Oracle® Communications EAGLE

System Health Check Guide

Release 45.0 and later

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ORACLE®

CAUTION: Use only the guide downloaded from the Oracle Technology Network (OTN) (http://www.oracle.com/technetwork/indexes/documentation/oracle-comms-tekelec-2136003.html).
Before upgrading your system, access the My Oracle Support web portal (https://support.oracle.com) and review any Knowledge Alerts that may be related to the System Health Check or the Upgrade.

Refer to Appendix A for instructions on accessing My Oracle Support.

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1. INTRODUCTION

1.1 Purpose and Scope

This document describes Oracle's recommended methods and procedures to be used to evaluate Site and STP data retrieved from in-service EAGLE STP. This document is intended for use for system running EAGLE releases 45.0 or later as well as system being upgrade to those releases. The intended audience for this document is EAGLE® Engineering, Documentation, Customer Service personnel and any craft person who has completed EAGLE training and is familiar with the EAGLE interface. The scope of this document is specifically to collect data to determine the health of an in-service EAGLE prior to a software upgrade or an extension shelf installation. In general, this document may be used for an instance where the health determination of the EAGLE is required (i.e., troubleshooting).

This document should be considered the next volume to 909-0656-001; see reference [2]. The former document covers EAGLE releases 31.6 to 44.0, where this document starts at release 45.0 and will continue for future releases. The initial content of this document is equivalent to the last version of that previous document with the additions of updates to support EAGLE Release 45.0. In release 45.0, the legacy GPSM/TDM hardware is no longer supported as the MASP, so this document does not have to support both hardware setup and removes complexity of several steps that had to support both platforms.

The document is written to support all customer configurations. All of the commands specified in the procedures should be executed unless explicitly stated otherwise in the individual procedure. Not doing so may result in a delay in the analysis performed by Oracle personnel.

Analysis of data captured during this procedure is out of the scope of this document. Analysis of the data is covered in reference [1].

1.2 References

[1] *Health Check Analysis Work Instruction*, WI005139, latest revision, Tekelec

[2] *EAGLE 5 ISS Releases 31.6 and later System Healthcheck Document, 909-0656-001,Revision P, Version 7.2, Tekelec*

[3] *TEKELEC Acronym Guide*, MS005077.doc, current revision

[4] *Recommended Ethernet Port Settings for EAGLE SM Cards and EPAP Switch Ports*, KM Alert Doc 2275062.1, current revision

1.3 Acronyms

Table 1. Acronyms

Acronym	Definition
AST	Associate State for Maintenance
BITS	Building Integrated Timing System
DPC	Destination Point Code
DSM	Database Services Module
E5-OAM	EAGLE Operation, Admission, & Maintenance
E5-MASP	Dual-card HW assembly composed of E5-MCAP and E5-TDM
FOA	First Office Application
GPL	Generic Program Load
IMT	Interprocessor Message Transport
IS-ANR	In Service - Abnormal
IS-NR	In Service - Normal
KSR terminal	Keyboard Send Receive terminal
Legacy MASP	System using GPSM-II\TDM card set (obsolete in release 45.0)
MASP	Maintenance and Administration Subsystem Processor
MCP	Measurements Collector/Poller
PST	Primary State for Maintenance
SAK	Software Access Key
SCCP	Signaling Connection Control Part
SLIC	Service and Link Interface Card
UHC	Upgrade Health Check

For additional Acronyms; refer to internal references [3] in section 1.2

2. GENERAL DESCRIPTION

The health check is to be performed as directed to by software release upgrade procedures, extension shelf installation MOPs, or My Oracle Support personnel. It may also be utilized during FOA, hardware installations, or customer problem analysis. This document outlines a series of commands and procedures to be performed on the system. With each command, there is a description of the command, expected command output, and what problems may be detected with the command. If the desired goal/output is not obtained by executing the command, contact My Oracle Support (MOS) (https://support.oracle.com/) to investigate the deficiencies. The entire set of commands should be executed each time in order to obtain a complete system status and configuration. Some of the commands may not be supported on all EAGLE releases, resulting in a command rejection. These rejected commands will not harm the system in any way and will be verified during the analysis of the captured data. The goal of this health check procedure is to be non-intrusive. Only spare equipment swap-out and the IMT bus testing are intrusive and should be executed during a maintenance window. The procedures that are intrusive are highlighted in the table in Section 2.3.

2.1 Recommendations for Performing Health Check

The commands in this document should be executed during periods of FOA, new software or hardware installations, upgrades, or customer problems.

Note: **EAGLE Release 47.0 does not support the DEIR feature. Therefore, do not upgrade to EAGLE 47.0 in case you are using this functionality. The DEIR support is going to be available in future releases**.

2.1.1 Frequency of Health Check

The frequency of executing these commands should be determined in upgrade execution procedures, extension shelf installation MOP, and the release FOA plan/strategy developed by Oracle. For software upgrade, three health checks are executed. The recommended time frames of these checks are the following: two weeks prior (UHC1), forty-eight hours prior (UHC2), and seventy-two hours following an upgrade (UHC3). For extension shelf, one health check is executed prior to installation. The exact time is based on availability of personnel and scheduled maintenance windows.

2.1.2 Data Capture

During the execution of this procedure, some method of data capture is necessary for proper analysis and for future reference. If a terminal emulation application is being used which supports capturing, the application should be enabled. A KSR or printer terminal may be selected as the capture terminal since output from the user terminal can be echoed to those terminal types. If no other method is available, input and output from the user terminal can be echoed to a configured printer. A capture file must be generated so a comparison can be made with other capture files from the same node to determine if any system degradation occurred between the two capture periods. Some of the procedures explicitly identify anomalies to be checked, if present, these occurrences should be noted. **After conclusion of the Health Check procedures the capture file and any notes are to be sent to Oracle for review. If the Health Check is being performed in preparation for an upgrade, contact My Oracle Support upon completion to verify that the upgrade can be performed after analysis of the capture file**

2.1.3 Step Check-Off and Recording Configuration

All steps in this Health Check are to be initialed by the person performing the step. Blanks have been provided under each step number for recording the initials. Also certain steps request recording of data, which is specific to the configuration of the switch being checked.

Note that the Health Check may take several hours to complete depending on the size of the system, the part number and version of MASPs in use, and user experience.

2.2 Health Check Record

Each time the System Health Check has been completed, record the date, the reason for the health check (e.g., upgrade preparation, new installation, post-upgrade verification, etc.) and record which procedure passed/failed in Table 2.

Table 2. Health Check Record

DATE	Reason for running health check	List any procedures that failed (Procedure number and name)	Technician Signature
	Upgrade HC #1		
	Upgrade HC #2		
	Upgrade HC #3		
	Extension Shelf HC		

2.3 Health Check Type

The following table lists the procedures to be executed depending on the type of health check being performed.

Table 3. Health Check Type Procedures

Procedure	Non-Intrusive Upgrade (UHC1, UHC3)	Intrusive Upgrade (UHC2)	Extension Shelf, New Product
3.2 Health Check Preparation	√	√	√
3.3 General System Status	√	√	√
3.4 Report System Troubles	√	√	√
3.5 Verifying Database Status	√	√	n/a
3.6 Verifying GPLs	√	√	n/a
3.7 Retrieving Obituaries	√	√	√
3.8 Verify SCCP Load	√	√	n/a
3.9 Verifying LNP and LSMS	√	√	n/a
3.10 Verifying SEAS	√	√	n/a
3.11 Verifying optional features	√	√	√
3.12 Verifying IP Signaling Status	√	√	√
3.13 Verifying EROUTE	√	√	√
3.14 Verifying IMT Status	√	√	√
3.15 Retrieving Trouble Data	√	√	√
3.16 Verifying Clock Status	√	√	√
3.17 Verifying MPS (See note 1)	√	√	n/a
3.18 Verify Source Database	n/a	√	n/a
3.19 Verifying Fixed and Removable Media (Part 1)	n/a	√	n/a
3.20 Testing IMT Status	n/a	√	√
3.21 Verifying Fixed and Removable Media (Part 2)	n/a	√	n/a
3.22 Table Capacity Status	√	√	n/a
3.23 Health Check Conclusion	√	√	√

Note 1: Intrusive procedures are shaded.

3. PROCEDURES

3.1 Pre-Health Check Requirements

Procedure 1: Verifying Pre-Health Check Requirements

S T E P #	This procedure verifies that all pre-health check requirements have been met. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. Should THIS PROCEDURE FAIL, Contact My Oracle Support AND **ASK FOR HEALTH CHECK ASSISTANCE.**	
1 ☐	Complete Pre-Health Check tasks	All applicable tasks in Table 4 must be completed before continuing.

Table 4. Pre-Health Check Requirements

√	Tasks to be completed prior to Health Check execution
	For Health Check #2 - Verify that on-site personnel are available.
	For Health Check #2 – Verify that Upgrade media is on-site or Upgrade target release has been downloaded to disk. Please reference Upgrade document Appendix B for these procedures.
	Verify that all terminal and modem recourses are available for remote access.
	An automatic rollback (for VxWorks 6.9-based to VxWorks 6.4-based flash GPLs) would be done via a special source OAM GPL. Therefore, make sure to verify that the Rollback Source Release GPL media is available. **Note**: • The automated rollback procedure is required only when upgrading to EAGLE 47.0. • The special source OAM GPLs are part of the EAGLE 47.0 download package on OSDC.

2 ■	Issue the command to display GPL status.	**REPT-STAT-GPL:GPL=OAMHC**
3 ☐ ☐	Response to GPL status command is displayed. If either 1113 or 1115 are not displayed, this procedure **fails**. Otherwise, continue to next procedure.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL OAMHC 1113 135-016-000 135-016-000 135-016-000 * OAMHC 1115 135-016-000 135-016-000 135-016-000 * Command Completed. ;

3.2 Health Check Preparation

Procedure 2: Health Check Preparation

STEP #	This procedure starts capturing all commands and command output to a printer or other terminal configured to capture data. See Section 2.1.2 for recommendation on data capture.	
1 ☐	Issue the command to log in to the EAGLE terminal.	**login:uid=XXXXXX** *(Where XXXXXX is your login ID)*
2 ☐	Response to login command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y User logged in on terminal X ;
3 ☐	Issue the command to retrieve terminal status.	**rtrv-trm**
4 ☐	Response to retrieve terminal command is displayed. Record the numbers that appear in the TRM column below corresponding to the terminal port being used to capture, SEAS terminals, and user terminal. In this example, terminal 12 is a printer, terminal 10 is the user's terminal, and terminal 17 is the SEAS. Refer to Section 2.1.2 for information on how to set up terminals for data capture. CAPTURE _____ SEAS _____ _____ USER _____ If not already activated, start mechanism to capture data. Refer to Section 2.1.2 for recommendation on data capture. Record the initial output group configuration for the user's and capture terminals. Also record user's TMOUT value Verify that all terminal groups for the printers show YES. If so, go to step 7. If any groups show 'NO', continue to step 5.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y TRM TYPE COMM FC TMOUT MXINV DURAL 1 NONE 9600 -7-E-1 SW 30 5 00:01:00 2 NONE 9600 -7-E-1 SW 30 5 00:01:00 3 NONE 9600 -7-E-1 SW 30 5 00:01:00 4 NONE 9600 -7-E-1 SW 30 5 00:01:00 5 NONE 9600 -7-E-1 SW 30 5 00:01:00 6 NONE 9600 -7-E-1 SW 30 5 00:01:00 7 NONE 9600 -7-E-1 SW 30 5 00:01:00 8 NONE 9600 -7-E-1 SW 30 5 00:01:00 9 NONE 9600 -7-E-1 SW 30 5 00:01:00 10 VT320 9600 -7-E-1 SW 30 5 00:01:00 11 NONE 9600 -7-E-1 SW 30 5 00:01:00 12 PRINTER 9600 -7-E-1 SW 30 5 00:01:00 13 VT320 9600 -7-E-1 SW 30 5 00:01:00 14 NONE 9600 -7-E-1 SW 30 5 00:01:00 15 NONE 9600 -7-E-1 SW 30 5 00:01:00 16 NONE 9600 -7-E-1 SW 30 5 00:01:00 TRM TYPE LOC TMOUT MXINV DURAL SECURE 17 SEAS 1108 30 5 00:01:00 no 18 TELNET 1108 30 5 00:01:00 no 19 TELNET 1108 30 5 00:01:00 no 20 TELNET 1108 30 5 00:01:00 no 21 TELNET 1108 30 5 00:01:00 no 22 TELNET 1108 30 5 00:01:00 no 23 TELNET 1108 30 5 00:01:00 no 24 TELNET 1108 30 5 00:01:00 no TRM TRAF LINK SA SYS PU DB 1 YES YES YES YES YES YES 2 NO NO NO NO NO NO 3 NO NO NO NO NO NO 4 NO NO NO NO NO NO 5 NO NO NO NO NO NO 6 NO NO NO NO NO NO 7 NO NO NO NO NO NO 8 NO NO NO NO NO NO 9 YES YES YES YES YES YES 10 YES YES YES YES YES YES 11 NO NO NO NO NO NO 12 YES YES YES YES NO NO 13 YES YES YES YES YES YES 14 NO NO NO NO NO NO 15 NO NO NO NO NO NO 16 NO NO NO NO NO NO 17 NO NO NO NO NO NO 18 NO NO NO NO NO NO 19 NO NO NO NO NO NO 20 NO NO NO NO NO NO 21 NO NO NO NO NO NO 22 NO NO NO NO NO NO 23 NO NO NO NO NO NO 24 NO NO NO NO NO NO ; USER ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ TMOUT ____ CAP ___ ___ ___ ___ ___ ___ ___ ___ ___ ___
5 ☐	Issue the command to change all terminal groups.	**chg-trm:trm=P:all=yes** *(Where P is the location of the capture terminal recorded in step 4)*

Procedure 2: Health Check Preparation

6 ☐	Response to change terminal command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y chg-trm:trm=P:all=yes Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y CHG-TRM: MASP A – COMPLTD ;
7 ☐	Issue the command to activate capture.	**act-echo:trm=P** *(Where P is a capture terminal port that was selected in step 4)*
8 ☐ ☐	Response to activate command is displayed. Verify that the capture terminal is correctly collecting data.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y Scroll Area Output will be echoed to Terminal X. ; *(***Caution**: loss of output may occur if too many terminals are echoed*)*
9 ☐	Issue the command to change the terminal groups to the optimal settings.	**chg-trm:trm=X:all=no:tmout=0:sa=yes:sys=yes:db=yes:dbg=yes** *(Where X is the location of the user's terminal recorded in step 4.)*
10 ☐	Response to change terminal command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y chg-trm:trm=X:all=no:tmout=0:sa=yes:sys=yes:db=yes:dbg=yes Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y CHG-TRM: MASP A – COMPLTD ;
11 ☐	Issue the command to display optional features	**rtrv-feat**
12 ☐ ☐	Response to retrieve feature command is displayed. Record the on/off status of the features in the following table.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y EAGLE FEATURE LIST GTT = on GWS = on NRT = off X25G = off LAN = on CRMD = off SEAS = off LFS = off MTPRS = off FAN = on DSTN5000 = off WNP = off CNCF = off TLNP = off SCCPCNV = off TCAPCNV = off IPISUP = off X252000 = off PLNP = off NCR = off ITUMTPRS = on SLSOCB = off EGTT = on VGTT = on MPC = on ITUDUPPC = on MEASPLAT = on TSCSYNC = off E5IS = off ;

Note: The following table lists all possible feature bits. Feature bits differ between releases, so one may appear in this table that will not exist on a particular EAGLE.

GTT	ON / OFF	**GWS**	ON / OFF	**NRT**	ON / OFF
LAN	ON / OFF	**CRMD**	ON / OFF	**LFS**	ON / OFF
MTPRS	ON / OFF	**FAN**	ON / OFF	**DSTN5000**	ON / OFF
WNP	ON / OFF	**CNCF**	ON / OFF	**TLNP**	ON / OFF
SCCPCNV	ON / OFF	**TCAPCNV**	ON / OFF	**IPISUP**	ON / OFF
PLNP	ON / OFF	**NCR**	ON / OFF	**ITUMTPRS**	ON / OFF
SLSOCB	ON / OFF	**EGTT**	ON / OFF	**VGTT**	ON / OFF
MPC	ON / OFF	**ITUDUPPC**	ON / OFF	**MEASPLAT**	ON / OFF
TSCSYNC	ON / OFF	**E5IS**	ON / OFF		

Procedure 2: Health Check Preparation

13 ☐	Issue the command to display feature keys that have been enabled.	**rtrv-ctrl-feat**
14 ☐	Response to the command is displayed. Record if LNP ported TN feature key and LNP ELAP Configuration is on and displayed as well as the current quantity[1]. Also record whether the EIR feature is on: LNP ported TN: ON / OFF Quantity: _____ LNP ELAP Config: ON/OFF EIR: ON/OFF Record if TPS feature key Configuration is on and displayed as well as the current quantity. Also record whether any temporary TPS keys are displayed as enabled. Verify no temporary TPS keys are enabled. TPS Status: ON / OFF Quantity: _____ Temporary TPS Enabled: YES/NO If upgrading to Rel 46.4 or higher & the source release is 46.3 or prior, the HIPR2 High Rate Mode must be on. Otherwise, this procedure fails. [2]	rtrv-ctrl-feat Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y The following features have been permanently enabled: Feature Name Partnum Status Quantity TPS 893000101 on 100 EAGLE Product 893007201 on ---- LNP ELAP Configuration 893010901 on ---- LNP ported TNs 893011036 on 384000000 EIR 893012301 on ---- HIPR2 High Rate Mode 893020101 on ---- G-Flex 893021901 on ---- EPAP Data Split 893039801 on ---- The following features have been temporarily enabled: Feature Name Partnum Status Quantity Trial Period Zero entries found. The following features have expired temporary keys: Feature Name Partnum Zero entries found.
15 ☐	Issue the command to retrieve IP security feature key	**rtrv-ctrl-feat:partnum=893400001**
16 ☐	Response to retrieve command is displayed. Note any IP Security Issue that is detected.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y The following features have been enabled: Feature Name Partnum Status Quantity EAGLE OA&M IP Security 893400001 off ---- ********** ******** WARNING IP SECURITY ISSUE DETECTED ******** ********** ** EAGLE OA&M IP Security FAK is not enabled and ON ** ** The SECU_DFLT parameter SSH is set to OFF ** ** One or more of the FTP servers has SECURITY parameter to OFF ** ********** ;
17 ☐	Issue the command to retrieve serial number for this node.	**rtrv-serial-num**

[1] If feature access key outputs "off" for status or does not appear in output the feature is OFF.

[2] If the HIPR2-High-Rate-Mode feature (partnum=893020101) is not activated, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5Gbps is verified. See "Cabling" in Hardware Reference and "Activating the HIPR2 High Rate Mode Feature" in Database Administration - System Management for more information. This activity needs to be performed during a maintenance window.

If the EAGLE is currently running release 46.2, then instruction on page http://www.oracle.com/us/support/licensecodes/tekelec/index.html can be followed to obtain the FAK for "HIPR2 High Rate Mode" (partnum=893020101) feature.

Procedure 2: Health Check Preparation

18 ☐	Response to retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.yy.y System serial number = nt00001659 System serial number is locked. ;
19 ☐	All steps in this procedure were completed.	

3.3 General System Status

Procedure 3: Determining General System Status

STEP #	This procedure examines the general status of all cards in the system by reporting card and system status. Look for unexplained alarms, or other entities listed as 'other'. Any system entities listed as 'other' should be documented, investigated, and explained. Look for unexplained card PST and SST states (i.e. not IS-NR/Active).	
1 ☐	Issue the command to display IMT errors.	**rept-imt-lvl1:r=summary:sloc=1201:eloc=1115**
2 ☐ ☐	Response to IMT report command is displayed. If UHC2 is being executed, verify that large values are not displayed in any highlighted columns.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y ========== SUMMARY REPORT: Totals accumulated from all requested cards Count — Bus A Value — Bus B Value Transmit Packet 0M 0M Transmit Byte 0M 0M Receive Packet 0M 0M Receive Byte 0M 0M Receive Packet with CRC Error 0 0 Receive Packet with Format Error 0 0 Receive Packet with Invalid Length 0 0 Primary Control Receive Error 0 0 Primary Control Transmit Error 0 0 Primary Control Sanity Error 0 0 Violation Error 0 0 CPU Receive FIFO Full 0 0 IMT Receive FIFO Half Full 0 0 CPU Receive FIFO Half Full 0 0 DMA Terminal Count Interrupt 0 0 MSU Retransmitted 0 0 MSU Safety Packet 0 0 ASU Safety Packet 0 0 TSU Safety Packet 0 0 IMT Receive FIFO Full 0 0 SSU Safety Packet 0 0 ---------- ;END OF REPORT ;
3 ☐	Issue the status command for the MUX cards.	**rept-stat-mux**
4 ☐ ☐ ☐ ☐	Response to MUX status command is displayed. Verify that all cards are IS-NR. Record the types of MUX cards displayed (circle all that are applicable): HIPR HIPR2 If upgrade to Rel 46.4 or higher & the source release is 46.3 or prior, then all cards must show HIGH in the BITRATE (ACT) column. Otherwise, this procedure fails. [3]	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y CARD TYPE PST SST AST BITRATE (OPER) BITRATE (ACT) BERT STATUS ---------- 1109 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN 1110 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN 1209 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN 1210 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN 1309 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN 1310 HIPR2 IS-NR Active ----- LOW LOW UNKNOWN Command Completed. ;

[3] If the REPT-STAT-MUX shows BITRATE (ACT) as LOW, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5Gbps is verified. See "Cabling" in Hardware Reference and "Activating the HIPR2 High Rate Mode Feature" in Database Administration - System Management for more information. This activity needs to be performed during a maintenance window.

Procedure 3: Determining General System Status

5 ☐ Issue the report IMT information command.

Repeat for all MUX types recorded in Step 4.

rept-imt-info:report=*XXXX*err

(where report=hiprerr if HIPR cards were detected in step 4;
report=hipr2err is HIPR2 cards were detected in step 4.)

6 ☐ Response to report IMT information command is displayed.

Note: Output abridged for brevity, Actual output varies based on software release and card type.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    XXXX Summary Report: Summed across all requested cards for each bucket

    XXXX Hourly Bucket Statistics

    ============================================================================
    Bucket Low Speed Statistic           BUS A Value  BUS B Value
    ------ -------------------           -----------  -----------
    XX     IMT Rx Packet CRC Error               0            0
           IMT Rx Packet Format Error            0            0
           IMT Rx Violation Error                0            0
           IMT Rx Command Error                  0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0
           IMT Tx FIFO Full                      0            0
           IMT Tx FIFO Half Full                 1            0

           High Speed Statistic          BUS A Value  BUS B Value
           --------------------          -----------  -----------
           IMT Rx Packet CRC Error               0            0
           IMT Rx Disparity Error                0            0
           IMT Rx Sync Lost Error                0            0
           IMT Rx Code Word Error                0            0
           CPU Rx FIFO Full                      0            0
           CPU Rx FIFO Half Full                 0            0
           CPU Rx FIFO Empty Before SOM          0            0
           CPU Rx FIFO Empty Before EOM          0            0
           CPU Rx Packet SOM Before EOM          0            0
           CPU Rx Packet CRC Error               0            0
           DMA terminal count                    0            0
           CPU Tx Buffer EOB                     0            0
           CPU Tx Buffer Full                    0            0
           CPU Tx Buffer Half Full               9            9
           IMT Bypass FIFO Full                  0            0
           IMT Bypass FIFO Half Full             0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0

           Misc Speed Statistic          BUS A Value  BUS B Value
           --------------------          -----------  -----------
           Shelf ID UART Framing Error           0            0
           Shelf ID UART Overrun Error           0            0

;
```

7 ☐ Issue the command to clear IMT errors.

clr-imt-stats:all=yes

8 ☐ Response to clear IMT stats command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    clr-imt-stats:all=yes
    Command entered at terminal #X.
;
    Eaglestp 98-03-09 14:09:41 EST Rel XX.X.X-x.x.x
    Clear IMT Statistics command(s) issued...
;
```

Procedure 3: Determining General System Status

9 ☐	Issue the command to report system status.	**rept-stat-sys**
10 ☐	Response to system status command is displayed. Record the Software Release: REL. _____ Record any card types that are not IS-NR. Investigate and record cards whose status cannot be explained. Card Type: _____ Card Type: _____ Record the number of IS-NR SS7IPGW and IPGWI cards. Verify the IP System is not deploying both SS7IPGW and IPGWI Cards by ensuring either SS7IPGW or IPGWI has 0 cards IS-NR. SS7IPGW Cards: _____ IPGWI Cards: _____	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.X.X-x.x.x MAINTENANCE STATUS REPORT Maintenance Baseline established. Routing Baseline established. SCCP Baseline established. ALARMS: CRIT= 0 MAJR= X MINR= X INH= 0 OAM 1113 IS-NR Standby INH= 0 OAM 1115 IS-NR Active INH= 0 LIM CARD IS-NR= X Other= X INH= 0 X25 CARD IS-NR= X Other= X INH= 0 SCCP CARD IS-NR= X Other= X INH= 0 GLS CARD IS-NR= X Other= X INH= 0 SS7IPGW CARD IS-NR= X Other= X INH= 0 IPGWI CARD IS-NR= X Other= X INH= 0 CLOCK IS-NR= X Other= X INH= 0 IMT IS-NR= X Other= X SLK IS-NR= XX Other= X INH= 0 DLK IS-NR= X Other= X INH= 0 LINK SET IS-NR= XX Other= X INH= 0 SS7 DPC IS-NR= XX Other= X X25 DPC IS-NR= X Other= X CLUST DPC IS-NR= X Other= X XLIST DPC IS-NR= X Other= X DPC SS Actv = X Other= X SEAS SS IS-NR= X Other= X SEAS X25 IS-NR= X Other= X INH= 0 LSMS SS IS-NR= X Other= X LSMS Q.3 IS-NR= X Other= X INH= 0 TERMINAL IS-NR= X Other= XX INH= 0 Command Completed. ;
11 ☐	Issue the command to report signaling link status.	**rept-stat-slk**
12 ☐	Response to report signaling links status command is displayed.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.X.X-x.x.x SLK LSN CLLI PST SST AST 1201,A ls1 ---------- IS-NR Avail ----- 1201,B ls4 ---------- OOS-MT Unavail ----- 1202,A ls1 ---------- IS-NR Avail ----- 1202,B ls1 ---------- IS-NR Avail ----- 1203,A ls1 ---------- IS-NR Avail ----- 1203,B ls2 ---------- IS-NR Avail ----- 1204,A ls4 ---------- IS-NR Avail ----- 1204,B ls3 ---------- IS-NR Avail ----- 1205,A ls5 ---------- IS-NR Avail ----- 1205,A1 ls5 ---------- IS-NR Avail ----- 1205,A2 ls5 ---------- IS-NR Avail ----- 1205,A3 ls5 ---------- IS-NR Avail ----- 1205,B3 ls5 ---------- IS-NR Avail ----- 1206,A ls6 ---------- IS-NR Avail ----- 1206,B ls6 ---------- IS-NR Avail ----- 1207,A ls7 ---------- IS-NR Avail ----- 1207,B ls7 ---------- IS-NR Avail ----- 1211,A ls11 ---------- IS-NR Avail ----- 1211,B ls11 ---------- IS-NR Avail ----- 1301,A ls1301i0 ---------- IS-NR Avail ----- 1301,B ls1301i0 ---------- IS-NR Avail ----- 1302,A ls1302i0 ---------- IS-NR Avail ----- 1302,B ls1302i0 ---------- IS-NR Avail ----- 1303,A ls1303i0 ---------- IS-NR Avail ----- 1303,B ls1303i0 ---------- IS-NR Avail ----- 1304,A ls1304i0 ---------- IS-NR Avail ----- 1304,B ls1304i0 ---------- IS-NR Avail ----- 1311,A ls1311i0 ---------- IS-NR Avail ----- 1311,B ls1311i0 ---------- IS-NR Avail ----- 1311,A1 ls1311i0 ---------- IS-NR Avail ----- 1311,B1 ls1311i0 ---------- IS-NR Avail ----- Command Completed. ;
13 ☐	Issue the command to retrieve card provisioning.	**rtrv-card**

14 ☐ Response to retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   TYPE      APPL     LSET NAME   LINK SLC LSET NAME   LINK SLC
    1101   ENET      IPSG     stpa220a    A    0   sc4a224a    B    0
                              sc1a221a    A1   0   sc5a225a    B1   0
                              sc2a222a    A2   0   sc6a226a    B2   0
                              sc3a223a    A3   0   sc7a227a    B3   0
                              stpa027i    A4   0   sp1a028i    B4   0
                              sc1a028i    A5   0   sp2a029i    B5   0
                              sc2a029i    A6   0   sp3a030i    B6   0
                              sc3a030i    A7   0   sp4a031i    B7   0
    1102   TSM       GLS
    1103   DSM       VSCCP
    1105   ENET      IPSG     stpa220a    A    1   sc4a224a    B    1
                              sc1a221a    A1   1   sc5a225a    B1   1
                              sc2a222a    A2   1   sc6a226a    B2   1
                              sc3a223a    A3   1   sc7a227a    B3   1
                              stpa027n    A4   1   sp1a028n    B4   1
    1106   LIME1     CCS7ITU  sc6a033i    A    0
    1107   DCM       IPGWI    sc5a032i    A    1
    1108   MCPM      MCP
    1111   ENET      IPSG     lg1111a00   A    0   lg1111i01   A1   0
                              lg1111n02   A2   0
    1112   ENET      IPSG     lg1111a00   A    1   lg1111i01   A1   1
                              lg1111n02   A2   1
    1113   E5-MCAP   OAM
    1114   TDM-A
    1115   E5-MCAP   OAM
    1116   TDM-B
    1117   MDAL
    1201   ENET      IPSG     stpa220a    A    3   sc4a224a    B    3
                              sc1a221a    A1   3   sc5a225a    B1   3
                              sc2a222a    A2   3   sc6a226a    B2   3
                              sc3a223a    A3   3   sc7a227a    B3   3
                              stpa027i    A4   3   sp1a028i    B4   3
                              sc1a028i    A5   3   sp2a029i    B5   3
                              sc2a029i    A6   3   sp3a030i    B6   3
                              sc3a030i    A7   3   sp4a031i    B7   3
                              stpa027n    A8   3   sp1a028n    B8   3
                              sc1a028n    A9   3   sp2a029n    B9   3
                              sc2a029n    A10  3   sp3a030n    B10  3
                              sc3a030n    A11  3   sp4a031n    B11  3
    1203   LIMT1     SS7ANSI  ls3307a00   A    0   ls3307a04   B    0
                              ls3307a00   A1   1   ls3307a04   B1   1
                              ls3307a00   A2   2   ls3307a04   B2   2
                              ls3307a00   A3   3   ls3307a04   B3   3
                              ls3307a08   A4   0   ls3307a12   B4   0
                              ls3307a08   A5   1   ls3307a12   B5   1
                              ls3307a08   A6   2   ls3307a12   B6   2
                              ls3307a08   A7   3   ls3307a12   B7   3
                              ls3307a16   A8   0   ls3307a20   B8   0
                              ls3307a16   A9   1   ls3307a20   B9   1
                              ls3307a16   A10  2   ls3307a20   B10  2
                              ls3307a16   A11  3   ls3307a20   B11  3
                              ls3307a24   A12  0   ls3307a28   B12  0
                              ls3307a24   A13  1   ls3307a28   B13  1
                              ls3307a24   A14  2   ls3307a28   B14  2
                              ls3307a24   A15  3   ls3307a28   B15  3
    1205   DCM       IPLIMI   sc4a031i    A    0   sc4a031n    B    0
                              sc4a031i    A1   1   sc4a031n    B1   1
    1206   DCM       IPLIMI   sc4a031i    A    8   sc4a031n    B    8
                              sc4a031i    A1   9   sc4a031n    B1   9
    1207   LIMATM    ATMANSI  sc8a228a    A    1   sc9a229a    B    1
    1208   ENET      IPSG     lg2305a00   A    7   gr2305i01   A1   7
                              gr2305n02   A2   7
    1211   ENET      IPSG     stpa220a    A    4   sc4a224a    B    4
    1212   MCPM      MCP
    1213   LIME1     CCS7ITU  ls1213i00   A    0   lr1213i04   B    0
                              ls1213i01   A1   0   lr1213i05   B1   0
    1215   ENET      IPSG     lg1111a00   A    2   lg1111i01   A1   2
                              lg1111n02   A2   2
    1216   ENET      IPSG     lg1111a00   A    3   lg1111i01   A1   3
                              lg1111n02   A2   3
    1217   DSM       VSCCP
;
```

15 ☐ Issue the command to report card status.

```
rept-stat-card
```

Procedure 3: Determining General System Status

16 ☐ Response to card status command is displayed.

☐ Look for the slot ID of any IS-ANR or OOS-MT status cards. Ensure that any cards in this state can be explained.

☐ Record the card locations of the MASPs:

Active MASP _____
Standby MASP _____

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   134-060-000  DCM       IPGHC      IS-NR          Active     -----
    1102   134-060-000  LIME1     SS7HC      IS-NR          Active     -----
    1103   134-060-000  LIME1     SS7ML      IS-NR          Active     -----
    1104   134-060-000  LIMDS0    SS7ML      IS-NR          Active     -----
    1105   134-060-000  MCPM      MCP        IS-NR          Active     -----
    1106   134-060-000  LIMATM    ATMANSI    IS-NR          Active     -----
    1107   134-060-000  DCM       IPGHC      IS-NR          Active     -----
    1108   134-060-000  DSM       SCCPHC     IS-NR          Active     -----
    1109   134-060-000  HIPR      HIPR       IS-NR          Active     -----
    1109   134-060-000  HIPR      HIPR       IS-NR          Active     -----
    1111   -----------  DSM       VSCCP      OOS-MT         Isolated   -----
    1112   134-060-000  TSM       GLSHC      IS-NR          Active     -----
    1113   134-060-000  E5MCAP    OAMHC      IS-NR          Standby    -----
    1114   -----------  E5TDM                IS-NR          Active     -----
    1115   134-060-000  E5MCAP    OAMHC      IS-NR          Active     -----
    1116   -----------  E5TDM                IS-NR          Active     -----
    1117   -----------  E5MDAL               IS-NR          Active     -----
    1201   134-060-000  DCM       IPLIMI     IS-NR          Active     -----
    Command Completed.
;
```

17 ☐ Issue the command to report card status.

```
rept-stat-card:loc=XXXX:mode=full
```
(where XXXX is the slot ID of any card that is IS-ANR or OOS-MT in step 16)

18 ☐ Response to card status command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    CARD   VERSION      TYPE      APPL       PST            SST        AST
    XXXX   -----------  LIMDS0    SS7ANSI    OOS-MT         Isolated   ----
      ALARM STATUS       = **  0013 Card is isolated from the system
             GPL version = -----------
      IMT BUS A          = -----
      IMT BUS B          = -----
      CLOCK A            = ----
      CLOCK B            = ----
      CLOCK I            = ----
      MBD BIP STATUS     = ----
      DB STATUS          = ----
      DBD MEMORY SIZE    = ----
      HW VERIFICATION CODE = ----
      SLK A   PST        = OOS-MT          LS=e3e4        CLLI=-----------
      SLK B   PST        = OOS-MT          LS=e3e4        CLLI=-----------
      SNM    TVG RESULT  = 24 hr: ------, 5 min: ------
      SCCP   TVG RESULT  = 24 hr: ------, 5 min: ------
      EROUTE TVG RESULT  = 24 hr: ------, 5 min: ------
      SENTINEL SOCKET A  = INACTIVE
    Command Completed.
;
```

19 ☐ Repeat steps 17 – 18 for all cards that were IS-ANR or OOS-MT in step 16.

20 ☐ Issue the command to display the version of the GPLs running on the system.

```
rept-stat-gpl:display=all
```

Procedure 3: Determining General System Status

21 ☐

Response to GPL status command.

If the target release is 46.7 or higher and any card displayed is running SCCPHC, SIPHC, DEIRHC or ENUMHC GPL, this step fails. Continue with this health check to identify all failures. However, failure of this step will also cause Procedure 19 to fail with obsolete CARD/GPL.

NOTE: Cards running those GPLs need to be converted to run corresponding 64 bits GPLs. Follow conversion procedure listed under GPL Management Procedures in "Database Administration - System Management User's Guide" document to convert cards to run 64 bit GPLs.

```
    eaglestp YY-MM-DD hh:mm:ss zzza EAGLE XX.x.x-YY.y.y
    GPL Auditing  ON

    GPL         CARD      RUNNING           APPROVED      TRIAL
    OAMHC69     1113      145-025-000       145-025-000   -----------  *
            BLDC32        145-023-000       145-023-000   145-023-000
    OAMHC69     1115      145-025-000       145-025-000   -----------  *
            BLDC32        145-023-000       145-023-000   145-023-000
    HIPR2       1109      145-002-000       145-002-000   145-002-000
    HIPR2       1110      145-002-000       145-002-000   145-002-000
    HIPR2       1209      145-002-000       145-002-000   145-002-000
    HIPR2       1210      145-002-000       145-002-000   145-002-000
    SFAPP       1107      145-025-000       145-025-000   145-025-000
            BLSLC64       145-023-000       145-023-000   145-023-000
    SFAPP       1202      145-025-000       145-025-000   145-025-000
            BLSLC64       145-023-000       145-023-000   145-023-000
    SS7HC       1101      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSHC       1104      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1204      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1207      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1208      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1213      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1214      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1215      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1216      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1217      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    IPSG        1218      145-025-000       145-025-000   145-025-000
            BLMCAP        145-023-000       145-023-000   145-023-000
    SCCP64      1111      145-025-000       145-025-000   145-025-000
            BLSLC64       145-023-000       145-023-000   145-023-000
    SCCP64      1211      145-025-000       145-025-000   145-025-000
            BLSLC64       145-023-000       145-023-000   145-023-000
    MCPHC69     1201      145-025-000       145-025-000   145-025-000
            BLDC32        145-023-000       145-023-000   145-023-000
    MCPHC69     1203      145-025-000       145-025-000   145-025-000
            BLSL932       145-023-000       145-023-000   145-023-000
    IPSHC69     1105      145-025-000       145-025-000   145-025-000
            BLSL932       145-023-000       145-023-000   145-023-000
    IPSHC69     1108      145-025-000       145-025-000   145-025-000
            BLSL932       145-023-000       145-023-000   145-023-000

    Command Completed.
;
```

22 ☐

Issue the command to retrieve the shelves

```
rtrv-shlf
```

23 ☐

Response to retrieve shelf command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y
    SHELF DISPLAY
    FRAME SHELF     TYPE
      1     1       CONTROL
      1     2       EXTENSION
;
```

24 ☐

Issue the command to retrieve STP.

```
rtrv-stp
```

25 ☐

Response to retrieve STP command is displayed.

Note: output abridged for brevity. This output displays information for one frame only.

```
    eaglestp YY-MM-DD hh:mm:ss zzza EAGLE XX.x.x-YY.y.y

    Card  Part Number  Rev Serial Number  Type     DB      APPL     GPL Version
    ----  -----------  --- -------------  ----     --      ----     -----------
    1101  870-2970-01  L   10214192225    LIME1    2048M   SS7HC    145-025-000
    1102  Empty
    1103  Empty
    1104  870-2971-01  TG  10217052393    IPSM     2048M   IPSHC    145-025-000
    1105  7094646      17  10217302123    IPSM     16384M  IPSHC69  145-025-000
    1106  Empty
    1107  7094646      17  10217322156    SLIC     16384M  SFAPP    145-025-000
    1108  BIP Data inv                    IPSM     16384M  IPSHC69  145-025-000
    1109  870-2872-02  F   10214372130                     HIPR2    145-002-000
    1110  870-2872-02  F   10214372180                     HIPR2    145-002-000
    1111  7094646      17  10217302213    DSM      16384M  SCCP64   145-025-000
    1112  Empty
    1113  870-2903-02  B   10212225164    E5MCAP   4096M   OAMHC69  145-025-000
    1114  TDM
    1115  870-2903-01  N   10208345081    E5MCAP   4096M   OAMHC69  145-025-000
    1116  TDM
    1117  E5MDAL
    1118  Empty

    1201  870-3089-01  G   10214025308    MCPM     4096M   MCPHC69  145-025-000
```

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		1202 7094646 17 10217322153 SLIC 16384M SFAPP 145-025-000 1203 7094646 19 10217442309 MCPM 16384M MCPHC69 145-025-000 1204 870-2971-01 TD 10216112120 ENETB 2048M IPSG 145-025-000 1205 Empty 1206 Empty 1207 BIP Data inv ENETB 2048M IPSG 145-025-000 1208 870-2971-01 C 10210255063 ENETB 2048M IPSG 145-025-000 1209 870-2872-01 B 10209125128 HIPR2 145-002-000 1210 870-2872-02 F 10214372120 HIPR2 145-002-000 1211 7094646 17 10217322039 SLIC 16384M SCCP64 145-025-000 1212 Empty 1213 870-2971-01 M 10212465071 ENETB 2048M IPSG 145-025-000 1214 870-2971-01 N 10213145384 ENETB 2048M IPSG 145-025-000 1215 870-2971-01 N 10213415156 ENETB 2048M IPSG 145-025-000 1216 870-2971-01 C 10210255065 ENETB 2048M IPSG 145-025-000 1217 870-2971-01 TE 10216222178 ENETB 2048M IPSG 145-025-000 1218 870-2971-01 G 10211257067 ENETB 2048M IPSG 145-025-000 ;
26 ☐	Issue the command to retrieve STP.	**RTRV-STP:GPL=IPSHC**
27 ☐	Response to retrieve STP command is displayed. ☐ Note if upgrading to 46.5 or higher and any P/N displayed is 870-2877-xx. If so, at the end of this health check, contact the My Oracle Support.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x -YY.y.y Card Part Number Rev Serial Number Type DB APPL GPL Version ---- ----------- --- ------------- ---- -- ---- ----------- 1105 870-2877-02 B 10208467329 IPSM 2048M IPSHC 140-022-000 1205 870-2971-01 N 10213315392 IPSM 2048M IPSHC 140-022-000 1215 870-2971-01 N 10213415158 IPSM 2048M IPSHC 140-022-000 1305 870-2877-02 B 10208507052 IPSM 2048M IPSHC 140-022-000 Command Completed. ;
28 ☐	Issue the command to retrieve event log.	**rtrv-log:dir=bkwd:num=100:mode=full:edate=*yymmdd*:type=alarm:slog=act** *(where yymmdd is yesterday's date.)*
29 ☐	Response to retrieve log command is displayed. ☐ If report terminates without the "end of log reached" displayed, continue to next step. Otherwise, go to step 32.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Card 1115; SYS REL= XX.x.x-YY.y.y; STP CLLI= eaglestp; Timezone= EST ****02-05-27 21:29:47**** 5119.0912 SYSTEM Dynamic database is now consistent ****02-05-27 21:19:47**** 9703.0911 ** SYSTEM Dynamic database is inconsistent Card 2304 ****02-05-27 21:09:42**** 9280.0912 SYSTEM Dynamic database is now consistent ****02-05-27 20:59:43**** 8850.0009 CARD 1115 OAMHC MASP became active ****02-05-27 19:56:21**** 6209.0106 IMT BUS B IMT Bus alarm cleared ****02-05-27 19:56:19**** 6208.0107 * IMT BUS B Minor IMT failure detected ****02-05-27 19:22:56**** 9829.0048 * TERMINAL 8 Terminal failed ****02-05-27 19:22:56**** 9828.0046 TERMINAL 7 Terminal enabled **UAM Report terminated - end of log reached** END OF LOG REPORT. ;
30 ☐	Issue the command to retrieve the next set of events.	**rtrv-log:next=500**

Procedure 3: Determining General System Status

31 ☐ Response to retrieve log command is displayed.

☐ If report terminates without the "end of log reached" display, the command can be repeated.[4]

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card 1115; SYS REL= XX.x.x-YY.y.y; STP CLLI=   eaglestp; Timezone= EST

    8978.0106    IMT BUS B                IMT Bus alarm cleared
    ****02-05-27  15:02:01****
    8960.0107  * IMT BUS B                Minor IMT failure detected
    ****02-05-27  13:59:06****
    6342.0912    SYSTEM                   Dynamic database is now consistent
    ****02-05-27  13:54:18****
    6152.0085    IP7CONN ipi2106b7m2pa    IP Connection Available
    ****02-05-27  13:54:18****
    6131.0536  * IP7CONN ipi2106b7m2pa    IP Connection Excess Retransmits
    ****02-05-27  13:49:01****
    ****02-05-27  00:58:37****
    8789.0311    DPC    2-047-2           DPC is allowed
    ****02-05-27  00:58:37****
    8787.0314    DPC    2-047-2           Route is allowed
    ****02-05-27  00:58:37****
    8786.0311    DPC    2-045-2           DPC is allowed
    ****02-05-27  00:58:37****
    8785.0314    DPC    2-045-2           Route is allowed
    UAM Report terminated - end of log reached
    END OF LOG REPORT.
;
```

32 ☐ Issue the command to retrieve the log for the standby.

Repeat steps 30 – 31 until the "end of log reached" message displays.

```
rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=alarm:slog=stb
```
(Where yymmdd is yesterday's date.)

33 ☐ Issue the retrieve log command for the UIM log types.

Repeat steps 30 – 31 until the "end of log reached" message displays.

```
rtrv-log:dir=bkwd:num=100:mode=full:edate=yymmdd:type=uim:slog=act
```
(Where yymmdd is yesterday's date.)

34 ☐ Issue the command to retrieve the STP power level.

```
rtrv-stp:display=power
```

35 ☐ Response to retrieve power frame command is displayed.

☐ Note any of the power threshold numbers prefixed with a "+" sign.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y

             Power Threshold          Power Consumption
    Frame   (Amps)    (Watts)         (Amps)    (Watts)
    -----   ----------------         ----------------
    CF00       45        2160          37.71       1810
    EF00       40        1920          33.99       1631
    EF01       35        1680          10.00        480
    EF04      +30       +1440          14.06        675

    Command Completed.
;
```

36 ☐ Issue the command to retrieve the threshold alarm levels.

```
rtrv-th-alm
```

37 ☐ Response to retrieve threshold alarm command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Thermal Alarm Level 1:                        92%
    Thermal Alarm Level 2:                        100%
    SCCP TPS Threshold:                           80%
    SCCP Calculation Method:                      N
    LNP TN  DB Alarm Level 1:                     80%
    LNP TN  DB Alarm Level 2:                     95%
    GTT SCCP Service Alarm Level 1:               10%
    GTT SCCP Service Alarm Level 2:               20%
    Non-GTT SCCP Service Alarm Level 1:           10%
    Non-GTT SCCP Service Alarm Level 2:           20%
    SCCP Service Alarm Level 1 Interval:          0
    SCCP Service Alarm Level 2 Interval:          0
    IMT Bus Combined Utilization Alarm Level 1: 70%
    IMT Bus Combined Utilization Alarm Level 2: 80%
    IMT Bus Congestion Alarm Level 1:             70%
    IMT Bus Congestion Alarm Level 2:             80%
    RTRV-TH-ALM: MASP B - COMPLTD.
;
```

38 ☐ Issue the command to retrieve the site ID.

```
rtrv-sid
```

[4] The amount of alarms and UIMs during a 24-period can vary greatly depending on the size and how tightly configured and controlled the system is. Retrieving additional log entries may be beneficial.

Procedure 3: Determining General System Status

39 ☐ Response to retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
       PCA             PCI          PCN                 CLLI              PCTYPE
       200-080-200     7-080-7      7-080-7-aa          tklc9051301       ANSI
                     s-7-080-7    s-7-080-7-aa

       CPCA
       200-081-000

       CPCI (INP)
       7-082-0         s-7-082-0

       CPCN (INP)
       7-082-0-aa        7-082-0-bc      s-7-082-0-aa      s-7-082-0-bc


       CPCA (GFLEX)
       200-085-000

       CPCI (GFLEX)
       7-085-0         s-7-085-0

       CPCN (GFLEX)
       7-085-0-aa        7-085-0-bc      s-7-085-0-aa      s-7-085-0-bc


       CPCA (MNP)
       200-086-000

       CPCI (MNP)
       7-086-0         s-7-086-0

       CPCN (MNP)
       7-086-0-aa        7-086-0-bc      s-7-086-0-aa      s-7-086-0-bc
;
```

40 ☐ Issue the command to retrieve SCTP associations.

```
rtrv-assoc:display=all
```

41 ☐ The response to the retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
                    CARD  IPLNK
    ANAME           LOC   PORT  LINK ADAPTER LPORT RPORT OPEN ALW
    iplma1103a2m2pa 1103  B     A2   M2PA    2175  2163  YES  YES
    iplma1103a3m2pa 1103  B     A3   M2PA    2176  2164  YES  YES
    iplma1103b2m2pa 1103  B     B2   M2PA    2179  2167  YES  YES
    iplma1103b3m2pa 1103  B     B3   M2PA    2180  2168  YES  YES
    iplma2116am2pa  2116  A     A    M2PA    3186  3166  YES  YES
    iplma2116a1m2pa 2116  A     A1   M2PA    3187  3167  YES  YES
    iplma2116a2m2pa 2116  A     A2   M2PA    3188  3168  YES  YES
    iplma2116a3m2pa 2116  A     A3   M2PA    3189  3169  YES  YES
    iplma2116bm2pa  2116  B     B    M2PA    3190  3170  YES  YES
    iplma2116b1m2pa 2116  B     B1   M2PA    3191  3171  YES  YES
    iplma2116b2m2pa 2116  B     B2   M2PA    3192  3172  YES  YES
    iplma2116b3m2pa 2116  B     B3   M2PA    3193  3173  YES  YES
    g1101asua400a   1101  A     A    SUA     7300  7300  YES  YES
    g1101asua500a   1101  A     A    SUA     2400  2400  YES  YES
    g1102asua400a   1102  A     A    SUA     2300  2300  YES  YES
    g1102asua500a   1102  A     A    SUA     2400  2400  YES  YES

    IP Appl Sock/Assoc table is (16 of 4000) 1% full

;
```

42 ☐ Issue the command to retrieve T1 ports.

```
rtrv-t1
```

43 ☐ The response to the retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
          T1
    LOC   PORT  ENCODE  T1TSEL    FRAMING  LL   CHANBRDG
    1304  3     B8ZS    LINE      ESF      133  ------    CHAN    ----
    1304  4     B8ZS    LINE      ESF      133  ------    CHAN    ----
    2203  5     B8ZS    LINE      ESF      133  ------    CHAN    ----
    2203  6     B8ZS    LINE      ESF      133  ------    CHAN    ----
    2314  7     B8ZS    LINE      ESF      133  ------    CHAN    ----
    2314  8     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3113  1     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3113  2     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3214  3     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3214  4     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3307  5     B8ZS    LINE      ESF      133  ------    CHAN    ----
    3307  6     B8ZS    LINE      ESF      133  ------    CHAN    ----
    4104  7     B8ZS    LINE      ESF      133  ------    CHAN    ----
    4104  8     B8ZS    LINE      ESF      133  ------    CHAN    ----
    1107  1     B8ZS    LINE      ESF      133  ------    CHAN    ----
    1107  2     B8ZS    LINE      ESF      133  ------    CHAN    ----

;
```

44 ☐ Issue the command to retrieve T1 ports.

```
rtrv-e1
```

45 The response to the retrieve command is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y
          E1                                                    LINK    MINSU
    LOC   PORT  CRC4  CAS  ENCODE  E1TSEL    SI  SN  CHANBRDG  CLASS   RATE
```

☐		1203 1 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1203 2 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1203 3 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1203 4 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1207 2 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1207 3 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1208 3 ON OFF HDB3 LINE 0 0 ------ CHAN ---- 1208 4 ON OFF HDB3 LINE 0 0 ------ CHAN ---- ;
46 ☐	Issue the command to report IP TPS usage.	**rept-stat-iptps**
47 ☐	The response to the status command is displayed.	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y IP TPS USAGE REPORT THRESH CONFIG TPS PEAK PEAKTIMESTAMP --- LSN ls2206i00 100% 2400 TX: 0 109 10-03-05 10:41:51 RCV: 0 0 00-00-00 00:00:00 ls2206i01 100% 2400 TX: 0 84 10-03-05 10:41:51 RCV: 0 0 00-00-00 00:00:00 ls2206i02 100% 2400 TX: 0 85 10-03-05 10:41:51 RCV: 0 0 00-00-00 00:00:00 ls2206i03 100% 2400 TX: 0 84 10-03-05 10:41:51 RCV: 0 0 00-00-00 00:00:00 lg1111a00 100% 13280 TX: 0 2883 10-03-08 15:26:06 RCV: 0 0 00-00-00 00:00:00 lg2305a00 100% 13280 TX: 0 374 10-03-08 17:19:36 RCV: 0 0 00-00-00 00:00:00 lg1111i01 100% 13280 TX: 0 2883 10-03-08 15:14:06 RCV: 0 0 00-00-00 00:00:00 lg1315i00 100% 5000 TX: 0 9 10-03-12 20:10:36 RCV: 0 0 00-00-00 00:00:00 lg5315i00 100% 380 TX: 0 0 00-00-00 00:00:00 RCV: 0 0 00-00-00 00:00:00 lg1111n02 100% 13280 TX: 0 2883 10-03-08 15:19:06 RCV: 0 0 00-00-00 00:00:00 lg1316n00 100% 5000 TX: 0 9 10-03-12 20:10:36 RCV: 0 0 00-00-00 00:00:00 sc1a221a 100% 3200 TX: 1 2883 10-03-08 15:54:36 RCV: 0 2920 10-03-08 18:09:21 sc3a223a 100% 3200 TX: 1 2972 10-03-08 18:39:06 RCV: 0 2920 10-03-08 17:30:21 sc3a030i 100% 3200 TX: 1 2724 10-03-08 17:17:06 RCV: 0 2724 10-03-08 16:44:21 --- Command Completed. ;
48 ☐	Issue the command to generate a measurements report.	**rept-meas:enttype=stp:type=mtcd**
49a ☐	If measurement collection is ON, the response to the report command is displayed.	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP REPORT PERIOD: LAST REPORT INTERVAL: YY-MM-DD, 00:00:00 THROUGH 23:59:59 STP-MTCD MEASUREMENTS These measurements are from 10-03-15, 00:00:00 through 23:59:59. ORIGMSUS = 228575718, TRMDMSUS = 204657972, THRSWMSU = 167565746, MTPRESTS = 0, DTAMSULOST = 0, MSINVDPC = 0, MSINVSIO = 0, OMSINVDPC = 0, MSINVLNK = 0, MSINVSIF = 0, MSNACDPC = 78, MSINVSLC = 0, GTTPERFD = 72959128, GTTUN0NS = 12096, GTTUN1NT = 360, MSSCCPFL = 0, MSULOST1 = 0, MSULOST2 = 0, MSULOST3 = 0, MSULOST4 = 0, MSULOST5 = 0, DRDCLFLR = 4207376, DURLKOTG = 4207370, CRSYSAL = 486, MASYSAL = 23558, MISYSAL = 2863, XLXTSPACE = 0, XLXTELEI = 0, TTMAPPF = 0, MSUDSCRD = 0, OVSZMSG = 0, GFGTMATCH = 3888000, GFGTNOMCH = 0, GFGTNOLKUP = 0, MSUSCCPFLR = 0, MSSCCPDISC = 0, MSIDPNOMCH = 0, MSIDPMATCH = 0, MSULOST6 = 0, SCCPLOOP = 0 ;
49b ☐	If measurement collection is OFF, the response to the report command is displayed. Note: This parameter (chg-meas:collect) does not affect measurements collection and generation for the Measurements Platform. It only activates or	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y TYPE OF REPORT: DAILY MAINTENANCE MEASUREMENTS ON STP REPORT PERIOD: LAST REPORT INTERVAL: YY-MM-DD, 00:00:00 THROUGH 23:59:59 STP-MTCD MEASUREMENTS **Measurement data are not current.** ;

Procedure 3: Determining General System Status

	deactivates the reporting of scheduled measurements to the UI for the Measurements Platform.	
50 ☐	All steps in this procedure were completed.	

3.4 Report System Troubles

This procedure examines non-network system troubles that should be corrected. Some examples of non-network troubles are:

- Terminal Failed
- Card has bad A or B system clock
- Card is not running approved GPL
- LIM denied SCCP service
- IMT Bus A failed

If there are any non-network troubles, which cannot be resolved, they should be documented.
In some cases, non-network troubles may not be correctable. For example, a terminal port connected to a modem will report Terminal Failed if the modem is not dialed in.

The procedure will also examine the devices that have their alarms inhibited. In some cases, these alarm inhibits may need to be cleared.

Procedure 4: Reporting System Troubles

STEP #	This procedure examines non-network system troubles that should be corrected (See examples above.)	
1 ☐	Issue the command to report trouble status.	**rept-stat-trbl:display=timestamp**
2 ☐	Response to trouble status command is displayed. Record any non-network troubles. Trouble _____	eaglestp 98-03-09 14:09:29 EST Rel XX.X.X Searching devices for alarms... ; eaglestp 98-03-09 14:09:30 EST Rel XX.X.X SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 5728.0048 * TERMINAL 14 Terminal failed 98-03-09 10:05:36 5729.0048 * TERMINAL 15 Terminal failed 98-03-09 10:05:36 98-03-09 13:57:40 5731.0013 ** CARD 1214 SS7ANSI Card is isolated from the system 98-03-09 13:57:40 5604.0013 ** CARD 1111 SCCP Card is isolated from the system 98-03-09 13:57:40 5732.0236 ** SLK 1214,A lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5733.0236 ** SLK 1214,B lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5734.0236 ** SLK 1106,A lsnx1 REPT-LKF: not aligned 98-03-09 13:57:40 5735.0318 ** LSN lsn1214 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 5736.0318 ** LSN lsnx1 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 Command Completed. ;
3 ☐	Issue the command to report inhibited alarms	**rept-stat-alm:display=inhb**
4	Response to alarm status command is displayed.	eaglestp 98-03-09 14:10:29 EST Rel XX.X.X rept-stat-alm:display=inhb Command entered at terminal #4. ALARM TRANSFER= RMC ALARM MODE CRIT= AUDIBLE MAJR= AUDIBLE MINR= SILENT ALARM FRAME 1 CRIT= 2 MAJR= 4 MINR= 0 ALARM FRAME 2 CRIT= 0 MAJR= 0 MINR= 0 ALARM FRAME 3 CRIT= 0 MAJR= 0 MINR= 0 ALARM FRAME 4 CRIT= 0 MAJR= 0 MINR= 0 ALARM FRAME 5 CRIT= 0 MAJR= 0 MINR= 0 ALARM FRAME 6 CRIT= 0 MAJR= 0 MINR= 0 ALARM FRAME OAP CRIT= 0 MAJR= 0 MINR= 0 PERM. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0 TEMP. INH. ALARMS CRIT= 0 MAJR= 0 MINR= 0 ACTIVE ALARMS CRIT= 2 MAJR= 4 MINR= 0 TOTAL ALARMS CRIT= 2 MAJR= 4 MINR= 0 ALARM INHIBIT REPORT --- DEVICE ELEMENT DURATION ALM INH LVL CUR ALM LVL --- --- --- --- --- CARD 1101 PERM MINR MAJR+ Command Completed. ;
5 ☐	All steps in this procedure were completed.	

3.5 Verifying Database Status

Procedure 5: Verifying Database Status

STEP #	This procedure verifies that your database is coherent, not in transition and that all cards are running at the same database level.	
1 ☐	Perform this step only if on-site personnel are available. If no personnel are available then go to step 2.	**Insert a current release system removable media into the system.** **For E5-MASP,insert a thumbdrive USB in the Active MASP's latched USB port.**
2 ☐	Issue the command to report database status.	**rept-stat-db:display=all**
3 ☐	Response to database command is displayed if running E5 MASP. (OAM-USB status is only shown for the active MASP) Examine the columns labeled C, T and LEVEL output by this command. All entries in C should be coherent which is indicated by a Y. Verify entries in column 'T' show 'N', which indicates that the database is not in transition except the OAM-RMV, OAM-USB, and TDM-BKUP, which show a dash. All entries in LEVEL are numeric values. All entries in this column should be the same value except TDM-BKUP, OAM-RMV and OAM-USB.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y DATABASE STATUS: >> OK << TDM 1114 (STDBY) TDM 1116 (ACTV) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP - -------- -------------------- - -------- -------------------- FD BKUP Y YYY YY-MM-DD HH:MM:SS TTTT Y YYY YY-MM-DD HH:MM:SS TTTT FD CRNT Y XXX Y XXX MCAP 1113 MCAP 1115 - -------- - -------- RD BKUP - - - - Y ZZZ YY-MM-DD HH:MM:SS TTTT USB BKP - - - - - - - - CARD/APPL LOC C T LEVEL TIME LAST UPDATE EXCEPTION --------- ---- - - ---------- ----------------- -------------- SCCP 1101 Y N XXX YY-MM-DD HH:MM:SS - SCCP 1102 Y N XXX YY-MM-DD HH:MM:SS - GLS 1103 Y N XXX YY-MM-DD HH:MM:SS - GLS 1104 Y N XXX YY-MM-DD HH:MM:SS - SS7GX25 1105 Y N XXX YY-MM-DD HH:MM:SS - OAM-RMV 1113 - - - - - - TDM-CRNT 1114 Y N XXX YY-MM-DD HH:MM:SS - TDM-BKUP 1114 Y - YYY YY-MM-DD HH:MM:SS DIFF LEVEL OAM-RMV 1115 Y - ZZZ YY-MM-DD HH:MM:SS DIFF LEVEL OAM-USB 1115 - - - - - - TDM-CRNT 1116 Y N XXX YY-MM-DD HH:MM:SS - TDM-BKUP 1116 Y - YYY YY-MM-DD HH:MM:SS DIFF LEVEL SS7ANSI 1201 Y N XXX YY-MM-DD HH:MM:SS - SS7ANSI 1202 Y N XXX YY-MM-DD HH:MM:SS - SS7ANSI 1203 Y N XXX YY-MM-DD HH:MM:SS - CCS7ITU 1211 Y N XXX YY-MM-DD HH:MM:SS - GLS 1218 Y N XXX YY-MM-DD HH:MM:SS - ;
4 ☐	Send a distributed network database (DDB) audit request to the active OAM.	**aud-data:type=ddb:display=all**

Procedure 5: Verifying Database Status

5 ☐	Response to the **aud-data** command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y DDB AUDIT REPORT SYSTEM STATUS: OK RESPONDING CARDS: 169 INCONSISTENT CARDS: (0) AUDIT START TIME: 18/06/2009 17:53:16 NON RESPONDING CARDS: (0) QUIET PERIOD: 500 ms RTE LINK SET LINK CM CARD CM CLSTR MATED APPL MTP GLOBLS H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=1201 IDLE PERIOD=711345 DDB UPDATES=218290 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=1203 IDLE PERIOD=711310 DDB UPDATES=265207 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=1205 IDLE PERIOD=711330 DDB UPDATES=303056 : : : H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=6115 IDLE PERIOD=711520 DDB UPDATES=173933 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 H'00f1f4c3 H'00000000 LOC=6117 IDLE PERIOD=711225 DDB UPDATES=75945 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=1101 IDLE PERIOD=711185 DDB UPDATES=202383 H'0a045208 H'020fb1c3 H'05dbdce5 H'00009b73 H'0000a398 ---------- H'00000000 LOC=1111 IDLE PERIOD=711535 DDB UPDATES=168151 ;
6 ☐	All steps in this procedure were completed.	

3.6 Verifying GPLs

Procedure 6: Verifying GPLs

STEP #	This procedure verifies that all GPLs are correctly distributed throughout the system, including fixed disks and removable media.	
1 ☐	Issue the command to display GPL status.	**rtrv-gpl**
2 ☐ ☐ ☐ ☐ ☐	Response to retrieve GPL command is displayed Verify that all GPLs in the APPROVED, TRIAL, and REMOVE TRIAL columns match those in the RELEASE column. Also verify that no GPL alarms exist. (Alarms are shown here as an example.) Verify that the removable media drive can be read and its GPL contents correspond to current Release GPLs.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y GPL Auditing ON GPL CARD RELEASE APPROVED TRIAL REMOVE TRIAL GLS 1114 134-060-000 134-060-000 134-060-000 134-060-000 GLS 1116 134-060-000 134-060-000 134-060-000 ---------- GLS 1115 ---------- ---------- ---------- ---------- IMT 1114 134-060-000 134-060-000 134-060-000 134-060-000 IMT 1116 134-060-000 134-060-000 134-060-000 ---------- IMT 1115 ---------- ---------- ---------- ---------- ATMANSI 1114 134-060-000 134-060-000 134-060-000 134-060-000 ATMANSI 1116 134-060-000 134-060-000 134-060-000 ---------- ATMANSI 1115 ---------- ---------- ---------- ---------- BPHCAP 1114 134-050-000 134-050-000 134-050-000 134-050-000 BPHCAP 1116 134-050-000 134-050-000 134-050-000 ---------- BPHCAP 1115 ---------- ---------- ---------- ---------- BPDCM 1114 134-050-000 134-049-000 ALM 134-050-000 134-050-000 BPDCM 1116 134-050-000 134-050-000 134-050-000 ---------- BPDCM 1115 ---------- ---------- ---------- ---------- BLMCAP 1114 134-060-000 134-060-000 134-060-000 134-060-000 BLMCAP 1116 134-060-000 134-060-000 134-060-000 ---------- BLMCAP 1115 ---------- ---------- ---------- ---------- OAMHC 1114 134-060-000 134-060-000 134-060-000 134-060-000 OAMHC 1116 134-060-000 134-060-000 ---------- ---------- OAMHC 1115 ---------- ---------- ---------- ---------- HIPR2 1114 134-060-000 134-060-000 134-060-000 134-060-000 HIPR2 1116 134-060-000 134-060-000 134-060-000 ---------- HIPR2 1115 ---------- ---------- ---------- ---------- *{output abridged for brevity.}*
3 ☐	Issue the command to display IPLHC GPL status.	**REPT-STAT-GPL:GPL=IPLHC**
4 ☐ ☐	Response to GPL status command is displayed. Note:if any IPLHC card is displayed, at the end of this health check, contact the My Oracle Support.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL IPLHC 1306 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX IPLHC 2111 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX IPLHC 4306 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX Command Completed. ;
5 ☐	Issue the command to display IPGHC GPL status.	**REPT-STAT-GPL:GPL=IPGHC**
6 ☐ ☐	Response to GPL status command is displayed. Note:if any IPGHC card is displayed, at the end of this health check, contact the My Oracle Support.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL IPGHC 1215 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX IPGHC 2107 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX IPGHC 5307 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX Command Completed. ;
7 ☐	All steps in this procedure were completed.	

3.7 Retrieving Obituaries

Procedure 7: Retrieving Obituaries

STEP #	**This procedure retrieves all recently logged obituaries. These obituaries describe the status of the system just before a processor restarted due to a hardware or software failure. The data includes a register and stack dump of the processor, card location, reporting module number, software code location, and class of the fault detected.**	
1 ☐	Issue the command to retrieve obits from MASP A	`rtrv-obit:loc=1113`
2 ☐ ☐	Response to retrieve obit command is displayed. Capture any obits that have been generated since the last system health check. If this is the first check, record any unexplained obits.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NOTICE: Only 1 obit(s) to retrieve in the log. ; eaglestp 98-03-09 18:58:47 EST Rel XX.X.X --- STH: Received a BOOT APPL-Obituary reply for restart Card 2203 Module ath_vxw.c Line 2837 Class 0001 Register Dump : EFL=00000000 CS =0000 EIP=00000000 SS =0000 EAX=00000000 ECX=00000000 EDX=00000000 EBX=00000000 ESP=00000000 EBP=00000000 ESI=00000000 EDI=00000000 DS =0000 ES =0000 FS =0000 GS =0000 Stack Dump : [SP+1E]=0000 [SP+16]=0000 [SP+0E]=0000 [SP+06]=0000 [SP+1C]=0000 [SP+14]=0000 [SP+0C]=0000 [SP+04]=0000 [SP+1A]=0000 [SP+12]=0000 [SP+0A]=0000 [SP+02]=0000 [SP+18]=0000 [SP+10]=0000 [SP+08]=0000 [SP+00]=0000 User Data Dump : 30 78 30 31 63 63 39 37 65 38 20 41 50 50 4c 20 0x01cc97e8.APPL. 57 61 74 63 68 64 6f 67 20 74 69 6d 65 6f 75 74 Watchdog.timeout 20 72 65 73 65 74 .res Report Date:02-01-01 Time:03:33:49 --- ;
3 ☐	Issue the command to retrieve obits from MASP B.	`rtrv-obit:loc=1115`
4 ☐ ☐	Response to retrieve obit command is displayed. Capture any obits that have been generated since the last system health check. If this is the first check, record any unexplained obits.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NOTICE: Only 3 obit(s) to retrieve in the log. ; eaglestp 98-03-09 18:58:56 EST Rel XX.X.X --- STH: Received a BOOT APPL-Obituary reply for restart Card 2217 Module pvdlvmsg.c Line 2755 Class 0001 Register Dump : EFL=00000246 CS =0008 EIP=00410368 SS =0010 EAX=00000000 ECX=00000000 EDX=00000003 EBX=007f7490 ESP=00da064c EBP=00da0684 ESI=00da066c EDI=00da0680 DS =0010 ES =0010 FS =0010 GS =0010 Stack Dump : [SP+1E]=0000 [SP+16]=03c4 [SP+0E]=2d54 [SP+06]=0000 [SP+1C]=0000 [SP+14]=7552 [SP+0C]=3250 [SP+04]=0000 [SP+1A]=03c3 [SP+12]=0054 [SP+0A]=8d86 [SP+02]=007f [SP+18]=f1da [SP+10]=554f [SP+08]=4eb0 [SP+00]=7490 User Data Dump : 50 32 54 2d 4f 55 54 00 52 75 c4 03 da f1 c3 03 P2T-OUT.Ru...... 00 00 00 00 .... Report Date:02-01-01 Time:18:59:23 --- ;
5 ☐	All steps in this procedure were completed.	

3.8 Verify SCCP Load

Procedure 8: Verify SCCP Load

STEP #		
	This procedure verifies that SCCP card loads are all below 40%. Verify that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.	
1 ☐	Issue the command to display SCCP status.	**rept-stat-sccp**
2 ☐	Response to SCCP status command is displayed. ☐ Verify that the number in the column labeled MSU USAGE is below 40% for all cards. Record any card slots, which are above 40% for later use. SCCP _____ SCCP _____ SCCP _____ ☐ E2374: SCCP not configured, displayed if no SCCP feature enabled.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms GFLEX SERVICE REPORT IS-ANR Active ----- GFLEX ALARM STATUS = * 0527 Service abnormal MNP SERVICE REPORT IS-ANR Active ----- MNP ALARM STATUS = * 0527 Service abnormal INPQ SUBSYSTEM REPORT IS-NR Active ----- ASSUMING MATE'S LOAD INPQ: SSN STATUS = Allowed MATE SSN STATUS = Prohibited INP ALARM STATUS = No Alarms SCCP Cards Configured= 3 Cards IS-NR= 3 System Daily Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Overall Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Total SCCP Capacity 2550 TPS (2550 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 2040 TPS (80% System N SCCP Capacity) CARD VERSION PST SST AST MSU USAGE CPU USAGE 1207 P XXX-XXX-XXX IS-NR Active ----- 37% 31% 1217 XXX-XXX-XXX IS-NR Active ----- 37% 8% 1315 XXX-XXX-XXX IS-NR Active ----- 37% 6% SCCP Service Average MSU Capacity = 37% Average CPU Capacity = 15% AVERAGE CPU USAGE PER SERVICE: GTT = 1% GFLEX = 1% MNP = 2% SMSMR = 2% IAR = 0% MTPRTD = 0% INPMR = 1% INPQ = 0% TOTAL SERVICE STATISTICS: SERVICE SUCCESS ERRORS FAIL RATIO REROUTE\ WARNINGS FORWARD TO GTT TOTAL GTT: 4025 0 0% - - 4025 GFLEX: 19184 0 0% 0 0 19184 MNP: 6378 0 0% 0 1600 7978 SMSMR: 0 0 0% 0 6450 6450 IAR: 0 0 0% 0 0 0 MTPRTD: 0 0 0% - - 0 INPMR: 4789 0 0% 0 0 4789 INPQ: 10427 0 0% 0 - 10427 Command Completed. ;
3 ☐	Issue the command to display SCCP status.	**rept-stat-sccp:mode=perf**
4 ☐	Response to SCCP status command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPP XX.x.x-YY.y.y SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms GFLEX SERVICE REPORT IS-ANR Active ----- GFLEX ALARM STATUS = * 0527 Service abnormal MNP SERVICE REPORT IS-ANR Active ----- MNP ALARM STATUS = * 0527 Service abnormal SCCP Cards Configured= 3 Cards IS-NR= 3 System Daily Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Overall Peak SCCP Load 1200 TPS 13-01-23 06:45:12 System Total SCCP Capacity 2550 TPS (2550 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 2040 TPS (80% System N SCCP Capacity) TPS STATISTICS CARD CPU USAGE TOTAL MSU RATE CLASS 0 MESSAGING RATE CLASS 1 MESSAGING RATE 1207 32% 340 311 29 1217 8% 346 330 16 1315 6% 317 297 20 AVERAGE MSU USAGE = 37%

		AVERAGE CPU USAGE = 15% TOTAL MSU RATE = 1003 STATISTICS FOR PAST 30 SECONDS ========== TOTAL MSUS: 52737 TOTAL ERRORS: 0 HIGHEST 06 OVERALL DAILY PEAKS LAST 06 DAILY PEAK SCCP LOADS ========== 1200 TPS 13-01-23 06:45:12 1200 TPS 13-01-23 06:45:12 1197 TPS 13-01-21 06:23:04 1186 TPS 13-01-22 23:49:55 1196 TPS 13-01-19 04:40:43 1197 TPS 13-01-21 06:23:04 1193 TPS 13-01-20 21:28:37 1193 TPS 13-01-20 21:28:37 1186 TPS 13-01-22 23:49:55 1196 TPS 13-01-19 04:40:43 1183 TPS 13-01-18 23:42:31 1183 TPS 13-01-18 23:42:31 Command Completed. ;
5 ☐	If the EPAP Data Split feature was on in Procedure 2, Step 14, issue the command to display Split Data status. Otherwise, go to step 8.	**rept-stat-sccp:data=dn**
6 ☐	Response to Split Data status is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPP XX.x.x-YY.y.y SCCP DNSUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms SCCP Cards Configured= 1 Cards IS-NR= 1 System Daily Peak SCCP Load 0 TPS 13-04-26 10:44:18 System Overall Peak SCCP Load 0 TPS 00-00-00 00:00:00 System Total SCCP Capacity 5000 TPS (5000 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 4000 TPS (80% System N SCCP Capacity) CARD VERSION PST SST AST MSU USAGE CPU USAGE DATA TYPE ---------- 1101 P 027-062-002 IS-NR Active ----- 0% 5% DN ---------- AVERAGE MSU USAGE = 0% AVERAGE CPU USAGE = 5% TOTAL MSU RATE = 0 Command Completed. ;
7 ☐	Repeat steps 5 – 6 for IMSI data.	Repeat the status command specifing: *data=imsi*
8 ☐	Issue the command to display SCCP status.	**rept-stat-sccp:data=epap**
9 ☐ ☐	Response to SCCP status is displayed. E2400: Dual ExAP Config feature must be Enabled, displayed if Dual ExAP Config feature is not enabled	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y SCCP SUBSYSTEM REPORT IS-NR Active ----- SCCP ALARM STATUS = No Alarms SCCP Cards Configured= 3 Cards IS-NR= 3 System Daily Peak SCCP Load 0 TPS 17-11-28 00:00:07 System Overall Peak SCCP Load 41047 TPS 17-11-22 04:12:44 System Total SCCP Capacity 40800 TPS (40800 max SCCP Capacity) System SCCP Capacity Calc. Method (N) System TPS Alarm Threshold 32640 TPS (80% System N SCCP Capacity) CARD VERSION PST SST AST MSU USAGE CPU USAGE DATA TYPE ---------- 2303 141-019-000 IS-NR Active ----- 0% 1% EPAP 4207 P 141-019-000 IS-NR Active ----- 0% 3% EPAP 5205 141-019-000 IS-NR Active ----- 0% 2% EPAP ---------- AVERAGE MSU USAGE = 0% AVERAGE CPU USAGE = 2% TOTAL MSU RATE = 0 Command Completed. ;

10 ☐	Issue the command to display network status for the card.	`pass:loc=`*`xxxx`*`:cmd="netstat -i"` (where *XXXX* is the slot ID of an SCCP card that is displayed in step 9.)

11 ☐	Response to NETSTAT command is displayed. ☐ For each card, verify both ports are configured to 1Gig EPAP-to-EAGLE download speed (displayed as 1000MB.). Note: See Reference [4] in Section 1.2 for further information on port configuration.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y PASS: Command sent to card ; eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE XX.x.x-YY.y.y SDS Shell Output -> tklc_ifShow lo (unit number 0): Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP RUNNING INET_UP Type: SOFTWARE_LOOPBACK inet: 127.0.0.1 Netmask 0xff000000 Subnetmask 0xff000000 Metric is 0 Maximum Transfer Unit size is 1536 0 packets received; 1 packets sent 0 multicast packets received 0 multicast packets sent 0 input errors; 0 output errors 0 collisions; 0 dropped 0 output queue drops DPLend (unit number 0): Flags: (0x20043) UP BROADCAST ARP RUNNING Type: ETHERNET_CSMACD Ethernet address is 00:00:00:00:00:00 Metric is 0 Maximum Transfer Unit size is 485 0 octets received 0 octets sent 0 unicast packets received 0 unicast packets sent 0 non-unicast packets received 0 non-unicast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops gei (unit number 0): Flags: (0x78043) UP BROADCAST MULTICAST ARP RUNNING INET_UP PHY Flags: (0x12114) AUTONEG **1000MB** FDX DIX Type: ETHERNET_CSMACD inet: 192.168.120.7 Broadcast address: 192.168.120.255 Netmask 0xffffff00 Subnetmask 0xffffff00 Ethernet address is 00:00:17:0d:7f:8a Metric is 0 Maximum Transfer Unit size is 1500 27358978 octets received 120833444 octets sent 819180 unicast packets received 80673 unicast packets sent 1798225 multicast packets received 52 multicast packets sent 18821781 broadcast packets received 985700 broadcast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops gei (unit number 1): Flags: (0x78043) UP BROADCAST MULTICAST ARP RUNNING INET_UP PHY Flags: (0x12114) AUTONEG **1000MB** FDX DIX Type: ETHERNET_CSMACD inet: 192.168.121.11 Broadcast address: 192.168.121.255 Netmask 0xffffff00 Subnetmask 0xffffff00 Ethernet address is 00:00:17:0d:7f:8b Metric is 0 Maximum Transfer Unit size is 1500 922842738 octets received 2982650752 octets sent 805755 unicast packets received 30769745 unicast packets sent 1556943 multicast packets received 104 multicast packets sent 7609692 broadcast packets received 985724 broadcast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops value = 26 = 0x1a ; NETSTAT command complete ;

12 ☐	Repeat steps 10 - 11 for all SCCP cards that are displayed in step 9.	
13 ☐	All steps in this procedure were completed.	

3.9 Verifying LNP and LSMS

Procedure 9: Verifying LNP and LSMS

STEP #		
	Perform procedure only if LNP feature is on, see Procedure 2, Steps 14 **This procedure displays LNP subsystem and LSMS statuses. Ensure that all cards that should be in service show PST - IS-NR. Record cards that do not show the expected status.** **This procedure shall also evaluate the SCCP hardware to determine if an upgrade is valid.**	
1 ☐	Issue the command to display LNP status.	`rept-stat-lnp`
2 ☐	Response to LNP status command is displayed. Verify that cards that are supposed to be in service are IS-NR. Verify that there are no errors.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y LNP SUBSYSTEM REPORT IS-NR Active ----- ASSUMING MATE'S LOAD LNP Cards Configured=15 CARD PST SST GTT STATUS LNP STATUS CPU USAGE 1201 IS-NR Active ACT ACT 1% 1208 IS-NR Active ACT ACT 1% 1218 IS-NR Active ACT ACT 1% 1301 IS-NR Active ACT ACT 1% 1308 IS-NR Active ACT ACT 0% 1318 IS-NR Active ACT ACT 1% 2108 IS-NR Active ACT ACT 1% 2118 IS-NR Active ACT ACT 1% 2208 IS-NR Active ACT ACT 1% 2218 IS-NR Active ACT ACT 1% 2308 IS-NR Active ACT ACT 1% 1101 IS-NR Active ACT ACT 1% 1102 IS-NR Active ACT ACT 1% 1103 IS-NR Active ACT ACT 1% 1108 IS-NR Active ACT ACT 1% LNPQS: SSN STATUS = Allowed MATE SSN STATUS = Prohibited ACG: OVERLOAD LEVEL = 0 MIC USAGE = 0% AVERAGE USAGE: GTT = 1% LNPMR = 1% LNPQS = 1% AVERAGE CPU USAGE = 1% TOTAL ERRORS: GTT: 0 out of 1603 LNPMR: 0 out of 38 LNPQS: 0 out of 5406 Command Completed. ;

Procedure 9: Verifying LNP and LSMS

3 ☐	Issue the command to display card status.	**rept-stat-card:mode=full:loc=XXXX** *(Where XXXX is the location of each SCCP card displayed in Procedure 3.9 Step 2)*
4 ☐ ☐	Response to card status command is displayed. Verify that all cards have at least 4096MB of daughterboard memory.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST 1111 138-011-000 DSM SCCPHC IS-NR Active ----- ALARM STATUS = No Alarms. BPDCM GPL version = 138-011-000 IMT BUS A = Conn IMT BUS B = Conn CLOCK A = Active CLOCK B = Idle CLOCK I = Idle MBD BIP STATUS = Valid MOTHER BOARD ID = SMXG A DBD STATUS = Valid DBD TYPE = None DBD MEMORY SIZE = 4096M HW VERIFICATION CODE = ---- CURRENT TEMPERATURE = 52C (126F) PEAK TEMPERATURE: = 52C (126F) [16-03-16 09:34] SCCP % OCCUP = 37% APPLICATION SERVICING TVG MFC TVG MFC SNM REQ STATUS = 24 hr: ------ ---, 5 min: ------ --- INM REQ STATUS = 24 hr: ------ ---, 5 min: ------ --- MTP3 REQ STATUS = 24 hr: G--, 5 min: G-- IPLNK STATUS IPLNK IPADDR STATUS PST A 192.168.120.5 UP IS-NR B 192.168.121.3 UP IS-NR DSM IP CONNECTION PORT PST SST A IS-NR Active B IS-NR Active Command Completed. ;
5 ☐	If LNP is ON as recorded in Procedure 2 Step 12 then issue the command to retrieve LNP options. Otherwise, go to next procedure.	**rtrv-lnpopts**
6 ☐ ☐	Response to LNP options command is displayed. Record audit status: AUD: _____ If LNP auditing is on, go to next procedure.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y LNP OPTIONS ---------- AMASLPID = 000000000 INCSLP = no AMACTYPE = 000 AMAFEATID = 000 CIC = 0000 AUD = off SP = FRCSMPLX = no ADMHIPRI = no GTWYSTP = no ;
7 ☐	If LNP ported TN is 48000000 or higher or the LNP ELAP Configuration feature key is ON, go to next procedure. Otherwise, issue the command to turn LNP Audit on.	**chg-lnpopts:aud=on**
8 ☐	Response to LNP options command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y CHG-LNPOPTS: MASP A - COMPLTD ;
9 ☐	For UHC#2, the LNP Audit must be allowed to run for at least 24 hours.	**NOTE**: allow LNP auditing to run for at least 24 hours prior to upgrade.
10 ☐	All steps in this procedure were completed.	

3.10 Verifying SEAS

Procedure 10: Verifying SEAS

STEP #		
	Perform procedure only if SEAS feature is on, see Procedure 2, Step 12 **This procedure verifies that SEAS feature is available. Ensure that all interfaces that should be in service show PST - IS-NR. Record interfaces that do not show the expected status.**	
1 ☐	Issue the command to display SEAS status.	`rept-stat-seas`
2 ☐	Response to SEAS status command is displayed if SEAS over IP feature is turned on.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y SEAS SYSTEM PST SST AST IS-NR Avail ----- ALARM STATUS = No Alarms TERM IPADDR PORT PST SST AST 18 120.30.10.11 15 IS-NR Active ----- ALARM STATUS = No Alarms 40 128.30.15.12 16 IS-NR Active ----- ALARM STATUS = No Alarms
☐	Verify that all entries are “IS-NR” and there are no alarms.	
3 ☐	All steps in this procedure were completed.	

3.11 Verifying optional features

Procedure 11: Verifying optional features

Note: EAGLE Release 47.0 does not support the DEIR feature. However, the functionality is going to be supported in the future EAGLE releases.

STEP #	**This procedure displays information on which optional features have been enabled.**	
1 ☐	Issue the command to retrieve STP options.	`rtrv-stpopts`
2 ☐ ☐ ☐ ☐	Response to the command is displayed. Record whether the following options are turned on: DSMAUD: ON / OFF / CCC Note: DSMAUD only displayed with certain features enabled (e.g. GFLEX, INP, GPORT) Verify the GBSUSNMINM option status: GBSUSNMINM: ON / OFF If upgrading to 46.2 and beyond, MFC must be on. If MFC is set to off, this procedure **fails**.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y STP OPTIONS ---------- MTPT31CTL 1 MTPLTI yes MTPLTCTDPCQ 3 MTPLTST 10000 MTPXLQ 500 MTPXLET 100 MTPXLOT 90 MTPDPCQ 8000 TFATFRPR 1000 MTPRSI no MTPRSIT 5000 MTPLPRST yes MTPT10ALT 30000 UIMRD no SLSCNV off CRITALMINH no DISPACTALMS no NPCFMTI 14-00-00-00 GSMDFLT discard GSMDECERR pass DEFCC 1 DEFNDC 970 DSMAUD on RPTLNPMRSS yes RANDSLS off RSTRDEV off SECMTPMATE off SECMTPSID off SECMTPSNM off SECSCCPSCMG off CNVCGDA no CNVCGDI no CNVCGDN no CNVCGDN24 no CNVCGDN16 no GTCNVDFLT yes ANSIGFLEX no ARCHBLDID on MFC on PCT off PCN16FMT 745 UITHROTTLE 0 GBSUSNMINM on GDPCA ---------- EPAP240M off
3 ☐	If E5IS feature is recorded as on in Procedure 2, Step 12 then issue the retrieve command. Otherwise, go to step 7.	`rtrv-eisopts`
4 ☐ ☐	Response to the command is displayed. Record the value of EISCOPY & FCMODE values: EISCOPY: ON / OFF FCMODE: STC/OFF/FCOPY	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y EIS OPTIONS ---------- EISCOPY = ON FAST COPY OPTIONS ---------- FCGPL = IPSG FCMODE = FCOPY FCGPL = IPGHC FCMODE = FCOPY ----------
5 ☐	Issue the command to retrieve user-specified options for the IP networks used by the EAGLE.	`rtrv-netopts`
6	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NETWORK OPTIONS

Procedure 11: Verifying optional features

Note: EAGLE Release 47.0 does not support the DEIR feature. However, the functionality is going to be supported in the future EAGLE releases.

☐ ☐	Record the value of PVN, PVNMASK, FCNA, FCNAMASK, FCNB and FCNBMASK.	------------------ PVN = 172.20.48.0 PVNMASK = 255.255.252.0 FCNA = 172.21.48.0 FCNAMASK = 255.255.254.0 FCNB = 172.22.48.0 FCNBMASK = 255.255.254.0
7 ☐	Issue the command to retrieve measurement options.	**rtrv-measopts**
8 ☐	Response to the measurement options command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y PLATFORMENABLE = on COLLECT15MIN = off CLLIBASEDNAME = off OAMHCMEAS = off ---------- SYSTOTSTP = on SYSTOTTT = on COMPLINK = on COMPLNKSET = on COMPSCTPASOC = off COMPSCTPCARD = off COMPUA = off GTWYSTP = on GTWYLNKSET = on GTWYORIGNI = on GTWYORIGNINC = on GTWYLSORIGNI = on GTWYLSDESTNI = on GTWYLSONISMT = off NMSTP = on NMLINK = on NMLNKSET = on AVLLINK = on AVLDLINK = off ;
9 ☐	Issue the command to retrieve user-specified options for the SCCP application.	**rtrv-sccpopts**
10 ☐	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y SCCP OPTIONS ---------- CLASS1SEQ off CCLEN 0 ACLEN 0 INTLUNKNNAI no SUBDFRN off DFLTGTTMODE CdPA MTPRGTT off MTPRGTTFALLBK mtproute UNQGTTSEL bestmatch DELCCPREFIX pfxwcc GTTDIST all ;
11 ☐	Issue the command to retrieve user-specified options for the GSM.	**rtrv-gsmopts**
12 ☐	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y GSM OPTIONS ---------- MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE MULTCC = NONE DEFMAPVR = 1 DEFMCC = 911 DEFMNC = NONE CCNC = 1970 MCCMNC = 911666 CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE CCNC = NONE MCCMNC = NONE SRIDN = TCAP SRIDNNOTFOUND = GTT CRPTT = NONE SRISMGTTRTG = OFF MSRNDIG = RNDN MSRNNAI = 1 MSRNNP = 10 MSISDNTRUNC = 0

Procedure 11: Verifying optional features

Note: EAGLE Release 47.0 does not support the DEIR feature. However, the functionality is going to be supported in the future EAGLE releases.

		SRFADDR = 19705552222 SRFNAI = 1 SRFNP = 1 MSRNLEN = 30 SERVERPFX = NONE GSM2IS41 = NONE MIGRPFX = SINGLE IS412GSM = NONE SPORTTYPE = NONE DFLTRN = NONE EIRGRSP = OFF EIRRSPTYPE = TYPE1 EIRIMSICHK = OFF ENCODECUG = OFF ENCODENPS = ON ENCDNPSPTNONE = OFF ENCDNPSDNNOTFOUND= OFF G-Flex MLR OPTIONS : GFLEXMAPLAYERRTG = NONE REGSS = OFF ACTSS = OFF DACTSS = OFF INTSS = OFF AUTHFAILRPT = OFF RSTDATA = OFF PROCUNSTRQT = OFF RDYFORSM = OFF PURGMOBSS = OFF SRILOC = OFF;
13 ☐	Issue the command to retrieve user-specified options for IS41 GSM Migration.	**rtrv-is41opts**
14 ☐	Response to the options command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y IS41 OPTIONS ---------- SMSREQBYPASS = NO LOCREQDN = SCCP IEC = NONE NEC = NONE RSPCGPARI = FRMSG RSPCGPAPCP = FRMSG RSPCDPARI = FRMSG RSPCDPAPCP = OFF RSPCGPANAI = NONE RSPCGPANP = NONE RSPCGPATT = NONE MTPLOCREQNAI = FRMSG RSPPARM = TLIST RSPDIG = RNDN RSPNON = NONE RSPNP = 2 RSPMIN = HOMERN MSCMKTID = 0 MSCSWITCH = 0 ESNMFG = 0 ESNSN = 0 RSPDIGTYPE = 6 LOCREQRMHRN = NO TCAPSNAI = FRMSG MTPLOCREQLEN = 0 SPORTTYPE = NONE DFLTRN = NONE LOCREQRSPND = OFF ;
15 ☐	If SNMP Feature was on in Procedure 2, Step 14 then issue the retrieve option command. Otherwise, go to step 19.	**rtrv-snmpopts**
16 ☐	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y SNMP OPTIONS ---------- SNMPUIM on GETCOMM public SETCOMM private
17 ☐	Issue the retrieve IP Host command for SNMP.	**rtrv-snmp-host**
18 ☐	Response to the retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y IPADDR 10.241.14.62 HOST dcmsnmptraphost1 CMDPORT 161 TRAPPORT 162 HB 60 TRAPCOMM public IPADDR 10.241.14.61 HOST dcmsnmptraphost2 CMDPORT 161 TRAPPORT 162

Procedure 11: Verifying optional features

Note: EAGLE Release 47.0 does not support the DEIR feature. However, the functionality is going to be supported in the future EAGLE releases.

		HB 60 TRAPCOMM public SNMP HOST table is (2 of 2) 100% full
19 ☐	If SIP NP Feature was on in Procedure 2, Step 14 then issue the retrieve option command. Otherwise, go to step 23.	**rtrv-sipopts**
20 ☐	Response to the command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y INCLUDENPDI = on INCLUDERN = on NPRSPFMT = RNDN RNFMT = RN NPLKUPFAIL = 404 RNCONTEXT = Null
21 ☐	Issue the report SIP status command.	**rept-stat-sip**
22 ☐	Response to the status command is displayed if configured, else "E2688 Cmd Rej: SIP not Configured" is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y SIP ALARM STATUS = ** 0625 SIP capacity normal, card(s) abnormal SIP Cards Configured= 3 Cards IS-NR= 1 CARD VERSION PST SST TPS PTPS PTIMESTAMP 1101 004-061-004 IS-ANR MPS Unavl 0 0 00-00-00 00:00:00 1103 004-062-000 IS-NR Active 100 100 02-01-08 10:55:23 1105 ---------- OOS-MT Isolated 0 0 00-00-00 00:00:00 TOTAL SERVICE STATISTICS: SERVICE SUCCESS ERROR WARNINGS BYPASS TOTAL SIPNP: 0 0 0 0 0 Command Completed
23 ☐	Issue the report DEIR status command.	**rept-stat-deir**
24 ☐	Response to the status command is displayed if configured, else "E2791 Cmd Rej: DEIR not Configured" is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y DEIR ALARM STATUS = No Alarms DEIR Cards Configured= 1 Cards IS-NR= 1 Average CPU Usage = 1% CARD VERSION PST SST AST TPS PTPS 1107 P 135-016-000 IS-NR Active ----- 0 0 TOTAL DEIR SERVICE STATISTICS: SERVICE SUCCESS ERROR WARNINGS OVERFLOW TOTAL DEIR SRV: 0 0 0 0 0 Command Completed. ;
25 ☐	Issue the report ENUM status command.	**rept-stat-enum**
26 ☐	Response to the status command is displayed if configured, else "E3188 Cmd Rej: ENUM not Configured" is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y ENUM ALARM STATUS = No Alarms ENUM Cards Configured= 2 Cards IS-NR= 2 CARD VERSION PST SST AST TPS 2303 139-019-000 IS-NR Active ----- 4006 1105 139-019-000 IS-NR Active ----- 1000 TOTAL SERVICE STATISTICS: SERVICE SUCCESS ERROR RECEIVED ENUM : 41495 78689 120178 SERVICE RCODE1 RCODE2 RCODE3 RCODE4 RCODE5 TOTAL ENUM : 12 0 78136 541 0 78689 Command Completed. ;
27 ☐	All steps in this procedure were completed.	

3.12 Verifying IP Signaling Status

Procedure 12: Verifying IP Signaling Status

STEP #	This procedure displays the status of IP Signaling connections and Application Servers. Verify that all IP Signaling connections and Application Servers that should be in service show a state of IS-NR. Record connections or Application Servers that do not show the expected status.	
1 ☐	Issue the command to display SCTP Association status.	`rept-stat-assoc`

2 ☐	Response to SCTP Association status command is displayed.
	
	Verify that all SCTP Associations that should be in service are IS-NR.
		`eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y`
		`ASSOCIATION PST SST`
		`ipgwa1 IS-NR ASP-ACTIVE`
		`ipgwa2 IS-NR ASP-ACTIVE`
		`iplima1 IS-NR ESTABLISHED`
		`iplima2 IS-NR ESTABLISHED`
		`Command Completed.`
		`;`

3 ☐	Issue the command to display Application Server status.	`rept-stat-as`

4 ☐	Response to Application Server status command is displayed.
	
	Verify that all Application Servers that should be in service are IS-NR.
		`eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y`
		`AS PST SST`
		`ipgwas1 IS-NR AS-ACTIVE`
		`ipgwas2 IS-NR AS-ACTIVE`
		`Command Completed.`
		`;`

5 ☐	All steps in this procedure were completed.	

3.13 Verifying EROUTE

Procedure 13: Verifying EROUTE

STEP #		
	This procedure displays the status of the STC cards, and also displays any cards that are denied EROUTE service. Record cards that are denied EROUTE service. **This procedure issues the "netstat" command to STC cards to determine if IP addresses have been associated with the card. Record cards that do not have IP addresses associated with them.**	
1 ☐	Issue the command to display EROUTE status.	`rept-stat-mon:type=eroute`
2 ☐ ☐	Response to EROUTE status command is displayed. Verify that all cards listed are in IS-NR state. Note: if any cards are denied eroute service, the text "CARDS DENIED EROUTE SERVICE:" will be displayed followed by the card locations.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y EROUTE SUBSYSTEM REPORT IS-NR Active ----- STC Cards Configured= 7 Cards IS-NR= 7 EISCOPY BIT = ON System Threshold = 80% Total Capacity System Peak EROUTE Load: 8000 Buffers/Sec System Total EROUTE Capacity: 9600 Buffers/Sec SYSTEM ALARM STATUS = No Alarms. CARD VERSION PST SST AST TVG USAGE CPU USAGE --- 1205 236-024-005 IS-NR Active ----- 35% 52% 1211 236-024-005 IS-NR Active ----- 35% 52% 1303 236-024-005 IS-NR Active ----- 35% 52% 1311 236-024-005 IS-NR Active ----- 35% 52% 1313 236-024-005 IS-NR Active ----- 35% 52% 2211 236-024-005 IS-NR Active ----- 35% 52% 2213 236-024-005 IS-NR Active ----- 35% 52% --- EROUTE Service Average TVG Capacity = 35% Average CPU Capacity = 52% Command Completed. ;

Procedure 13: Verifying EROUTE

3 ☐	Issue the command to display network status for the card.	`Pass:loc=xxxx:cmd="netstat -i"` **(where XXXX is the slot ID of an STC card that is IS-NR in step 2.)**

4 ☐	Response to NETSTAT command is displayed. ☐ Verify both Port A (Seeq 0) and Port B (Seeq 1) of the STC card have an associated IP address. Note: For E5-ENET card, verify both Port A (GEI 2) and Port B (GEI 0) have associated IP addresses.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y PASS: Command sent to card ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y lo (unit number 0): Flags: (0x48049) UP LOOPBACK MULTICAST TRAILERS ARP RUNNING INET_UP Type: SOFTWARE_LOOPBACK inet: 127.0.0.1 Netmask 0xff000000 Subnetmask 0xff000000 Metric is 0 Maximum Transfer Unit size is 1536 0 packets received; 1 packets sent 0 multicast packets received 0 multicast packets sent 0 input errors; 0 output errors 0 collisions; 0 dropped 0 output queue drops DPLend (unit number 0): Flags: (0x60043) UP BROADCAST ARP RUNNING INET_UP Type: ETHERNET_CSMACD inet: 172.20.48.243 Broadcast address: 172.20.51.255 Netmask 0xffff0000 Subnetmask 0xfffffc00 Ethernet address is 00:00:00:00:00:f3 Metric is 0 Maximum Transfer Unit size is 485 42 octets received 28 octets sent 1 unicast packets received 1 unicast packets sent 0 non-unicast packets received 0 non-unicast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops gei (unit number 2): Flags: (0x70043) UP BROADCAST ARP RUNNING INET_UP PHY Flags: (0x12012) 100MB FDX DIX Type: ETHERNET_CSMACD inet: 192.168.53.68 Broadcast address: 192.168.53.255 Netmask 0xffffff00 Subnetmask 0xffffff00 Ethernet address is 00:00:17:0d:87:a8 Metric is 0 Maximum Transfer Unit size is 1500 118464 octets received 44920 octets sent 698 unicast packets received 698 unicast packets sent 0 multicast packets received 0 multicast packets sent 1152 broadcast packets received 2 broadcast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops gei (unit number 3): Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP PHY Flags: (0x2224) AUTONEG DIX Type: ETHERNET_CSMACD inet: 172.21.48.243 Broadcast address: 172.21.49.255 Netmask 0xffff0000 Subnetmask 0xfffffe00 Ethernet address is 00:00:17:0d:87:a9 Metric is 0 Maximum Transfer Unit size is 2000 0 octets received 0 octets sent 0 unicast packets received 0 unicast packets sent 0 multicast packets received 0 multicast packets sent 0 broadcast packets received 0 broadcast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops gei (unit number 1): Flags: (0x78042) DOWN BROADCAST MULTICAST ARP RUNNING INET_UP PHY Flags: (0x2224) AUTONEG DIX Type: ETHERNET_CSMACD inet: 172.22.48.243 Broadcast address: 172.22.49.255 Netmask 0xffff0000 Subnetmask 0xfffffe00 Ethernet address is 00:00:17:0d:88:9f

Procedure 13: Verifying EROUTE

		Metric is 0 Maximum Transfer Unit size is 2000 0 octets received 0 octets sent 0 unicast packets received 0 unicast packets sent 0 multicast packets received 0 multicast packets sent 0 broadcast packets received 0 broadcast packets sent 0 incoming packets discarded 0 outgoing packets discarded 0 incoming errors 0 outgoing errors 0 unknown protos 0 collisions; 0 dropped 0 output queue drops ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NETSTAT command complete
5 ☐	Repeat steps 3 - 4 for all STC cards that are IS-NR in step 2.	
6 ☐	All steps in this procedure were completed.	

3.14 Verifying IMT Status

Procedure 14: Verifying IMT Status

STEP #	This procedure verifies that the IMT Bus is free of errors. This procedure is run in correspondence with Procedure 3.	
1 ☐	Issue the command to display IMT errors.	**rept-imt-lvl1:sloc=1201:eloc=1115:r=summary**
2 ☐ ☐	Response to IMT report command is displayed. Ensure that all highlighted columns contain zeroes.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y ========== SUMMARY REPORT: Totals accumulated from all requested cards Count — Bus A Value — Bus B Value Transmit Packet 0M 0M Transmit Byte 0M 0M Receive Packet 0M 0M Receive Byte 0M 0M Receive Packet with CRC Error 0 0 Receive Packet with Format Error 0 0 Receive Packet with Invalid Length 0 0 Primary Control Receive Error 0 0 Primary Control Transmit Error 0 0 Primary Control Sanity Error 0 0 Violation Error 0 0 CPU Receive FIFO Full 0 0 IMT Receive FIFO Half Full 0 0 CPU Receive FIFO Half Full 0 0 DMA Terminal Count Interrupt 0 0 MSU Retransmitted 0 0 MSU Safety Packet 0 0 ASU Safety Packet 0 0 TSU Safety Packet 0 0 IMT Receive FIFO Full 0 0 SSU Safety Packet 0 0 ---------- ;END OF REPORT ;
3 ☐	If non-zeros, the command to display IMT level 1 information.	**rept-imt-lvl1:sloc=1201:eloc=1115:r=full**
4 ☐	Response to MUX status command is displayed. Note: Output abridged for brevity,	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y ========== FULL REPORT: Totals accumulated from all requested cards Count — Bus A Value — Bus B Value Transmit Packet 0M 0M Transmit Byte 0M 0M Receive Packet 0M 0M Receive Byte 0M 0M Receive Packet with CRC Error 0 0 Receive Packet with Format Error 0 0 Receive Packet with Invalid Length 0 0 Primary Control Receive Error 0 0 Primary Control Transmit Error 0 0 Primary Control Sanity Error 0 0 Violation Error 0 0 CPU Receive FIFO Full 0 0 IMT Receive FIFO Half Full 0 0 CPU Receive FIFO Half Full 0 0 DMA Terminal Count Interrupt 0 0 MSU Retransmitted 0 0 MSU Safety Packet 0 0 ASU Safety Packet 0 0 TSU Safety Packet 0 0 IMT Receive FIFO Full 0 0 SSU Safety Packet 0 0 ---------- ;END OF REPORT ;
5 ☐	Issue the status command for the MUX cards	**rept-stat-mux**

Procedure 14: Verifying IMT Status

6 ☐

Response to MUX status command is displayed.

Verify that all cards are IS-NR.

Record the types of MUX cards displayed (circle all that are applicable):

HMUX HIPR HIPR2

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    CARD   TYPE       PST           SST        AST
    1109   HMUX       IS-NR         Active     -----
    1110   HMUX       IS-NR         Active     -----
    1209   HMUX       IS-NR         Active     -----
    1210   HMUX       IS-NR         Active     -----
    1309   HIPR       IS-NR         Active     -----
    1310   HIPR       IS-NR         Active     -----
    2109   HIPR2      IS-NR         Active     -----
    2110   HIPR2      IS-NR         Active     -----

    Command Completed.
;
```

7 ☐

Issue the report IMT information command.

Repeat for all MUX types recorded in Step 6.

rept-imt-info:report=*XXXX*err

(where report=hmuxerr if HMUX cards were detected in step 6;
report=hiprerr if HIPR cards were detected in step 6;
report=hipr2err is HIPR2 cards were detected in step 6.)

8 ☐

Response to report IMT information command is displayed.

Note: Output abridged for brevity, Actual output varies based on software release and card type.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP  XX.x.x-YY.y.y
    XXXX Summary Report: Summed across all requested cards for each bucket

    XXXX Hourly Bucket Statistics

    ============================================================================
    Bucket Low Speed Statistic           BUS A Value  BUS B Value
    ------ --------------------          -----------  -----------
    XX     IMT Rx Packet CRC Error               0            0
           IMT Rx Packet Format Error            0            0
           IMT Rx Violation Error                0            0
           IMT Rx Command Error                  0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0
           IMT Tx FIFO Full                      0            0
           IMT Tx FIFO Half Full                 1            0

           High Speed Statistic          BUS A Value  BUS B Value
           --------------------          -----------  -----------
           IMT Rx Packet CRC Error               0            0
           IMT Rx Disparity Error                0            0
           IMT Rx Sync Lost Error                0            0
           IMT Rx Code Word Error                0            0
           CPU Rx FIFO Full                      0            0
           CPU Rx FIFO Half Full                 0            0
           CPU Rx FIFO Empty Before SOM          0            0
           CPU Rx FIFO Empty Before EOM          0            0
           CPU Rx Packet SOM Before EOM          0            0
           CPU Rx Packet CRC Error               0            0
           DMA terminal count                    0            0
           CPU Tx Buffer EOB                     0            0
           CPU Tx Buffer Full                    0            0
           CPU Tx Buffer Half Full               9            9
           IMT Bypass FIFO Full                  0            0
           IMT Bypass FIFO Half Full             0            0
           IMT Rx FIFO Full                      0            0
           IMT Rx FIFO Half Full                 0            0

           Misc Speed Statistic          BUS A Value  BUS B Value
           --------------------          -----------  -----------
           Shelf ID UART Framing Error           0            0
           Shelf ID UART Overrun Error           0            0

;
```

9 ☐

All steps in this procedure were completed.

3.15 Retrieving Trouble Data

Procedure 15: Retrieving Trouble Data

STEP #	This procedure retrieves the most recently logged troubles. Estimated time for completion: 5 minutes	
1 ☐	Issue the command to retrieve troubles from MASP A.	**rtrv-trbl:loc=1113:num=15**
2 ☐ ☐	Response to retrieve trouble command is displayed. Troubles shown here are only examples. Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y rtrv-trbl:loc=1113:num=15 Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NOTICE: Only 2 trouble(s) to retrieve in the log. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y Card 1113 Module SCM_UTL0.C Line 4101 Class 01bc Severity 1 Of . Report Date:YY-MM-DD Time:hh:mm:ss ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y Card 1107 Module ED_ENET.C Line 437 Class 01c3 Severity 1 bc 5e 20 00 07 2d 12 00 d4 9b 00 00 00 .^...-..... Report Date:YY-MM-DD Time:hh:mm:ss ;
3 ☐	Issue the command to retrieve troubles from MASP B.	**rtrv-trbl:loc=1115:num=15**
4 ☐ ☐	Response to retrieve trouble command is displayed. Troubles shown here are only examples. Note any unexplained troubles. (The troubles shown are examples only, actual troubles - if any - may differ.)	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y rtrv-trbl:loc=1115:num=15 Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y NOTICE: Only 1 trouble(s) to retrieve in the log. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y Card XXXX Module XXXXXXXX.C Line XXXX Class XXXX Severity X Of . Report Date:YY-MM-DD Time:hh:mm:ss ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y 5876.1083 SYSTEM INFO REPT COND: system alive Report Date:YY-MM-DD Time:hh:mm:ss ;
5 ☐	If the amount of output displayed on the capture terminal is excessive, then issue the command to change the terminal output groups. Otherwise, go to step 7.	**chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes** *(Where P is the location of the capture terminal used in Proc 1, Step 5.)*
6 ☐	Response to change terminal command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y chg-trm:trm=P:all=no:sys=yes:sa=yes:db=yes Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y CHG-TRM: MASP A – COMPLTD ;
7 ☐	All steps in this procedure were completed.	

3.16 Verifying Clock Status

Procedure 16: Verifying Clock Status

STEP #	This procedure verifies your system clock status. Specifically, the primary and secondary composite clocks and the A and B clocks going to each card are examined. Both the Primary and Secondary composite clocks should be good (IDLE or ACTIVE) on both the active and standby MASP. There should be no cards reporting a bad A clock and no cards reporting a bad B clock in step 2.	
1 ☐	Issue the command to report clock status.	**rept-stat-clk:mode=full**
2 ☐ ☐ ☐	Response to clock status command is displayed. Verify that both composite clocks are either in IDLE or ACTIVE state on both ACTIVE and STANDBY MASP. All highlighted cards-with-bad-CLK values should equal zero.	eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y COMPOSITE PST SST AST SYSTEM CLOCK IS-NR Idle ----- ALARM STATUS = No Alarms. Primary Comp Clk 1114 (CLK A) IS-NR Active Primary Comp Clk 1116 (CLK B) IS-NR Active Secondary Comp Clk 1114 (CLK A) IS-NR Idle Secondary Comp Clk 1116 (CLK B) IS-NR Idle Clock Using Bad CLK A 173 0 CLK B 2 0 CLK I 0 -- HIGH SPEED PST SST AST SYSTEM CLOCK IS-NR Active ----- ALARM STATUS = No Alarms. Primary HS Clk 1114 (HS CLK A) IS-NR Active Primary HS Clk 1116 (HS CLK B) IS-NR Active Secondary HS Clk 1114(HS CLK A) IS-NR Idle Secondary HS Clk 1116(HS CLK B) IS-NR Idle HS CLK TYPE 1114 = RS422 HS CLK LINELEN 1114 = ----- HS CLK TYPE 1116 = RS422 HS CLK LINELEN 1116 = ----- Clock Using Bad HS CLK A 19 0 HS CLK B 0 0 HS CLK I 0 -- Cards with bad clock source: CARD CLK A CLK B HS CLK A HS CLK B ---------- Command Completed. ;
10 ☐	Issue the command to retrieve the clock options.	**rtrv-clkopts**
11 ☐	Response to retrieve command is displayed.	eaglestp YY-MM-DD hh:mm:ss zone PPP XX.x.x-YY.y.y CLK OPTIONS ---------- PRIMARY ---------- HSCLKSRC rs422 HSCLKLL longhaul SECONDARY ---------- HSCLKSRC rs422 HSCLKLL longhaul ;
12 ☐	All steps in this procedure were completed.	

3.17 Verifying MPS

The purpose of this procedure is to determine the health of MPS.

Procedure 17: Verifying MPS

STEP #	This procedure checks the status of the MPS.	
1 ☐	Issue the command to display MPS status.	**rept-stat-mps**
2 ☐	Response to MPS status command is displayed, if any of the features requires ELAP/EPAP. If the MTT error 4102 is output go to step 5.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y VERSION PST SST AST MPS A 027-015-000 OOS-MT Fault ----- CRITICAL PLATFORM ALARM DATA = No Alarms MAJOR PLATFORM ALARM DATA = h'0123456789ABCDEF MINOR PLATFORM ALARM DATA = h'0123456789ABCDEF CRITICAL APPLICATION ALARM DATA = No Alarms MAJOR APPLICATION ALARM DATA = h'0123456789ABCDEF MINOR APPLICATION ALARM DATA = No Alarms ALARM STATUS = ** 0371 Major Platform Failure(s) VERSION PST SST AST MPS B 027-015-000 OOS-MT Fault ----- CRITICAL PLATFORM ALARM DATA = No Alarms MAJOR PLATFORM ALARM DATA = No Alarms MINOR PLATFORM ALARM DATA = No Alarms CRITICAL APPLICATION ALARM DATA = h'0123456789ABCDEF MAJOR APPLICATION ALARM DATA = h'0123456789ABCDEF MINOR APPLICATION ALARM DATA = No Alarms ALARM STATUS = *C 0373 Critical Application Failure(s) CARD PST SST LNP STAT 1106 P IS-NR Active ACT 1201 IS-ANR Active SWDL 1205 OOS-MT-DSBLD Manual ------- 1302 OOS-MT Fault ------- 1310 IS-ANR Standby SWDL CARD 1106 ALARM STATUS = No Alarms CARD 1201 ALARM STATUS = No Alarms CARD 1205 ALARM STATUS = No Alarms CARD 1302 ALARM STATUS = ** 0013 Card is isolated from the system CARD 1310 ALARM STATUS = No Alarms Command Completed. ;
3 ☐	If DSM Audit was recorded as being on in Procedure 3.11 Step 2, or is not displayed then go to step 5. Otherwise, if DSM Audit is off, then execute this step. Issue the command to change STP options.	**chg-stpopts:dsmaud=on**
4 ☐	Response to the command is displayed	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y CHG-STPOPTS: MASP B – COMPLTD ;
5 ☐	All steps in this procedure were completed.	

3.18 Verify Source Database

Procedure 18: Verify Source Database

STEP #		
	The purpose of this procedure is to determine the presence of unsupported or obsolete references in the system prior to doing an upgrade when performing the UHC#2 as described in section 2.3, table 3. Otherwise, go to Procedure 19. **Note: it is important that the target release has been downloaded to the fixed disk, and for target release 46.0 and higher that the system has been configured to use the recommended CHG-UPGRADE-CONFIG:THRESTYPE=SET upgrade method.[5]** **This procedure verifies the presence of the following:** • **obsolete cards** • **network address conflicts with the PVN and FCN network address** **Note: this procedure is intrusive meaning the target OAM application must be loaded temporarily to complete this procedure. To ensure accuracy, it is strongly suggested that data capture be active during this procedure because the information produced by this procedure will be used to guide the change of hardware or the modification of the database so potential issues don't effect successful complete of the upgrade.** **The Software Access Key (SAK) for the upgrade target release is required for this procedure if upgrading *to* 45.0, 45.1 or 46.0.**	
1 ☐	If removable media is present, remove it from the system.	**Note:** it is important that the target release has been downloaded to the fixed disk, and for target release 46.0 and higher that the system has been configured to use the recommended CHG-UPGRADE-CONFIG:THRESTYPE=SET upgrade method.(see footnote 3)
2 ☐	Issue the upgrade command to display the database status.	**ACT-UPGRADE:ACTION=DBSTATUS**
3 ☐ ☐	Response to the upgrade - database status command is displayed. Verify that the Inactive Partition Group database version displays the target release's version.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.y.y DATABASE STATUS: >> OK << TDM 1114 (STDBY) TDM 1116 (ACTV) C LEVEL TIME LAST BACKUP C LEVEL TIME LAST BACKUP - -------- ---------- - -------- ---------- FD BKUP Y 148913 12-10-09 04:49:11 GMT Y 148913 12-10-09 04:49:11 GMT FD CRNT Y 148913 Y 148913 MCAP 1113 MCAP 1115 - -------- - -------- RD BKUP - - - - - - - - USB BKP - - - - - - - - CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS --------- ---- - - ---------- ---------- ---------- OAM-RMV 1113 - - - - - - TDM-CRNT 1114 Y N 148913 12-10-09 04:47:40 133-003-000 NORMAL TDM-BKUP 1114 Y - 148913 12-10-09 04:47:40 133-003-000 NORMAL OAM-RMV 1115 - - - - - - OAM-USB 1115 - - - - - - TDM-CRNT 1116 Y N 148913 12-10-09 04:47:40 133-003-000 NORMAL TDM-BKUP 1116 Y - 148913 12-10-09 04:47:40 133-003-000 NORMAL INACTIVE PARTITION GROUP CARD/APPL LOC C T LEVEL TIME LAST UPDATE VERSION STATUS --------- ---- - - ---------- ---------- ---------- TDM-CRNT 1114 Y - 1 00-00-00 00:00:00 135-000-000 NORMAL TDM-BKUP 1114 Y - 1 00-00-00 00:00:00 135-000-000 NORMAL TDM-CRNT 1116 Y - 1 00-00-00 00:00:00 135-000-000 NORMAL TDM-BKUP 1116 Y - 1 00-00-00 00:00:00 135-000-000 NORMAL ;
4 ☐	Issue the card status to verify the location of the active MASP slot	**rept-stat-card:appl=oam**

[5] In the EAGLE Software Upgrade Procedure; see Appendix B: Preparations for Upgrade Execution on how to download the software release to the fixed disk for the applicable target release [B.1: Target Release Software Download] and on how to configure the system to use the card-set upgrade method [B2: Configuring Card-Set Network Conversion Method.]

Procedure 18: Verify Source Database

5 ☐	Response to the card status command is displayed. Record the card locations of both MASPs and the running GPL: Act MASP _____ Stby MASP ____ MASP GPL: _____ For this sample output, cards 1113/1114 are standby and 1115/1116 are active.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.y.y CARD VERSION TYPE GPL PST SST AST 1113 XXX-XXX-XXX E5MCAP OAMHC IS-NR Standby ----- 1115 XXX-XXX-XXX E5MCAP OAMHC IS-NR Active ----- Command Completed. ;
6 ☐	Inhibit the standby MASP	**inh-card:loc=*XXXX*** (Where ***XXXX*** is the location of the standby MASP slot recorded in step 5)
7 ☐	Response to the inhibit command is displayed Verify UAM 514 is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y Card is inhibited. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y ** 7991.0514 ** CARD xxxx OAMHC Standby MASP is inhibited ; **Wait for card to boot and return to the IMT bus.**
8 ☐	Download target release flash to the standby MASP.	**init-flash:loc=XXXX:code=trial** (Where ***XXXX*** is the location of the standby MASP slot recorded in step 5)
9 ☐	Response to flash initialization is shown. Verify UAM 0004 is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx started. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y FLASH Memory Download for card xxxx completed. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y * 8003.0004 * GPL SYSTEM BLMCAP Card is running non-activated GPL ; **Wait for card to boot and return to the IMT bus.**
10 ☐	Retrieve the GPLs running on the card location.	**rept-stat-gpl:loc=XXXX** (Where ***XXXX*** is the location of the standby MASP slot recorded in step 5)
11 ☐	Response to the card status command is displayed. Repeat the previous step if a valid version of the flash GPL is not displayed.[6]	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.y.y GPL CARD RUNNING APPROVED TRIAL OAMHC ***XXXX*** ---------- ---------- ---------- BLDC32 YYY-YYY-YYY ALM+ XXX-XXX-XXX YYY-YYY-YYY Command Completed. ;
12 ☐	Run the target release GPL on the standby MASP	**alw-card:loc=*XXXX*:code=inactiveprtn** (target release downloaded to inactive partition) (Where *XXXX* is the location of the standby MASP recorded in step 5)

[6] Valid flash GPL for the MASP cards can be either BLMCAP or BLDC32 depending on the release. BLMCAP is valid for 46.6 and prior. BLDC32 is valid in 46.6 or later.

Procedure 18: Verify Source Database

13 ☐	Response to command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y INFO: Provisioning subsystem is in duplex mode. ; Note: UAMs are generated during this step. An audible alarm is generated. Wait for the new standby MASP to come up in standby mode and system returns to duplex mode.
14 ☐	Issue command to report the GPLs running on Standby MASP.	**rept-stat-gpl:loc=*XXXX*** (Where ***XXXX*** is the location of the standby MASP slot recorded in step 5)
15 ☐	Verify that the standby MASP is running target release GPLs. The standby MASP will display ALM to indicate that the card is not running the approved version GPL See footnote 6	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL OAMHC69 ***xxxx*** YYY-YYY-YYY ALM XXX-XXX-XXX XXX-XXX-XXX * BLDC32 YYY-YYY-YYY ALM+ XXX-XXX-XXX XXX-XXX-XXX Command Completed. ;
16 ☐	Issue command to report the GPLs running on the Active MASP.	**rept-stat-gpl:loc=yyyy** (Where ***XXXX*** is the location of the active MASP slot recorded in Step 5)
17 ☐	Verify that the active MASP is running source release GPL. See footnote 6	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x.x.x-YY.y.y GPL Auditing ON GPL CARD RUNNING APPROVED TRIAL OAMHC69 ***yyyy*** XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX * BLDC32 XXX-XXX-XXX XXX-XXX-XXX XXX-XXX-XXX Command Completed. ;
18 ☐	Perform an OAM role change by booting the active OAM.	**init-card:loc=*YYYY*** (Where *YYYY* is the location of the active MASP recorded in step 5)
19 ☐	Response to card initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y init-card:loc=xxxx Command entered at terminal #10. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Init Card command issued to card xxxx ;
20 ☐	Issue command to log back in to the system.	**login:uid=*XXXXXX*** (Where *XXXXXX* is a valid login ID)
21 ☐	Response to login command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 User logged in on terminal X
22 ☐	Issue the command to activate capture.	**act-echo:trm=P** *(Where P is a capture terminal port that was selected in Procedure 2, Step 4)*
23 ☐ ☐	Response to activate command is displayed. Verify that the capture terminal is correctly collecting data.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.yy.y Upg Phase 0 Scroll Area Output will be echoed to Terminal X. ; *(***Caution***: loss of output may occur if too many terminals are echoed)*
24 ☐	Issue the card status to verify the location of the active MASP slot	**rept-stat-card:appl=oam**

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25 ☐	Response to the card status command is displayed. Record the card locations of both MASPs: Active MASP _____ Standby MASP _____ For this sample output, 1113 is the active and 1115 is standby. Note: GPL & PST display for the standby MASP can be ignored.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 CARD VERSION TYPE GPL PST SST AST 1113 XXX-XXX-XXX E5MCAP OAMHC IS-NR Active ----- 7 1115 XXX-XXX-XXX E5MCAP ????? IS-NR Standby ----- 8 Command Completed. ;
26 ☐	Inhibit the standby MASP	**inh-card:loc=*YYYY*** (Where *YYYY* is the location of the standby MASP recorded in step 22)
27 ☐ ☐	Response to the inhibit command is displayed Verify UAM 514 is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 Card is inhibited. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 ** 7991.0514 ** CARD *yyyy* OAMHC Standby MASP is inhibited ; **Wait for card to boot and return to the IMT bus.**
28 ☐	Download target release flash to the standby MASP.	**init-flash:loc=*YYYY*:code=trial** (Where *YYYY* is the location of the standby MASP recorded in step 22)
29 ☐	Response to flash initialization is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x,x,x-YY.yy.y Upg Phase 0 FLASH Memory Download for card *yyyy* started. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 FLASH Memory Download for card *yyyy* completed. ; **Wait for card to boot and return to the IMT bus.**
30 ☐	Retrieve the GPLs running on the card location.	**rept-stat-gpl:loc=*YYYY*** (Where *YYYY* is the location of the standby MASP slot recorded in step 22)
31 ☐	Response to the card status command is displayed. Repeat the previous step if valid version of the flash GPL is not displayed. See footnote 6 May need to wait up to 15 minutes to see the GPL in trial and approved column.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 GPL CARD RUNNING APPROVED TRIAL OAMHC 1113 ----------- ----------- ----------- BLMCAP YYY-YYY-YYY ALM + XXX-XXX-XXX YYY-YYY-YYY Command Completed. ;
32 ☐	Run the target release GPL on the standby MASP	**alw-card:loc=*YYYY*:code=inactiveprtn** (target release downloaded to inactive partition) (Where *YYYY* is the location of the standby MASP recorded in step 22)

[7] Dashes are displayed until GPL auditing has initialized after the activity has been switched, which may take up to two minutes.
[8] The GPL of the standby may be blank or may show OAMHC based on the Source/Target releases. Regardless, this information has no impact on the completion of this step.

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33 ☐	Response to allow card command is shown.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x.x.x-YY.yy.y Upg Phase 0 Card has been allowed. ;
34 ☐	Issue the card status command to verify the target release GPL is running.	**rept-stat-gpl:gpl=oamhc69**
35 ☐ ☐	Response from the status command is displayed. Verify that the GPL versions that are displayed in the "RUNNING" is the target release and different from versions displayed in the "APPROVED". [9] Verify that both MASP cards are running the same GPL version. If no cards are displayed, repeat step 34 where **gpl=oamhc**. If not running the correct versions contact the My Oracle Support.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 rept-stat-gpl:gpl=oam Command entered at terminal #10. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 GPL Auditing ON APPL CARD RUNNING APPROVED TRIAL OAMHC69 1113 XXX-XXX-XXX ALM YYY-YYY-YYY ----------- 10 OAMHC69 1115 XXX-XXX-XXX ALM YYY-YYY-YYY ----------- Command Completed. ;
36 ☐	Issue the command to report card status to determine the active MASP.	**rept-stat-card**

[9] The "ALM" is displayed when the GPL auditing has completed a cycle. "ALM" does not have to be displayed to continue.
[10] Dashes are displayed until GPL auditing has initialized after the activity has been switched, which may take up to two minutes.

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37 ☐

Typical response to a card status command.

☐ Determine if both MASPs are IS-NR. If not, pause until the LEDs indicate both MASP are back or wait 30 seconds and then execute the previous step again.

☐ Otherwise, determine the active MASP by finding which area of shaded text reports 'active'.
Record the active MASP location: -
_____

Note: any 'isolated' cards should be plugged into their slots if possible.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    CARD   VERSION      TYPE      GPL        PST            SST        AST
    1101   ----------   ENETB     IPSG       OOS-MT         Isolated   -----
    1102   134-070-034  LIMATM    ATMHC      IS-NR          Active     -----
    1103   134-070-034  LIME1ATM  ATMHC      IS-NR          Active     -----
    1104   134-070-034  LIME1     SS7HC      IS-NR          Active     -----
    1105   134-070-034  E5ENETB   IPSG       IS-NR          Active     -----
    1106   134-070-034  DCM       IPGHC      IS-NR          Active     -----
    1107   134-070-034  DSM       SCCPHC     IS-NR          Active     -----
    1108   134-070-034  DCM       IPLHC      IS-NR          Active     -----
    1109   134-070-034  HIPR2     HIPR2      IS-NR          Active     -----
    1110   134-070-034  HIPR2     HIPR2      IS-NR          Active     -----
    1111   134-070-034  STC       ERTHC      IS-NR          Active     -----
    1112   134-070-034  TSM       GLSHC      IS-NR          Active     -----
    1113   134-070-034  E5MCAP    OAMHC      IS-NR          Active     -----
    1114   ----------   E5TDM                IS-NR          Active     -----
    1115   134-070-034  E5MCAP    OAMHC      IS-NR          Standby    -----
    1116   ----------   E5TDM                IS-NR          Active     -----
    1117   ----------   E5MDAL               IS-NR          Active     -----
    1201   ----------   ENETB     IPSG       OOS-MT         Isolated   -----
    1202   134-070-034  LIMT1     SS7HC      IS-NR          Active     -----
    Command Completed.
;
```

38 ☐

Issue the Send Message command that performs checks for obsolete cards.

send-msg:loc=XXXX:ds=1:da=h'1d:f=h'61
(Where XXXX is the location of the active MASP)

Note: It is important to enter the correct active MASP location determined in the previous step. Incorrect results could be displayed otherwise.

39 ☐

Response to the Send Message command is displayed. Verify the output for the following checks:

☐ Verify the shaded text (shown) does not indicate any incorrect hardware is found. Unsupported/obsolete cards are indicated with ***. If obsolete cards are shown then this check fails until the target's baseline hardware is installed.

☐ Record the count of obsolete cards:

_____

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0
    System Buffer sent has following attributes :
        Msg Length = H'0010
        Dest Card = H'00fa
        Orig Subsys = H'0001            Dest Subsys = H'0001
        Orig Appl ID = H'0030           Dest Appl ID = H'001d
        Func ID = H'0061                Bus/Ret/Sut = H'0002
        Violation Ind = H'0000
    User Message sent to location XXXX.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y
    IMT Bus Check Started
    IMT Bus Check Completed Successfully.

    Hardware Validation Test Started...
    [DSM-1G Obsolescence Test for IPS application.]
    [TSM-256 Obsolescence Test for GLS application.]
    [LIM-ATM Obsolescence Test for ATMANSI/ATMITU application.]
    [E1/T1 MIM Obsolescence Test for SS7ANSI/CCS7ITU application.]
    [DSM Obsolescence Test for VSCCP application.]
    [DCM/EDCM Obsolescence Test.]
    [EDSM Obsolescence Test for MCPM application.]
    [E1/T1 MPL Obsolescence Test for SS7ML application.]

    *** CARD/GPL in slot 1101  is obsolete
    *** CARD/GPL in slot 1102  is obsolete
    *** CARD/GPL in slot 1105  is obsolete
    *** CARD/GPL in slot 1111  is obsolete

     Obsolete card's count = 4

    Hardware Validation Test Failed, Upgrade can not proceed.
;
```

40 ☐

Issue the Send Message command that checks for possible conflicts of IP addresses configured in the system.

send-msg:loc=XXXX:ds=1:da=h'1d:f=h'63
(Where XXXX is the location of the active MASP)

Note: It is important to correctly enter the active MASP location determined in step 35. Otherwise, incorrect results could be displayed.
.

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41 ☐ ☐	Response to command is displayed. Verify that the IP Address Validation check passes if running the target release of 45.x. Or the check is not required in target release of 46.0 and beyond.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 System Buffer sent has following attributes : Msg Length = H'001c Dest Card = H'00fa Orig Subsys = H'0001 Dest Subsys = H'0001 Orig Appl ID = H'0030 Dest Appl ID = H'001d Func ID = H'0063 Bus/Ret/Sut = H'0002 Violation Ind = H'0000 User Message sent to location *xxxx*. ; In 45.x: eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 IP Address Validation Report IP Address Validation Result: Pass. ; In 46.0 and beyond: eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 Health Check: This check is no longer necessary. ;
42 ☐	If the target release is 45.0, 45.1, or 46.0, issue the command to enter the software access key. Otherwise, if the target release is 46.1 or later, go to step 44.	**chg-upgrade-config:sak=XXXXXXXXXXXXX:src=fixed** (Where XXXXXXXXXXXXX is the Software Access Key)
43 ☐ ☐	Response to command is displayed. Verify the command completed successfully and the correct Upgrade target release is output	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 chg-upgrade-config:sak=XXXXXXXXXXXXX:src=zzzzz Command entered at terminal #6. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y Upg Phase 0 Upgrade target: EAGLE XX.x.x-YY.y.y ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Command Completed. ;

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44 ☐	If system is running release 46.5.X or 46.6.X and target release is 46.7.X or later, update the bootloader version of SLIC SM cards running 64-bit GPL while the system in in HC2 phase-0 with the following steps: A. Issue the Send Message command that performs checks for obsolete cards. Where, XXXX = Location of the active MASP	**send-msg:loc=XXXX: ds=1:da=64:f=171**
	B. Check the status of SM card.	**rept-stat-card:mode=full:loc=XXXX**
	C. Execute the command **Note:** Ignore if it reports Error *E2603: Cmd Rej: Card must be inhibited before executing this command*.	**init-flash:mode=rplcebl:loc=XXXX:bits=64**
	D. Execute the command **Note:** If card is running correct bootloader then it will display message: "BOOTLOADER not changed for card xxxx. Already running requested bootloader." otherwise it will update the correct bootloader.	**INIT-FLASH:MODE=rplcebl:FORCE=YES:LOC=XXXX**
45 ■	Issue the command to retrieve the upgrade configuration.	**rtrv-upgrade-config**
46 ☐	Response to the retrieve-card command is displayed	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y Software Access Key no longer required for this system Configured Upgrade Threshold Type: SET Number of SERVICE Sets: 2 Number of LINK Sets: 2 Command Completed. ;
47 ☐	Issue the command to initialize the active and standby MASP cards so that they are running the source release software.	**init-card:appl=oam**
48 ☐	Response to the initialize-card command is displayed	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.y.y init-card:appl=oam Command entered at terminal #X. ;
49 ☐	Issue command to log back in to the system.	**login:uid=*XXXXXX*** (Where *XXXXXX* is a valid login ID)

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50 ☐	Response to login command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.yy.y User logged in on terminal X
51 ☐	Issue the command to activate capture.	**act-echo:trm=P** *(Where P is a capture terminal port that was selected in Procedure 2, Step 4)*
52 ☐	Response to activate command is displayed. Verify that the capture terminal is correctly collecting data.	eaglestp YY-MM-DD hh:mm:ss ZZZZ PPPPP XX.x.x-YY.yy.y Scroll Area Output will be echoed to Terminal X. ; *(***Caution**: loss of output may occur if too many terminals are echoed*)*
53 ☐	Issue the command to report card status.	**rept-stat-card**
54 ☐	Typical response to card status command. Note: Compare this output with the rept-stat-card done prior to booting the target MASP. The display should be the same.	eaglestp YY-MM-DD hh:mm:ss zzzz PPPPP XX.x.x-YY.yy.y CARD VERSION TYPE GPL PST SST AST 1101 134-061-000 DCM IPGHC IS-NR Active ALMINH 1102 134-061-000 DCM IPLHC IS-NR Active ALMINH 1103 134-061-000 E5ENET IPSG IS-NR Active ----- 1107 134-061-000 DSM VSCCP IS-NR Active ----- 1109 134-058-000 HIPR HIPR IS-NR Active ----- 1110 134-058-000 HIPR HIPR IS-NR Active ----- 1111 134-061-000 DSM SCCPHC IS-NR Active ----- 1113 134-061-000 E5MCAP OAMHC IS-NR Standby ----- 1114 ---------- E5TDM IS-NR Active ----- 1115 134-061-000 E5MCAP OAMHC IS-NR Active ----- 1116 ---------- E5TDM IS-NR Active ----- 1117 ---------- E5MDAL IS-NR Active ----- 1201 134-061-000 LIMDS0 SS7ML IS-NR Active ----- Command Completed. ;
55 ☐	Issue the command to report trouble status.	**rept-stat-trbl:display=timestamp**
56 ☐	Response to trouble status command is displayed. Record any non-network alarms. Alarm _____	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y Searching devices for alarms... ; eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y SEQN UAM AL DEVICE ELEMENT TROUBLE TEXT 5728.0048 * TERMINAL 14 Terminal failed 98-03-09 10:05:36 5729.0048 * TERMINAL 15 Terminal failed 98-03-09 10:05:36 98-03-09 13:57:40 5731.0013 ** CARD 1214 SS7ANSI Card is isolated from the system 98-03-09 13:57:40 5604.0013 ** CARD 1111 SCCP Card is isolated from the system 98-03-09 13:57:40 5732.0236 ** SLK 1214,A lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5733.0236 ** SLK 1214,B lsn1214 REPT-LKF: not aligned 98-03-09 13:57:40 5734.0236 ** SLK 1106,A lsnx1 REPT-LKF: not aligned 98-03-09 13:57:40 5735.0318 ** LSN lsn1214 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 5736.0318 ** LSN lsnx1 REPT-LKSTO: link set prohibited 98-03-09 13:57:40 Command Completed. ;
57 ☐	All steps in this procedure were completed.	

3.19 Verifying Fixed and Removable Media (Part 1)

Procedure 19: Verifying Fixed Disks Functions with TST-DSK

STEP #	This procedure verifies that EAGLE fixed disks and removable drives are accessible and in proper working order. Disks\drives are exercised by issuing test disk and backup commands. If no on-site personnel are available and the removable drive is not inserted then this procedure needs to be rescheduled.	
1 ☐	Issue the command to backup to the fixed disk.	`chg-db:action=backup`

2 ☐	Response to backup command is displayed.	`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`7706.1114  CARD 1115  Database BACKUP started`
		`Report Date:98-03-09  Time:17:59:25`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (FIXED): MASP B - Backup starts on active MASP.`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (FIXED): MASP B - Backup on active MASP to fixed disk complete.`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (FIXED): MASP B - Backup starts on standby MASP.`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (FIXED): MASP B - Backup on standby MASP to fixed disk complete.`
		`;`

3 ☐	**If not already inserted, insert the source removable media drive into the system**	**NOTE:** The insertion of a removable drive is required to complete this procedure. If drive cannot be inserted, this procedure fails. After failing this procedure, go to Step 9 and to complete the check of the fixed disks.

4 ☐	Issue the command to backup to the removable. Otherwise, procedure needs to be rescheduled.	**Note**: The USB storage media in the flush-mounted USB port of the MASP card can also be used for backups.
		
		For removable media:
		`chg-db:action=backup:dest=remove`
		
		For USB storage media:
		`chg-db:action=backup:dest=usb`

5 ☐ ☐	Response to backup command is displayed.
	
	Record the location of the active MASP:
	
	[1113 or 1115] _____.
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (REMOVABLE): MASP A - Backup starts on active MASP.`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`0465.1114  CARD 1113  Database BACKUP started`
		`Report Date:98-03-31  Time:00:02:03`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`BACKUP (REMOVABLE): MASP A - Backup to removable cartridge complete.`
		`;`
		
		`eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y`
		`0466.1116  CARD 1113  Database action ended - OK`
		`Report Date:98-03-31  Time:00:05:08`
		`;`

6 ☐	Issue the command to copy GPLs from active TDM to removable drive.	**Note**: The USB storage media in the flush-mounted USB port of the MASP card can also be used for backups.
		
		For removable media:
		`copy-gpl:sloc=XXXX:ddrv=remove`
		
		For USB storage media:
		`copy-gpl:sloc=XXXX:ddrv=usb`
		
		(Where XXXX is the active TDM location (1114 or 1116) that corresponds to the MASP slot recorded in step 5)

Procedure 19: Verifying Fixed Disks Functions with TST-DSK

7 ☐	Response to copy GPL command is displayed Verify command completes successfully.	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y COPY GPL: MASP *Y* - COPY STARTS ON ACTIVE MASP COPY GPL: MASP *Y* - COPY TO REMOVABLE CARTRIDGE COMPLETE ; *(Where Y is the active MASP – A or B)*
8 ☐	Issue the commands to display disk directory of the fixed disk.	**disp-disk-dir:loc=XXXX** *(Where XXXX is the standby TDM)*
9 ☐	Response to the display command is displayed. Verify command completes successfully. *Note that the output data may vary from this example.*	eaglestp YY-MM-DD hh:mm:ss zzz PPPPP XX.x.x-YY.yy.y DISP-DISK-DIR Loc=1114 Dev = FIXED(Active) Filename Ext Length DMS1024 CFG 32768 dbstat bkp 47662 dbstat tbl 47662 ipas tbl 262090 mcfg bkp 156 mcfg tbl 156 *(additional files listed …)* File(s) : 465 Bytes : 1925810639 Disk Size (MB) : 7515 ;
10 ☐	Issue this command to test the fixed disk.	**tst-disk:loc=XXXX:partition=all** *(Where XXXX is the standby fixed disk)*
11 ☐ ☐	Response to the test disk command is displayed. Verify that there are no errors and retries are indicated. This command will complete in less than a minute.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y TST-DISK RESULTS: Total clusters: 983290 Free Clusters: 983290 Bad Clusters: 0 Total Free Space: 3933160 Max. Contiguous Free Space: 3933160 Files: 932 Folders: 0 Bytes in Files: 3761348 Lost Chains: 0 Bytes in Lost Chains: 0 ;
12 ☐	Issue the commands to display disk directory of the removable media.	**Note**: The USB storage media in the flush-mounted USB port of the MASP card can also be used for backups. For removable media: **disp-disk-dir:loc=xxxx:src=remove** For USB media: **isp-disk-dir:loc=xxxx:src=usb** ***(Where XXXX is the active MASP)***
13 ☐	Response to disp-disk-dir command is displayed. Verify command completes successfully. *Note that the output data may vary from this example.*	eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y DISP-DISK-DIR Loc=1115 Dev = REMOVE Filename Ext Length DMS1024 CFG 32768 TATMANSI ELF 3145728 TATMHC ELF 5242880 TATMITU ELF 3145728 TBLBEPM ELF 3145728 TBLBIOS ELF 3145728 (additional files listed …) File(s) : 182 Bytes : 511026520 Disk Size (MB) : 1910 ;

Procedure 19: Verifying Fixed Disks Functions with TST-DSK

14 ☐	Issue this command to test the removable media.	**Note**: The USB storage media in the flush-mounted USB port of the MASP card can also be used for backups. For removable media: **tst-disk:disk=remove:loc=xxxx** For USB media: **tst-disk:disk=usb:loc=xxxx** ***(Where XXXX is the active MASP)***
15 ☐ ☐	Response from the tst-disk command is displayed. For E5OAM system, execution time is under a minute. Verify that there are no errors and no retries indicated in output.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y TST-DISK RESULTS: Total clusters: 149949 Free Clusters: 149949 Bad Clusters: 0 Total Free Space: 599796 Max. Contiguous Free Space: 517336 Files: 431 Folders: 0 Bytes in Files: 1323558 Lost Chains: 0 Bytes in Lost Chains: 0 ;
16 ☐	Remove the removable drives from the active and standby MASP. Update the label with release and database level. Store in a safe place for later use	
17 ☐	Issue the command to initialize the active MASP.	**init-card:loc=*XXXX*** (Where ***XXXX*** is the location of the active E5-MASP)
18 ☐	Response to the initialize command is displayed	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y init-card:loc=XXXX Command entered at terminal #10. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y ** 6573.0013 ** CARD XXXX OAMHC Card is isolated from the system ASSY SN: xxxxxxxxxxx ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 6577.0014 CARD XXXX OAMHC Card is present ASSY SN: xxxxxxxxxxx ;
19 ☐	Issue the command to log in to the EAGLE terminal.	**login:uid=XXXXXX** *(Where XXXXXX is your login ID)*
20 ☐	Response to login command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y User logged in on terminal X ;
21 ☐	Issue the command to activate capture.	**act-echo:trm=P** *(Where P is a terminal port used in Procedure 3.2, Step 5)*
22 ☐	Response to activate command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Scroll Area Output will be echoed to Terminal X. ;
23 ☐	Repeat Steps 8-11 for the formerly-active TDM.	
24 ☐	All steps in this procedure were completed.	

3.20 Testing IMT Status

Procedure 20: Testing IMT Buses

STEP #		
	This procedure tests that the IMT Buses are healthy. **This procedure should be executed in a maintenance window. If it cannot be done in a maintenance window, then this procedure needs to be rescheduled.** **If no on-site personnel are available, then step 14 needs to be rescheduled.**	
1 ☐	Issue the command to report the status of the IMT buses.	`rept-stat-imt:mode=full`

2 ☐	Response to report IMT status command is displayed.	`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		` IMT  PST            SST       AST`
		`  A    IS-NR           Active    -----`
		`  ALARM STATUS      = No Alarms.`
		
		` IMT  PST            SST       AST`
		`  B    IS-NR           Active    -----`
		`  ALARM STATUS      = No Alarms.`
		`Command Completed.`
		`;`

3 ☐	If in a maintenance window, issue the command to inhibit the IMT bus.	`inh-imt:bus=A`

4 ☐	Response to inhibit IMT bus command is displayed.	`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Inhibit IMT Bus A command issued`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`0401.0098    IMT BUS A             IMT inhibited`
		`;`

5 ☐	Issue the command to test the IMT bus.	`tst-imt:type=faulttest:bus=A`

6 ☐
☐
	Response to test IMT bus command is displayed.
	
	"Test Passed" message displayed.
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		
		`IMT Fault Isolation Bus A`
		`Fault Location    Probable Cause    Failure(s)`
		`No Faults Found`
		`                                  All Tests Passed`
		`;`

7 ☐	Issue the command to allow the IMT bus.	`alw-imt:bus=A`

8 ☐	Response to allow IMT bus command is displayed.	`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Allow IMT Bus A command issued`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`0403.0097    IMT BUS A             IMT allowed`
		`;`

9 ☐	Issue the command for the Extended BERT test.	`tst-imt:type=extbert:time=10:bus=A`

10 ☐	Response to test IMT bus command is displayed.
	Otherwise, error "E4765 Cmd Rej: Obsolete MUX cards detected in the system" is displayed when the hardware is invalid for this command.
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended BERT: Command in progress...`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended BERT: Target Bus A will be inhibited`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`5042.0098    IMT BUS A             IMT inhibited`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended BERT: Active MASP will be reconnected on Bus A`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended BERT: Extended processing time required.`
		`Results will be displayed on test completion.`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Command Completed.`

Procedure 20: Testing IMT Buses

☐	"PASS" messages displayed in BERT Status column.	*After 10 minutes:*
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended Bit Error Rate Test Bus A`
		`MAX ERROR = 20 TIME = 00:10:00 START TIME = 12:10:30`
		`TEST STATUS = PASS`
		
		`CARD TYPE SERIAL_NUMBER BERT_STATUS BIT_ERROR ERRORED_SEC DURATION`
		`1110 HIPR2 10208345012 PASS 3 2 01:00:00`
		`1210 HIPR2 10208345031 PASS 2 1 01:00:00`
		`1310 HIPR2 10208345052 PASS 5 3 01:00:00`
		
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`Extended BERT: Target Bus A will be allowed`
		`;`
		
		`eaglestp YY-MM-DD HH:MM:SS tzone Rel XX.X.X-YY.Y.Y`
		`5042.0098 IMT BUS A IMT allowed`
		`;`

11 ☐	Issue the status command for the IMT buses.	`rept-stat-imt:mode=full`

12 ☐	Response to IMT bus status command is displayed.
	
	☐ Verify that bus has returned to IS-NR.
		`eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y`
		`IMT PST SST AST`
		`A IS-NR Active -----`
		`ALARM STATUS = No Alarms.`
		
		`IMT PST SST AST`
		`B IS-NR Active -----`
		`ALARM STATUS = No Alarms.`
		`Command Completed.`
		`;`

13 ☐	Repeat Steps 3 – 12 for IMT Bus B.	Repeat command in order to test IMT Bus B
14 ☐	If upgrading to Release 46.4 or later from Release 46.3 or prior; visually inspect the IMT cables. If cables are incorrect, this procedure fails. [11]	**Note:** all IMT cables in the system need to be the high-speed fiber-channel cables (P/N 830-1344-xx.) Review all part numbers for all IMT cables present in the system.
15 ☐	All steps in this procedure were completed.	

[11] If the correct cables are not installed, then steps must be followed to ensure that the cables have been properly installed and operation of IMT buses at 2.5Gbps is verified. See "Cabling" in Hardware Reference and "Activating the HIPR2 High Rate Mode Feature" in Database Administration - System Management for more information. This activity needs to be performed during a maintenance window.

3.21 Verifying Fixed and Removable Media (Part 2)

Procedure 21: Verifying Fixed Disks and Removable Media Function with TST-DISK

STEP #		
	This procedure verifies that EAGLE fixed disks and removable media are accessible and in proper working order. Disks will be exercised by issuing test disk and backup commands. If no on-site personnel are available to insert the source release removable media then this procedure needs to be rescheduled. This procedure must be done in a maintenance window.	
1 ☐	Verify that a **source release removable media** is inserted in the active MASP. If in a maintenance window, issue the command to display card status.	`rept-stat-card:appl=oam`

2 ☐ ☐	Response to card status command is displayed.
	
	Determine which MASP is currently Standby by looking in the column labeled SST.
	
	Record the locations of the MASPs:
	
	Active MASP _____
	
	Standby MASP _____
		`eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y`
		`CARD VERSION TYPE GPL PST SST AST`
		`1113 XXX-XXX-XXX E5MCAP OAMHC IS-NR Standby -----`
		`1115 XXX-XXX-XXX E5MCAP OAMHC IS-NR Active -----`
		
		`Command Completed.`
		`;`

3 ☐	Remove Standby E5MASP from the system.	☐ Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue). ☐ Remove the standby E5MASP card determined in step 2
4 ☐	Issue the command to report clock status.	`rept-stat-clk:mode=full`

5 ☐ ☐	Response to clock status command is displayed.
	
	Verify that all cards are using the clock on the other E5MASP.
		`eaglestp YY-MM-DD hh:mm:ss EST PPP XX.x.x-YY.y.y`
		`COMPOSITE PST SST AST`
		`SYSTEM CLOCK IS-ANR Idle -----`
		`ALARM STATUS = No Alarms.`
		`Primary Comp Clk 1114 (CLK A) IS-NR Active`
		`Primary Comp Clk 1116 (CLK B) IS-NR Idle`
		`Secondary Comp Clk 1114 (CLK A) IS-NR Idle`
		`Secondary Comp Clk 1116 (CLK B) IS-NR Idle`
		
		`Clock Using Bad`
		`CLK A 3 0`
		`CLK B 0 3`
		`CLK I 0 --`
		
		`HIGH SPEED PST SST AST`
		`SYSTEM CLOCK IS-NR Idle -----`
		`ALARM STATUS = No Alarms.`
		`Primary HS Clk 1114 (HS CLK A) IS-NR Active`
		`Primary HS Clk 1116 (HS CLK B) IS-NR Idle`
		`Secondary HS Clk 1114(HS CLK A) IS-NR Idle`
		`Secondary HS Clk 1116(HS CLK B) IS-NR Idle`
		
		`HS CLK TYPE 1114 = RS422`
		`HS CLK LINELEN 1114 = -----`
		`HS CLK TYPE 1116 = RS422`
		`HS CLK LINELEN 1116 = -----`
		
		`Clock Using Bad`
		`HS CLK A 0 0`
		`HS CLK B 0 0`
		`HS CLK I 0 --`
		
		`Cards with bad clock source:`
		`CARD CLK A CLK B HS CLK A HS CLK B`
		`1103 Active Fault ----- -----`
		`1105 Active Fault ----- -----`
		`1113 Active Fault ----- -----`
		
		`Command Completed.`
		`;`

Procedure 21: Verifying Fixed Disks and Removable Media Function with TST-DISK

6 ☐ Place spare E5MASP in system.

☐ Insert the spare E5MASP card

☐ Slide the MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for the MASP H/S LED to transition from blinking blue to off and the MASP to come up in standby mode).

7 ☐ Display database version information.

```
rept-stat-db:display=version
```

8 ☐ Verify that the standby TDM contains the same database version as the active.

☐ **If the database version on the standby disk is not the same as the active disk, stop the procedure and contact My Oracle Support.**

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    DATABASE STATUS: >> NOT OK (DMS) <<
            TDM 1114 ( ACTV )                   TDM 1116 ( STDBY)
            C   LEVEL    TIME LAST BACKUP       C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- --------------------
    FD BKUP Y   XXXXXX YY-MM-DD hh:mm:ss TTT  Y   ZZZZZZ YY-MM-DD hh:mm:ss TTT
    FD CRNT Y   XXXXXX                        Y   ZZZZZZ DIFF LEVEL
            MCAP 1113                         MCAP 1115
            - --------                        - --------
    RD BKUP Y   XXXXXX YY-MM-DD hh:mm:ss TTT  -    -         -        -
    USB BKP -    -         -         -       -    -         -        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION STATUS
    ---------  ----  -  -  ----------  -----------------  -------------------
    OAM-RMV    1113  -  -      -           -        -          -
    OAM-USB    1113  -  -      -           -        -          -
    TDM-CRNT   1114  Y  N   XXXXXX     YY-MM-DD hh:mm:ss  XXX-XXX-XXX  NORMAL
    TDM-BKUP   1114  Y  -   XXXXXX     YY-MM-DD hh:mm:ss  XXX-XXX-XXX  NORMAL
    OAM-RMV    1115  -  -      -           -        -          -
    TDM-CRNT   1116  Y  N   ZZZZZZ     YY-MM-DD hh:mm:ss  XXX-XXX-XXX  NORMAL
    TDM-BKUP   1116  Y  -   ZZZZZZ     YY-MM-DD hh:mm:ss  XXX-XXX-XXX  NORMAL
;
```

9 ☐ Issue the command to verify the GPL versions.

```
rtrv-gpl
```

10 ☐ Response to retrieve GPL command is displayed.

☐ Verify the column between the Approved and Trial shows no alarms for the Standby TDM that was recorded in Step 2. If an alarm is found, go to step 11. Otherwise, go to Step 13.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
    BLMCAP     1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    BLMCAP     1116  XXX-XXX-XXX  XXX-XXX-XXX ALM  XXX-XXX-XXX  XXX-XXX-XXX
    BLMCAP     1113  -----------  -----------      -----------  -----------
    OAMHC      1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    OAMHC      1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    OAMHC      1113  -----------  -----------      -----------  -----------
    HIPR2      1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    HIPR2      1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    HIPR2      1113  -----------  -----------      -----------  -----------
    HIPR       1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    HIPR       1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    HIPR       1113  -----------  -----------      -----------  -----------
    SS7HC      1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    SS7HC      1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    SS7HC      1113  -----------  -----------      -----------  -----------
    BLBIOS     1114  133-043-000  133-043-000      133-043-000  133-043-000
    BLBIOS     1116  133-043-000  133-043-000      133-043-000  133-043-000
    BLBIOS     1113  -----------  -----------      -----------  -----------
    BLCPLD     1114  133-055-000  133-055-000      133-055-000  133-055-000
    BLCPLD     1116  133-055-000  133-055-000      133-055-000  133-055-000
    BLCPLD     1113  -----------  -----------      -----------  -----------
    GLSHC      1114  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    GLSHC      1116  XXX-XXX-XXX  XXX-XXX-XXX      XXX-XXX-XXX  XXX-XXX-XXX
    GLSHC      1113  -----------  -----------      -----------  -----------
;
```

11 ☐ Issue the command to copy GPLs.

```
copy-gpl:sloc=yyyy:dloc=XXXX
```

(Where yyyy is the active MASP(1113/1115) and XXXX is the standby TDM (1114/1116) location recorded in step 2)

12 ☐ Response to copy GPL command is displayed.

☐ Verify command completes successfully.

```
    eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
    COPY GPL:  MASP B - COPY STARTS FROM REMOVABLE CARTRIDGE TO STANDBY TDM
    COPY GPL:  MASP B - COPY TO STANDBY TDM COMPLETE
;
```

13 ☐ Issue the command to repair the standby disk.

```
chg-db:action=repair
```

14 ☐ Response to repair command is displayed.

This command may take up to 45 minutes to complete

```
    eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y
    BACKUP (FIXED): MASP B - Repair starts on standby MASP.
;

    sysint211 98-03-09 18:07:59 EST Rel XX.X.X
    BACKUP (FIXED): MASP B - Repair on standby MASP to fixed disk complete.
```

15 ☐ Issue the commands to display disk directory of the standby MASP.

```
disp-disk-dir:loc=XXXX
```

(Where XXXX is the standby MASP disk slot)

Procedure 21: Verifying Fixed Disks and Removable Media Function with TST-DISK

16 ☐	Response to display disk directory command is displayed. ☐ Verify command completes successfully. *Note that the output data may vary from this example.*	eaglestp YY-MM-DD hh:mm:ss TTT PPP XX.x.x-YY.y.y DISP-DISK-DIR Loc=1114 Dev = FIXED(Active) Filename Ext Length DMS1024 CFG 32768 dbstat bkp 47662 dbstat tbl 47662 ipas tbl 262090 mcfg bkp 156 mcfg tbl 156 *(additional files listed …)* File(s) : 465 Bytes : 1925810639 Disk Size (MB) : 7515 ;
17 ☐	Issue this command to test the fixed disk.	**tst-disk:partition=all:loc=XXXX** *(Where XXXX is the standby MASP disk slot recorded in step 2)*
18 ☐	Response to the test disk command is displayed. ☐ Verify that there are no errors and retries are indicated.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y TST-DISK RESULTS: Total clusters: 149949 Free Clusters: 149949 Bad Clusters: 0 Total Free Space: 599796 Max. Contiguous Free Space: 517336 Files: 431 Folders: 0 Bytes in Files: 1323558 Lost Chains: 0 Bytes in Lost Chains: 0 ;
19 ☐	Remove the removable drives from the active and standby MASP. Update the label with release and database level. Store in a safe place for later use.	
20 ☐	Issue the initialize card command for the active MASP.	**init-card:loc=XXXX** *(Where for the first time executing this command, XXXX is the location of the active MASP recorded in step 2; Where for the second time executing this command, XXXX is the location of the standby MASP recorded in step 2)*
21 ☐	Response to the initialize command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y * 0261.0013 * CARD XXXX OAM Card is isolated from the system ASSY SN: xxxxxxxx ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y 5038.0014 CARD XXXX OAM Card is present ASSY SN: xxxxxxxx ;
22 ☐	Issue the command to log in to the EAGLE terminal.	**login:uid=XXXXXX** *(Where XXXXXX is your login ID)*
23 ☐	Response to login command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y User logged in on terminal X ;
24 ☐	Issue the command to activate capture. Refer to Section 2.1.2 for information on how to set up terminals for data capture.	**act-echo:trm=P** *(Where P is a terminal port used in Procedure 3.2, Step 5)*
25 ☐	Response to activate command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y act-echo:trm=P Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y Scroll Area Output will be echoed to Terminal X. ;
26 ☐	Issue the command to report the status of the MDAL.	**rept-stat-card:loc=1117**

Procedure 21: Verifying Fixed Disks and Removable Media Function with TST-DISK

27 ☐	Response to the status command is displayed.
	
	Verify that status is IS-NR.
			`eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y`
			`CARD VERSION TYPE APPL PST SST AST`
			`1117 ---------- E5MDAL IS-NR Active -----`
			`Command Completed.`
			`;`

28 ☐	Repeat Steps 20-27. If second time executing this step, continue to next step.		
29 ☐	Inhibit the standby MASP so that the spare MASP may be removed from the system.		**inh-card:loc=*XXXX*** *(where XXXX is the location of the standby MASP.)*

30 ☐	Response to the inhibit command is displayed		`eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y`
			`Card is inhibited.`
			`;`

☐	Verify UAM 514 is displayed.		`eaglestp YY-MM-DD hh:mm:ss TTTT PPP XX.x.x-YY.y.y`
			`** 7991.0514 ** CARD xxxx OAMHC Standby MASP is inhibited`
			`;`
			
			Wait for card to boot and return to the IMT bus.

31 ☐	Remove Standby E5MASP from the system.	☐	Slide the MASP H/S switch (SW3) on the standby MASP up to the unlocked position (Wait for all drive LEDs to transition to a steady blue).
		☐	Remove the standby E5MASP card; the location specified in Step 24
		☐	Insert the spare E5MASP card
		☐	Slide the MASP H/S switch (SW3) on the standby MASP down to the locked position (Wait for the MASP H/S LED to transition from blinking blue to off and the MASP to come up in standby mode).

Procedure 21: Verifying Fixed Disks and Removable Media Function with TST-DISK

32 ☐ Issue the allow card to bring the standby MASP in service.

```
alw-card:loc=xxxx
 (where XXXX is the location of the standby MASP specified in step 32)
```

33 ☐ Response to allow card is displayed.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    Card has been allowed.
;

    eaglestp YY-MM-DD hh:mm:ss TTTT PPP  XX.x.x-YY.y.y
    1798.0014    CARD XXXX OAM          Card is present
                 ASSY SN:  10202081389
;
```

34 ☐ Display database version information.

```
act-upgrade:action=dbstatus
```

35 ☐ Verify that the standby MASP contains the same database version as the active.

☐ **If the database version on the standby disk is not the same as the active disk, first repeat previous step and then contact My Oracle Support.**

☐ If target release was downloaded, verify the version of the inactive partition is that of the upgrade target release, the database level is "1" and the coherency is "Y". If otherwise, contact My Oracle Support.

```
    eaglestp YY-MM-DD hh:mm:ss TTTT EAGLE5 XX.x.x-YY.yy.y
                          VERSION       PST            SST        AST
    DATABASE STATUS: >> OK <<
            TDM 1114 ( STDBY)                 TDM 1116 ( ACTV )
            C   LEVEL    TIME LAST BACKUP     C   LEVEL    TIME LAST BACKUP
            - -------- ---------------------- - -------- ----------------------
-
    FD BKUP Y   148913 12-10-09 04:49:11 GMT  Y   148913 12-10-09 04:49:11 GMT
    FD CRNT Y   148913                        Y   148913
            MCAP 1113                         MCAP 1115
            - --------                        - --------
    RD BKUP -    -         -        -         -    -         -        -
    USB BKP -    -         -        -         -    -         -        -

    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION STATUS
    ---------  ----  -  -  ----------  -----------------  -------------------
    OAM-RMV    1113  -  -      -          -          -          -
    TDM-CRNT   1114  Y  N  148913      12-10-09 04:47:40  ZZZ-ZZZ-ZZZ  NORMAL
    TDM-BKUP   1114  Y  -  148913      12-10-09 04:47:40  ZZZ-ZZZ-ZZZ  NORMAL
    OAM-RMV    1115  -  -      -          -          -          -
    OAM-USB    1115  -  -      -          -          -          -
    TDM-CRNT   1116  Y  N  148913      12-10-09 04:47:40  ZZZ-ZZZ-ZZZ  NORMAL
    TDM-BKUP   1116  Y  -  148913      12-10-09 04:47:40  ZZZ-ZZZ-ZZZ  NORMAL

    INACTIVE PARTITION GROUP
    CARD/APPL  LOC   C  T  LEVEL       TIME LAST UPDATE   VERSION STATUS
    ---------  ----  -  -  ----------  -----------------  -------------------
    TDM-CRNT   1114  Y  -  1           00-00-00 00:00:00  XXX-XXX-XXX  NORMAL
    TDM-BKUP   1114  Y  -  1           00-00-00 00:00:00  XXX-XXX-XXX  NORMAL
    TDM-CRNT   1116  Y  -  1           00-00-00 00:00:00  XXX-XXX-XXX  NORMAL
    TDM-BKUP   1116  Y  -  1           00-00-00 00:00:00  XXX-XXX-XXX  NORMAL

;
```

36 ☐ All steps in this procedure were completed.

3.22 Table Capacity Status

The following procedure is for data collection only. It does not have any pass fail criteria and does not include command response output.

Procedure 22: Collect Table Capacity Status

STEP #	This procedure collects the current capacity of certain database tables. Upon analysis of the health check data capture, it is the goal of this procedural to identify if table capacity is approaching any limitation prior to any impact on the EAGLE's performance.	
1 ☐	Issue the following command.	`rtrv-ls`
2 ☐	Issue the following command.	`rtrv-tbl-capacity`
3 ☐	Issue the following command.	`rept-stat-sys`
4 ☐	If EGTT feature is on, go to Step 6. If GTT feature is on (refer to Procedure 3.2, Step 12), issue the following command. Otherwise, go to the end of this procedure	`rtrv-tt`
5 ☐	Issue the following command.	`rtrv-gtt:type=XX` *(Where XX is any Type displayed in step 4)*
6 ☐	If any LNP feature is on, issue the following command.	`rtrv-lnp-serv`
7 ☐	Issue the following command.	`rtrv-cspc`
8 ☐	Issue the following command.	`rtrv-npp-srs`

3.23 Health Check Conclusion

Procedure 23: Return the System to Former Configuration

STEP #	This procedure returns the EAGLE to the configuration prior to the start of this health check.	
1 ☐	Issue the command to changes the user's terminal output group configuration.	**chg-trm:trm=P:YYY=yes,ZZZ=no** *(Where P is the location of the printer terminal recorded in Procedure 3.2, Step 4.)* *(YYY is an output group that was recorded in Procedure 3.2, Step 4.)* *(ZZZ is another output group that was recorded in Procedure 3.2, Step 4.)*
2 ☐	Response to change terminal command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y chg-trm:trm=P:YYY=yes,ZZZ=no Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y CHG-TRM: MASP A - COMPLTD ;
3 ☐	Issue the command to changes the user's terminal output group configuration.	**chg-trm:trm=X:YYY=yes,ZZZ=no:TMOUT=TTT** *(Where X is the location of the user's terminal recorded in Procedure 3.2, Step 4.)* *(YYY is an output group that was recorded in Procedure 3.2, Step 4.)* *(ZZZ is another output group that was recorded in Procedure 3.2, Step 4.)* *(TTT is the timeout value that was recorded in Procedure 3.2, Step 4*
4 ☐	Response to change terminal command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y chg-trm:trm=X:YYY=yes,ZZZ=no Command entered at terminal #X. ; eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y CHG-TRM: MASP A - COMPLTD ;
5 ☐	Issue the command to cancel capture.	**canc-echo:trm=P** *(Where P is a terminal port that was recorded in Procedure 3.2, Step 4)*
6 ☐	Response to cancel command is displayed.	eaglestp YY-MM-DD hh:mm:ss TTTT PPPPP XX.x.x-YY.y.y canc-echo:trm=P Command entered at terminal #X. ; eaglestp 98-03-09 08:29:26 EST Rel XX.X.X-YY.Y.Y Scroll Area Output echo disabled for terminal X. ;
7 ☐	All steps in this procedure were completed.	

4. COMPLETION OF HEALTH CHECK

When the System Health Check has been completed, record all procedures completed, data along with the date into Table 2. Health Check Record on page 8. Contact your local Oracle Global Customer Support Center (http://www.oracle.com/support/contact.html) if any failed procedures. Be prepared to identify your Release level, which procedures failed, and at what point each procedure failed.

APPENDIX A. MY ORACLE SUPPORT

 **CAUTION: Use only the guide downloaded from Oracle Help Center (OHC)** (https://docs.oracle.com/en/industries/communications/index.html).

My Oracle Support (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support can assist you with My Oracle Support registration.

Call the Customer Access Support main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

- For Technical issues such as creating a new Service Request (SR), select **1**.
- For Non-technical issues such as registration or assistance with My Oracle Support, select **2**.
- For Hardware, Networking and Solaris Operating System Support, select **3**.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.