</td>
<td>255</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA01</td>
<td>160</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA06T0</td>
<td>10</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA06</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA05T1</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA05</td>
<td>8</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA04T1</td>
<td>3</td>
<td>0.0</td>
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<tr>
<td>SNFCCA04</td>
<td>44</td>
<td>0.0</td>
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<tr>
<td>SNFCCA11</td>
<td>2</td>
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</tr>
<tr>
<td>SNFCCA13</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA12T0</td>
<td>6</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA12</td>
<td>28</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA13T1</td>
<td>5</td>
<td>0.0</td>
</tr>
<tr>
<td>SNFCCA13</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>828</td>
<td>0.0</td>
</tr>
</tbody>
</table>
3.56 **Control Offices by District:** This report provides a summary of control offices by district. Each district is reported on a new page, so that report can be distributed to the appropriate district management. The information contained in the body of the report is the same as that shown in paragraph 3.55, **Control Offices by Subdistrict.** This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

05-29-79 11:15:42

**WEEKLY T1 FAILURE STATISTICS BY DISTRICT**

**REPORTING INTERVAL** 05-23-79 00:00:00 TO 05-28-79 00:00:00

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>OPTNRCESB</th>
<th>DEPARTMENT</th>
<th>PLT</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLPSCA11</td>
<td>184</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>FRMTCA12</td>
<td>11</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>FRMTCA11</td>
<td>61</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>HYWRCA11</td>
<td>51</td>
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<td>0.0</td>
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<tr>
<td>HYWRCA02T0</td>
<td>255</td>
<td></td>
<td>0.0</td>
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<tr>
<td>HYWRCA02</td>
<td>160</td>
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<tr>
<td>HYWRCA01T1</td>
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<tr>
<td>HYWRCA01</td>
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<td>0.0</td>
</tr>
<tr>
<td>UNCYCA11</td>
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<td></td>
<td>0.0</td>
</tr>
<tr>
<td>SNJSCA12</td>
<td>8</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>SNJSCA14</td>
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<tr>
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<td>SNJSCA02T2</td>
<td>2</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>SNJSCA02</td>
<td>0</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>SNLNCA11T0</td>
<td>6</td>
<td></td>
<td>0.0</td>
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<tr>
<td>SNLNCA61</td>
<td>28</td>
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<td>0.0</td>
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<tr>
<td>SNLNCA11T1</td>
<td>5</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td>SNLNCA11</td>
<td>0</td>
<td></td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>828</strong></td>
<td></td>
<td><strong>0.0</strong></td>
</tr>
</tbody>
</table>
3.57 **Control Offices for Network:** This report summarizes the statistics for each control office in the network. The names of the district are interspersed between groups of offices to designate the district which those offices occupy. Totals are provided and are based upon an average of all offices in the list. The information contained in the body of this report is the same as that shown in paragraph 3.55, **Control Offices by Subdistrict.** This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

**WEEKLY T1 FAILURE STATISTICS FOR NETWORK**

**BY CONTROL OFFICE**

REPORTING INTERVAL 05-23-79 00:00:00 TO 05-28-79 00:00:00

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>PTL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STATISTICS FOR CONTROLLED T1 SYSTEMS</strong></td>
<td><strong>CONTROLLED SPAN LINES</strong></td>
</tr>
<tr>
<td>OFFICE NAME</td>
<td>MONIT</td>
</tr>
<tr>
<td></td>
<td>SYS</td>
</tr>
<tr>
<td>DCSNTX01</td>
<td>51</td>
</tr>
</tbody>
</table>

**DISTRICT TOLL**

| HNTBSXMI    | 0   | 0.0 | 0 | 0 | 0 | 0 | 33 | 0 | 0.0 |
| HNTBSXAP    | 8   | 0.0 | 0 | 0 | 0 | 0 | 250 | 0 | 0.0 |
| HNTBSXFR    | 3   | 0.0 | 0 | 0 | 0 | 0 | 100 | 0 | 0.0 |

**DISTRICT WEST**

| HSTNTX06    | 0   | 0.0 | 0 | 0 | 0 | 0 | 41 | 0 | 0.0 |
| HSTNTX04    | 6   | 0.0 | 0 | 0 | 0 | 0 | 226 | 0 | 0.0 |
| HSTNTX03    | 28  | 0.0 | 0 | 0 | 0 | 0 | 375 | 0 | 0.0 |
| HSTNTX08    | 5   | 0.0 | 0 | 0 | 0 | 0 | 40 | 0 | 0.0 |
| HSTNTX01    | 0   | 0.0 | 0 | 0 | 0 | 0 | 127 | 0 | 0.0 |
| **TOTAL**   | 828 | 0.0 | 0 | 0 | 0 | 0 | 4908 | 0 | 0.0 |
3.58 **Districts by Division:** The statistics obtained from each control office in a district are combined and presented as that district's statistics in this report. The statistics given for each district will be the same as the totals obtained in the *Control Offices by District* report for that district. Each division is reported on a new page, with the name of the division identified in the heading. The information contained in the body of this report is the same as that shown in paragraph 3.55, *Control Offices by Subdistrict*. This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

05-29-79 11:15:42

**WEEKLY T1 FAILURE STATISTICS BY DIVISION**

**REPORTING INTERVAL** 05-23-79 00:00:00 TO 05-28-79 00:00:00

<table>
<thead>
<tr>
<th>DIVISION</th>
<th>OPTNRBY</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTRICT NAME</td>
<td>STATISTICS FOR CONTROLLED T1 SYSTEMS</td>
</tr>
<tr>
<td>NAME</td>
<td>MONIT</td>
</tr>
<tr>
<td>OPTNRBYWA</td>
<td>184</td>
</tr>
<tr>
<td>OPTNRBYWY</td>
<td>11</td>
</tr>
<tr>
<td>OPTNRBYRI</td>
<td>61</td>
</tr>
<tr>
<td>OPTNRBYRE</td>
<td>51</td>
</tr>
<tr>
<td>OPTNRBYOR</td>
<td>255</td>
</tr>
<tr>
<td>OPTNRBYMI</td>
<td>160</td>
</tr>
<tr>
<td>TOTAL</td>
<td>679</td>
</tr>
</tbody>
</table>
### 3.59 Districts by Network:

This report lists each district in the network and the statistics. The information contained in the body of this report is the same as that shown in paragraph 3.55, *Control Offices by Subdistrict*. This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

<table>
<thead>
<tr>
<th>District Name</th>
<th>Statistics for Controlled T1 Systems</th>
<th>Controlled Span Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>MONIT</strong></td>
<td><strong>CGA/SYS</strong></td>
</tr>
<tr>
<td></td>
<td><strong>CGAS</strong></td>
<td><strong>HRS</strong></td>
</tr>
<tr>
<td>OPTNRCESB</td>
<td>15</td>
<td>0.0</td>
</tr>
<tr>
<td>OPTNRBYSF</td>
<td>61</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>76</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### 3.60 Divisions by Area:

This report lists the statistics for each division of the area. The statistics for each division will be the same as the totals obtained in the *Districts by Division* report for that division. The information contained in the body of this report is the same as that shown in paragraph 3.55, *Control Offices by Subdistrict*. This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

<table>
<thead>
<tr>
<th>Division Name</th>
<th>Statistics for Controlled T1 Systems</th>
<th>Controlled Span Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>MONIT</strong></td>
<td><strong>CGA/SYS</strong></td>
</tr>
<tr>
<td></td>
<td><strong>CGAS</strong></td>
<td><strong>HRS</strong></td>
</tr>
<tr>
<td>OPTNRCE</td>
<td>11</td>
<td>0.0</td>
</tr>
<tr>
<td>OPTNRBYS</td>
<td>51</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>62</td>
<td>0.0</td>
</tr>
</tbody>
</table>
3.61 **Divisions by Network:** This report lists the statistics for each division in the network. The information contained in the body of this report is the same as that shown in paragraph 3.55, *Control Offices by Subdistrict*. This report is available in three versions—weekly, monthly, and quarterly. The characteristics of this report are the same as *Division by Area*; thus, no example is given. Refer to paragraph 3.60.

3.62 **Network by Area:** This report lists the statistics for each area in the network. The information contained in the body of this report is the same as that shown in paragraph 3.55, *Control Offices by Subdistrict*. This report is available in three versions—weekly, monthly, and quarterly. An example of the weekly version is as follows:

```
05-29-79 11:15:42

WEEKLY T1 FAILURE STATISTICS FOR NETWORK BY AREA
REPORTING INTERVAL 05-23-79 00:00:00 TO 05-28-79 00:00:00

<table>
<thead>
<tr>
<th>AREA NAME</th>
<th>MONIT SYSTEMS</th>
<th>CGA/ SYSTEMS/WK</th>
<th>MONIT CGAS</th>
<th>OTG HRS</th>
<th>NO-OF-SYSTEMS &gt;0 CGA</th>
<th>NO-OF-SYSTEMS &gt;4 CGA</th>
<th>SPAN LINES</th>
<th>PTCHD LINES</th>
<th>AVG PTCH HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTNR</td>
<td>61</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>248</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61</td>
<td>0.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>248</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>
```

3.63 **Central Office Trouble Isolation and Repair:** This report lists, for each control office, the average sectionalization time, fault location time, repair time, and trouble location on trouble cases associated with systems or spans controlled by that office. The report contains the following information:

- Identification of the reporting interval
- Identification of the control office
- Number of controlled systems
- Average sectionalization time
- The type of trouble which will be one of the following:
  - Terminal (TRM)
  - Central Office (CO)
  - Line (LNE)
  - No trouble found (NTF)
**SECTION 190-200-101**

- Average repair time
- Number of controlled span lines
- Average fault location time
- The trouble location which will be one of the following:
  - Span line (SPN)
  - Central office (CO)
  - No trouble found (NTF)
  - Came clear (CC).

The report is available for districts, subdistricts, divisions, and areas. An example of the report for districts is as follows:

01-04-77 10:30:18

CENTRAL OFFICE TROUBLE ISOLATION AND REPAIR BY DISTRICT
REPORTING INTERVAL 12-31-75 00:00:00 TO 12-31-75 00:00:00
DISTRICT EAST DEPARTMENT PIT

<table>
<thead>
<tr>
<th>OFFICE NAME</th>
<th>AVG CRLD</th>
<th>AVG SCTN</th>
<th>AVG TRM</th>
<th>AVG CO</th>
<th>AVG LNE</th>
<th>AVG NTF</th>
<th>AVG REP</th>
<th>AVG CRLD</th>
<th>AVG F/L</th>
<th>AVG SPANS</th>
<th>AVG HRS</th>
<th>AVG TROUBLE LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTXWA</td>
<td>199</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>705</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXWY</td>
<td>11</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXRI</td>
<td>67</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>263</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXRE</td>
<td>55</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>115</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXOB</td>
<td>268</td>
<td>.5</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>726</td>
<td>****</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXMI</td>
<td>176</td>
<td>.6</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1145</td>
<td>.6</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>879</td>
<td>.5</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>****</td>
<td>5325</td>
<td>.6</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
3.64 Construction Activity: This report provides information on the span maintenance repair activities. The information in this report is given per office and includes the following:

- Identification of the reporting interval
- Identification of the control office
- Number of controlled span lines
- Number of trouble cases pending at the start and end of the reporting interval
- Number of cases handled during the reporting interval
- Average repair time
- The final trouble location, which will be one of the following:
  - Span line (SPAN)
  - Central office (CO)
  - No trouble found (NTF)
  - Came clear (CC).

This report is available for districts, subdistricts, divisions, and areas. An example of the report for districts is as follows:

01-04-77 10:33:48

CONSTRUCTION ACTIVITY BY DISTRICT
REPORTING INTERVAL  12-31-75 00:00:00 TO 12-31-75 00:00:00
DISTRICT CENTRAL     DEPARTMENT PLT

<table>
<thead>
<tr>
<th>OFFICE NAME</th>
<th>CRLD</th>
<th>SPANS</th>
<th>TROUBLES HANDLED</th>
<th>AVG REPAIR IN DAYS</th>
<th>TROUBLE LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>START   END COMPLD</td>
<td>SPAN</td>
<td>CO</td>
</tr>
<tr>
<td>HSTNTXCL</td>
<td>182</td>
<td>0</td>
<td>0       0</td>
<td>*****</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXJA</td>
<td>2395</td>
<td>0</td>
<td>0       0</td>
<td>*****</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXMC</td>
<td>202</td>
<td>0</td>
<td>0       3</td>
<td>0.3</td>
<td>3</td>
</tr>
<tr>
<td>HSTNTXCA</td>
<td>2789</td>
<td>0</td>
<td>0       3</td>
<td>0.3</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6068</td>
<td>0</td>
<td>0       3</td>
<td>0.3</td>
<td>3</td>
</tr>
</tbody>
</table>

END OF REPORT

3.65 Summary of Open Trouble Cases: This report provides a snapshot of the current status of each open trouble case and should normally be scheduled at the beginning of each TRCC shift. The report contains the following information:

- Identification of the system
- The current status of the system
- Identification of any patch line used
- Last action taken on the trouble case.
SUMMARY OF OPEN TROUBLE CASES

<table>
<thead>
<tr>
<th>SYSTEM ID</th>
<th>STATUS</th>
<th>BB OR ML USED</th>
<th>LAST ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>107 D1A</td>
<td>HSTNTXMI</td>
<td>HSTNTXSU CLEAR</td>
<td>REF</td>
</tr>
<tr>
<td>101 D1B</td>
<td>BYTWTXTXC</td>
<td>HSTNTXUN ALARM</td>
<td>REF</td>
</tr>
<tr>
<td>102 D1A</td>
<td>HSTNTXFA</td>
<td>HSTNTXOV CLEAR</td>
<td>SFL</td>
</tr>
<tr>
<td>142 D1A</td>
<td>HSTNTXHO</td>
<td>HSTNTXUN CLEAR</td>
<td>REF</td>
</tr>
<tr>
<td>101 D1A</td>
<td>HSTNTXHU</td>
<td>HSTNTXMO ALARM</td>
<td></td>
</tr>
<tr>
<td>110 D1A</td>
<td>HSTNTXAP</td>
<td>HSTNTXMI CLEAR</td>
<td>REF</td>
</tr>
<tr>
<td>101 D1A</td>
<td>HSTNTXMO</td>
<td>HSTNTXSE CLEAR</td>
<td>REF</td>
</tr>
<tr>
<td>108 D3</td>
<td>HSTNTXOV</td>
<td>HSTNTXSU CLEAR</td>
<td></td>
</tr>
<tr>
<td>101 D1DD3</td>
<td>HSTNTXPE</td>
<td>HSTNTXSU PATCH 801B BSPARE HSTNTXFB HSTNTXMI REF 301M MSPARE HSTNTXMI HSTNTXPE</td>
<td></td>
</tr>
</tbody>
</table>

END OF REPORT

3.66 TCAS Summary Report: This report provides the TRCC manager with a picture of the trouble cases handled during the reporting interval and the status of currently open trouble cases.

TCAS SUMMARY REPORT

REPORTING INTERVAL 12-31-75 00:00:00 TO 01-03-76 00:00:00

IN INITIAL OPEN TROUBLE CASES

TOTAL TROUBLE CASES CLOSED

| LINE   | 16 |
| TERMINAL | 2 |
| NO TROUBLE FOUND | 2 |

FINAL OPEN TROUBLE CASES

| PATCHED-NOT REF TO OP | 0 |
| PATCHED-REF TO OP    | 0 |
| OTHER                | 0 |

TOTAL SERVICE OUTAGE-LINE 712 MIN
AVERAGE SERVICE OUTAGE-LINE 45 MIN

TOTAL SERVICE OUTAGE-TERMINAL 92 MIN
AVERAGE SERVICE OUTAGE-TERMINAL 46 MIN

END OF REPORT
3.67 **Backbone Usage:** This report is used to evaluate the effectiveness of the backbone network. It identifies backbones which are not frequently being used for restoration patches. It also shows which *segments* of each backbone are most frequently used. This may indicate the need for additional backbones along certain routes or fewer backbones along other routes. The report also summarizes requested patching routes for which no patch lines were available. The report contains the following information:

- Identification of each backbone line.
- Number of times the entire backbone was used (end-to-end).
- Number of times that more than one span of the backbone was used (multisegment).
- A list of each span in the backbone, showing the transmitting and receiving office. The following statistics are provided for each span:
  - Number of usages
  - Average usage time.
- A list, by office pair, of patch lines requested but unavailable. The following statistics are provided for each patch line request:
  - Transmit and receive directions
  - Number of patch line requests
  - Number of requests for which a patch line was unavailable.

The following is a sample backbone usage report. Excluded from this sample is the summary of patch line requests for which a patch line was unavailable.
### Backbone Usage Report

**Reporting Interval:** 10-31-76 00:00:00 to 11-18-76 00:00:00

<table>
<thead>
<tr>
<th>Backbone Identification</th>
<th>Control Office</th>
<th>No. Usages Entire BKBN</th>
<th>No. Usages Multi-Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>801B BSPARE ALVNTXAL HSTNTXMI</td>
<td>HSTNTXMI</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Transmit Office</strong></td>
<td><strong>Receive Office</strong></td>
<td><strong>Total Usages</strong></td>
<td><strong>Average Usage</strong></td>
</tr>
<tr>
<td>ALVNTXAL</td>
<td>HSTNTXFR</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXFR</td>
<td>ALVNTXAL</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXFR</td>
<td>HSTNTXPE</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXPE</td>
<td>HSTNTXFR</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXPE</td>
<td>HSTNTXMI</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXMI</td>
<td>HSTNTXPE</td>
<td>0</td>
<td>0 MIN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Backbone Identification</th>
<th>Control Office</th>
<th>No. Usages Entire BKBN</th>
<th>No. Usages Multi-Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>801B BSPARE ARCLTXXA HSTNTX01</td>
<td>HSTNTX01</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Transmit Office</strong></td>
<td><strong>Receive Office</strong></td>
<td><strong>Total Usages</strong></td>
<td><strong>Average Usage</strong></td>
</tr>
<tr>
<td>ARCLTXXA</td>
<td>HSTNTXID</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXID</td>
<td>ARCLTXXA</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXID</td>
<td>HSTNTXJA</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXJA</td>
<td>HSTNTXID</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTXJA</td>
<td>HSTNTX01</td>
<td>0</td>
<td>0 MIN</td>
</tr>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXJA</td>
<td>0</td>
<td>0 MIN</td>
</tr>
</tbody>
</table>

#### 3.68 Maintenance Line Usage:

This report helps the TRCC to assess the availability of patch lines, to determine which spans are heavily used for patching, and to recognize patch lines which are no longer needed. It also helps the center to locate spans where patch lines are being left in use too long. The report contains the following information:

- Identification of the reporting interval.
- Identification of the transmitting and receiving offices. Thus, each pair of offices will appear twice, once for each direction of transmission.
- The total number of patch lines installed between the offices (in the specified direction).
- The maximum number of patch lines in use between the offices.
- The number of patch lines requested between the office pair, but were unavailable.
• The total number of patch lines used during the reporting interval.

• Average duration of the patches. This indicates whether patches have been allowed to remain in place too long.

04-03-77 11:11:00

MAINTENANCE LINE USAGE
REPORTING INTERVAL 03-31-77 00:00:00 TO CURRENT TIME

<table>
<thead>
<tr>
<th>TRANSMIT OFFICE</th>
<th>RECEIVE OFFICE</th>
<th>INSTALLED LINES</th>
<th>IN-USE</th>
<th>NOT AVAILABLE PATCHED</th>
<th>PATCH HRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXCA</td>
<td>35</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXHO</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXJA</td>
<td>33</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXMI</td>
<td>23</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>HSTNTX01</td>
<td>HSTNTXOV</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>HSTNTXCA</td>
<td>HSTNTX01</td>
<td>35</td>
<td>3</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

END OF REPORT

3.69 Trouble-Type Statistics by Office: This report allows the TRCC to evaluate the causes of T-carrier failures. The report lists the number of system failures which were attributed to each one of the TCAS trouble types. It is provided on a per-office basis to assist the office in recognizing faulty maintenance procedures. The report contains the following information:

• Identification of the reporting interval.

• Identification of the office being reported.

• Number of monitored, terminating systems for the office.

• Number of terminating span lines (monitored systems only) for the office.

• Number of monitored, controlled systems for the office.

• Number of controlled span lines (monitored systems only) for the office.

• A listing of each TCAS trouble type and the number of troubles of that type which were charged against the office. These statistics are obtained from trouble-type identifications entered through the CDTs by the maintenance controllers. Each count corresponds to the failure of one T1 System or patch line.
<table>
<thead>
<tr>
<th>Office Identity</th>
<th>Terminating T1 Systems</th>
<th>Terminating Span Lines</th>
<th>Controlled T1 Systems</th>
<th>Controlled Span Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNJSCA14</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

- Terminal (Channel Bank): 0
- Terminal Power Supply/Fuse: 0
- Office Repeater/Fuse: 0
- Office Battery: 0
- Office Wiring/Frame: 0
- Office, Other Equipment: 0
- Office, Span Powering/Fuse: 0
- Office, Came Clear: 0
- Office, Work Error: 0
- Office, Miscellaneous: 0
- Office, MTCE/Rearrangements: 0
- Span Line Cable/Splice: 0
- Span Line Repeater: 0
- Span Line Apparatus Case (Non Repeater): 0
- Span Line, Came Clear: 0
- Span Line, Work Error: 0
- Span Line, Miscellaneous: 0
- Span Line, MTCE/Rearrangements: 0
- Line, Came Clear: 0
- System, Miscellaneous: 0
- No Trouble Found: 0
- Other Than T1 System: 0
### 3.70 TRCC Report

This report provides the information required monthly by AT&T from all TRCCs, and is a **snapshot** of the status of the T-carrier network. The reporting interval is identified in the heading of the report.

01-04-77 10:38:42

**T-CARRIER RESTORATION CONTROL CENTER REPORT**

**REPORTING INTERVAL** 12-31-75 00:00:00 TO 12-31-75 00:00:00

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF MONITORED T1 SYSTEMS</td>
<td>3649</td>
</tr>
<tr>
<td>NUMBER OF BACKBONE LINES WORKING</td>
<td>41</td>
</tr>
<tr>
<td>NUMBER OF TCXR LINE OUTAGES REPORTED</td>
<td>18</td>
</tr>
<tr>
<td>NUMBER OF LINE OUTAGES PATCHED/BACKBONE</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL LINE OUTAGE (MINUTES)/BACKBONE</td>
<td>0</td>
</tr>
<tr>
<td>AVERAGE LINE OUTAGE (MINUTES)/BACKBONE</td>
<td>*****</td>
</tr>
<tr>
<td>NUMBER OF LINE OUTAGES NOT ON BACKBONE</td>
<td>18</td>
</tr>
<tr>
<td>MAINTENANCE PATCH USED</td>
<td>5</td>
</tr>
<tr>
<td>RESTORED OR OTHER</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL LINE OUTAGE (MINUTES)/NO BACKBONE</td>
<td>804</td>
</tr>
<tr>
<td>AVERAGE LINE OUTAGE (MINUTES)/NO BACKBONE</td>
<td>45</td>
</tr>
<tr>
<td>NUMBER OF TCXR BANK FAILURES</td>
<td>2</td>
</tr>
<tr>
<td>AVERAGE BANK OUTAGE (MINUTES)</td>
<td>46</td>
</tr>
<tr>
<td>NUMBER POWER UNIT DEFECTIVE</td>
<td>1</td>
</tr>
<tr>
<td>OTHER</td>
<td>1</td>
</tr>
</tbody>
</table>

**END OF REPORT**
3.71 **Performance Assessment Report:** This report begins on the first day of each quarter and runs for 13 consecutive weeks. The report is a picture of the overall T-carrier network and the dependability factor of the network. It should be noted, that 20,000 system weeks of data are required before satisfactory level of confidence is reached (eg; for 5000 monitored systems, four weeks of data are required). A summary (totals of the statistics) is provided at the end of the report.

01-04-77 10:38:48

**QUARTERLY T1 CARRIER PERFORMANCE REPORT**
**REPORTING INTERVAL** 12-31-75 00:00:00 TO 12-31-75 00:00:00

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<th>TOTAL ALARMS RECORD</th>
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**END OF REPORT**
4. INDEX OF INPUT MESSAGES

A. Introduction

4.01 This part provides a reference index of all input messages identified in this document. To permit ease in locating the input messages, all messages are listed in alphabetical order and are referenced to the appropriate paragraph number. This part is intended to be used as an easy access to each input message in this practice. Thus, no detailed meanings of the messages are included here.

4.02 The messages are grouped into three categories according to the job function the message addresses. This grouping will maintain consistency and facilitate referencing of the input messages. The three categories are maintenance control, data base control, and computer control input messages. All input messages are listed in alphabetical order per each category.

B. Input Message Index

4.03 The following paragraphs index all input messages identified in this practice. Messages are cross-referenced to the appropriate paragraphs where detailed meanings and options available are specified.

4.04 Maintenance Control Input Message Index

<table>
<thead>
<tr>
<th>MESSAGE</th>
<th>PARAGRAPH NUMBER</th>
<th>MESSAGE</th>
<th>PARAGRAPH NUMBER</th>
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<th>PARAGRAPH NUMBER</th>
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<td>OP:LINKHS</td>
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### 4.06 Computer Control Console Input Message Index

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