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FINAL

VERIFICATION TEST OF THE
MAINTENANCE MANAGEMENT SYSTEM (MMS)
VERSION A04

LETTER OF FINDINGS

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September 1992

FEDERAL AVIATION ADMINISTRATION

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2. VERSION A04 VERIFICATION TEST RESULTS AND RECOMMENDATIONS.

2.1 RESULTS.

2.1.1 Security.

- a. When a user accesses IMCS anytime during an MMS session and then presses F6 (LOGOFF) from MMS, the user's SECTOR and INITIALS remain on the SYSTEM ACCESS screen. This problem was reported to Unisys via the MMS Hotline on 8/13/92.
- b. A user with an access level of 0 for all MMS subsystems is correctly denied access to all MMS subsystems. However, the message displayed PASSWORD HAS EXPIRED - MUST CHANGE PASSWORD BEFORE PROCEEDING is incorrect. The correct message should be ACCESS TO REQUESTED SUBSYSTEM NOT AUTHORIZED. This problem was reported to Unisys via the MMS Hotline (7/92).
- c. A user with an MMS ADMINISTRATION (ADM) access level of 1, 2, or 3 can produce the Last Access By User ID (ACCLAST) report. According to the VDD, this report is intended for use by the MPS system administrator and requires an ADM access level of 4 before it can be produced. This problem was reported to Unisys via the MMS Hotline (7/92).
- d. There is a problem with the Terminal Types/Configuration Identification (TERMCHKO) server. The system administrator visually noticed that a CPU was near full capacity. Using the Enlighten program, it was ascertained that process \$B961 (TERMCHKO) had an error 26. This problem was reported to Unisys via the MMS Hotline (7/92).
- e. A problem was discovered during Security Interface testing using a dedicated dial-up PC. (This problem occurs with all static window terminals). During an MMS session, a controller was turned off and then back on. Of course, this caused the application on the MMS screen to blank out. A redial was attempted to reestablish connection with the MPS. The PC terminal did not enter block mode. A program reset (Alt-Backspace) was performed for the PC. The MMS application returned to the PC, but not to the function that was running when the controller-induced interruption occurred. Instead, the MMS application returned to the MMS Main Menu. This problem was reported to Unisys via the MMS Hotline (7/92).

2.1.2 Logging Activity Subsystem (LOG).

2.1.2.1 Equipment Modification Function (LEM).

A date can be entered into the ORDERED field that is greater than the date entered into the RECEIVED field. This problem was reported to Unisys via the MMS Hotline on 8/18/92.

2.1.2.2 Line/Frequency Function (LLF).

In the error message **** REVERSE FEILD(S) ARE IN ERROR ****, the word FEILD(S) should be FIELD(S).

2.1.2.3 Detailed Review Function (LRV).

a. On page 3-38, Section 3.8.6.1.14 of the VDD for MMS, Summary of Change to the LRV Function, the following is stated:

"In addition, when no additional comments have been entered and the user presses F8 (ADD), the message now indicates that no new comments were entered and that comments were not added."

The above worked as described when there are nine lines of comments or more. However, when the Comments screen was not entirely filled, and F8 (ADD) was pressed with no additional comment or comments added, the COMMENTS HAVE BEEN ADDED TO LOG ID NUMBER 0000XXXX BY (User's Initials) message was displayed.

b. The COMMENT DATE and TIME fields are not entirely highlighted when they are in error; only the month field has bright highlighting.

c. Why doesn't the LRV screen show the number of comments that are associated with a particular record the way the LCO screen does (below the FACILITY-TYPE field)?

d. Should the LOG ID NUMBER be retained when going from the LRV function to any other LOG function? When going from any LOG function to the LRV function, the LOG ID NUMBER is not retained.

2.1.2.4 Comments Function (LCO).

On page 3-34, Section 3.8.6.1.5 of the VDD for MMS, Summary of Change to the LCO Function, the following is stated:

"Also, when no additional comments have been entered, and the user presses F8 (ADD), the message now indicates that no new comments were entered and that comments were not added."

The above worked as described when all nine lines of the Comments screen were already filled. However, when the Comments screen was not entirely filled, and F8 (ADD) was pressed with no additional comment or comments added, the COMMENTS HAVE BEEN ADDED TO LOG ID NUMBER 0000XXXX BY (User's Initials) message was displayed.

2.1.3 Report Generation/Distribution Subsystem (RGD).

When the REP, RNP, RPC, or RTE functions are accessed, there should be a specific RGD function key to return to the REPORT GENERATION/DISTRIBUTION MENU screen. Other MMS subsystems allow the user to return to a particular subsystem menu screen from a function within that subsystem (e.g., when a user presses F3 from the Corrective Maintenance (LCM) screen, the Logging Activity Subsystem Menu screen is displayed).

2.1.3.1 Report Generation Function (REP).

a. After a report is produced via F10 (PRODUCE REPORT), the message **** REPORT PROCESSING **** is displayed. However, after the status of a report is checked via F12 (REPORT STATUS) and a return is made back to the REP screen, the message **** REPORT PROCESSING **** should be cleared out.

b. The Facility/Service Outages (6040-12) (FSINTDTL) report can not be produced (ACN-100D attempted to generate only the FSINTDTL report. ACN-100D will attempt to generate the remaining reports during subsequent testing.) The following appeared at the \$OSP:

```
\ACTA.04,117 - *** COBOL85 Library Error 121 ***
\ACTA.04,117 - From COBOL85^ARMTRAP + %171
\ACTA.04,117 - R60403 + %53465
\ACTA.04,117 - R03STRT + %250
\ACTA.04,117 - $SYSTEM.MMBSREP.R03STRTO - 28 Jul 92 16:09
\ACTA.04,117 - A hardware/software trap occurred-the type follows
\ACTA.04,117 - Arithmetic overflow
Save file created: $SYSTEM.MMBSREP.ZZSA1827
```

c. For consistency with the other FSEP Data Extraction Reports (i.e., PCFDS, PCFEQ, PCFMF, PCFPS), should PCPFF be PCFPF?

d. ACN-100D recommends that the Report Names screens in the Report (REP) function be reviewed with regard to use of three-letter subfunction identifiers (e.g., PFF, FPF) and software field identifiers (e.g., FAC TYPE/IDENT, FA/CA NUMBER, etc.). These should be spelled out (alternately, the three-letter subfunction identifiers and field identifiers may be placed within parentheses following the spelled-out name). Note that this recommendation does not apply to acronyms (e.g., LOG, FSEP, IMCS, MMS, FMF, PC, PM). However, if an acronym is used, it should be consistently used. For example, PM and PERIODIC MAINTENANCE are both used in the Report Name screen for the PM/Certification Reports (recommend using only PM).

e. The Report Names screen text should be changed as follows:

<u>SHORT REPORT NAME</u>	<u>LONG REPORT NAME</u>
PMTODAY	PMs AND CERTIFICATIONS SCHEDULED FOR TODAY

2.1.3.2 Report Generation (REP), NPR Subsystem Report Generation (RNP), and TEC Subsystem Report Generation (RTE) Functions.

When F2 is pressed while on the HELP screen, instead of being non-functional, the HELP screen is displayed again with extraneous filler. On the REP and the RTE screens, this occurs for every field except the REPORT NAME field. On the RNP screen, this occurs for every field. This problem was reported to Unisys via the MMS Hotline on 8/21/92. Calista Hillman, Unisys, phoned on 8/24/92 to confirm that this is an editing feature used by Unisys that should have been disabled.

2.1.4 Facility/Service/Equipment Profile Subsystem (FSE).

2.1.4.1 FSEP Data Set Selection Function (FDS).

When attempting to generate any of the data sets (selections A, B, C, or D), the message *** FILE CREATION FAILURE *** WRITE0045 -CALL OPERATOR was displayed after a few minutes of processing. The following was displayed at the \$OSP :

```
$B030 *** COBOL85 LIBRARY ERROR 085 ***
$B030 FROM FDSS + #4356
$B030 $$SYSTEM.MMBSSERV.FDSO - 10 Aug 92 14:19
$B030 WRITE OPERATION FAILED BECAUSE FILE IS FULL
$B030 FILE CSC-DATA-SET-FILE, \ACTA.$DATA1.TEST.TEST1: OUTPUT
```

FUP INFO \$DATA1.TEST.TEST1,DETAIL and FUP INFO DETAIL for a file that was generated prior to the A04 version was entered. The comparisons showed that the EXT (file extent allocation) for the A04 file was (4 PAGES, 32 PAGES) and the EXT for the pre-A04 file was (442 PAGES, 440 PAGES). This problem was reported to Unisys via the MMS Hotline on 8/13/92.

2.1.4.2 Facility/Service File Update Function (FFA).

On page 3-26, Section 3.8.5.3 of the Version Description Document (VDD) for MMS (dated 5/11/92), Summary of Change to the FFA Function, the following is stated:

"A sixth character was added to the cost center code."

On the FFA screen, the COST CENTER code still has only five characters. Calista Hillman, Unisys, informed ACN-100D that a memo was issued stating that the sixth character will not be visible on the MMS screen. However, there will be a sixth character in the data base.

2.1.4.3 Module Detail File Update Function (FMO).

On page 3-29, Section 3.8.5.4 of the VDD for MMS, Summary of Change to the FMO Function, the following is stated:

"The FMO function was also changed to display an error message when an attempt is made to modify the record key to a value that already exists in the FSEFMO file."

An existing FMO record was retrieved, and the SHORT NAME field was modified (F9) with the same existing data. An OPERATION SUCCESSFUL message was displayed. Is this correct?

2.1.4.5 Precommissioned Facility File Update Function (FPF).

After retrieving an FPF record, F12 (FFA MODE) was pressed. The message ENTER KEY VALUE AND F7/SF7 TO RETR'VE FROM FFA/FSU OR F12 TO EXIT FFA/FSU MODE was displayed. The FSU references in this and any other message must be deleted, since the FSU function no longer exists. This problem was reported to Unisys via the MMS Hotline on 8/13/92.

2.1.5 MMS User's Manual (6/15/92).

- a. On page xiii, 8.5 Adding RSEP Records, RSEP should be FSEP.
- b. On page 8-10, 8.5 ADDING RSEP RECORDS, RSEP should be FSEP.
- c. For consistency with the Report Names screens of the Report Generation function (REP), the long report names for the following reports should be changed in appendix D as follows:

<u>SHORT REPORT NAME</u>	<u>LONG REPORT NAME</u>
PC60403B	CREATE FACILITY AND SERVICE OUTAGE REPORT/EXTRACT FILE AND DOWNLOAD TO PC (BCS)
PCMDT	CREATE LOGGING EXTRACT FILE FOR MDT AND DOWNLOAD TO PC
PCREPDTL	CREATE REPORTABLE LOG ENTRY DETAIL EXTRACT FILE AND DOWNLOAD TO PC
CURSTAT	IMCS CURRENT STATUS REPORT
UPLINK	UPLINK AUTHORIZATION LISTING BY USER ("authorization" is spelled incorrectly)

- d. Change the User's Manual (if the recommendation in 2.1.3.1.e for the Report Names screen text is accepted) as follows:

<u>SHORT REPORT NAME</u>	<u>LONG REPORT NAME</u>
PMTODAY	PMs AND CERTIFICATIONS SCHEDULED FOR TODAY

2.1.6 MMS System Administrator's Guide (dated 4/22/92).

On page 6-38, Step 2 description states "...non key fields as described in table 6-6." However, table 6-6 does not specify non key or primary fields.

2.1.7 MMS Software Requirements Specification (dated 9/30/91).

For consistency with the Help screens of the REP function, the MMS Software Requirements Specification should be changed as follows:

<u>REFERENCE</u>	<u>COMMENT</u>
3.2.1.4	Add the following reports: l. Call Back List for Sector by User Name (short name: CALLUSER) and m. Last Access by User ID (short name: ACCLAST). Also add corresponding subparagraphs (3.2.1.4.12 and 3.2.1.4.13).
3.2.1.4.b	Change "FAC" to "Fac" (see paragraph title in 3.2.1.4.2).
3.2.1.4.d	Change "Facility" to "Facility/Service".
3.2.1.4.k	Change "ALF" to "Line/Frequency".
3.2.1.4.4	In the paragraph title, change "Facility" to "Facility/Service".
3.2.1.4.11	In the paragraph title, change "ALF" to "Line/Frequency".
3.2.5.3.1	Add two reports: g. Out of Sector Log Activity for Sector h. Log Summary Report. Also add subparagraphs for each (i.e., 3.2.5.3.1.7 and 3.2.5.3.1.8).
3.2.5.3.4.a	Should read: Create Logging Summary Extract File and Download to PC.
3.2.5.3.4.b	Should read: Create Logging Extract File for MDT and Download to PC.
3.2.5.3.4.c	Should read: Create Reportable Log Entry Detail Extract File and Download to PC.
3.2.5.3.5	Should the IMCS Data Extraction Reports (i.e., PCDBCS, PCDBH) be added to this paragraph?
3.2.6.3.e	Change "P/M" to "PM".
3.2.7.3.1.b	Change "Identifier" to "Ident".
3.2.7.3.1.e	Should read: FMF Special Facilities Report (6000-19).
3.2.7.3.1.2	In the paragraph title change "Description" to "Descriptions" and "Identifier" to "Ident".
3.2.7.3.1.5	Paragraph title should read: FMF Special Facilities Report (6000-19). In line 3, correct "6000-19.follows".
3.2.7.3.2.d	Change "Sector/Subsector" to "Sector, Subsector".

- 3.2.7.3.4.c Change "Type/Facility Ident" to "Type/Ident".
- 3.2.7.3.4.d Change "Type/Facility Ident" to "Type/Ident".
- 3.2.7.3.6.b Should this be deleted? Report does not appear to be listed on the Help screen in the REP subsystem.
- 3.2.7.3.6.1.a Should the short name be changed from "FSCRSS1" to "FSCRFFA" to match the Help screen in REP subsystem?
- 3.2.7.3.6.2 Should this paragraph be deleted? Report does not appear to be listed on the Help screen in the REP subsystem.
- 3.2.7.3.6.3 Should the short name be changed from "FSCRSS3" to "FSCRFEQ" to match the Help screen in REP subsystem?
- 3.2.7.3.6.4 Should the short name be changed from "FSCRSS4" to "FSCRFMO" to match the Help screen in REP subsystem?
- 3.2.7.3.6.5 Should the short name be changed from "FSCRSS5" to "FSCRFPS" to match the Help screen in REP subsystem?
- 3.2.7.3.6.6 Should the short name be changed from "FSCRSS6" to "FSCRFPF" to match the Help screen in REP subsystem?
- 3.2.7.3.7 Recommend that the three-letter identifiers (i.e., FDS, FEQ, FPS, and PFF) in the report titles be replaced with their function names (i.e., FSEP data set, equipment detail, power system, precommissioned facility). Note that the Help screens in the REP subsystem are inconsistent in this regard. Recommend that the Help screens in the REP subsystem be modified to replace all three-letter identifiers with their function names. All documentation should then be modified accordingly.

2.1.8 Miscellaneous.

The following error message was displayed on the OSP:

```

$B901 -   *** COBOL85 Library Error 057 ***
$B901 -   From LEAPS + %16620
$B901 -       SIDS + %5254
$B901 -   $$SYSTEM.MMBSSERV.SIDO - 03 Aug 92 16:48
$B901 -   OPEN operation failed with error 12
$B901 -   File LOG-SEARCH-FILE, \ACTA.$DATA2.MMBSDATA.LOGLSE:  CLOSED.

```

The message indicated that the LOGLSE file was full, and a FUP PURGEDATA needed to be performed. ACN-100D recommends that OSP messages be generated when the file is 80% full and 90% full to warn of these upcoming conditions. Also, when the file full condition occurs, a message noting that the LOGLSE file is full should appear instead of the COBOL85 Library Error, which usually denotes a more serious problem. This was reported to Unisys on 8/4/92.

2.1.9 Outstanding A04 Beta Test Exception.

A problem remains that was discovered during the MMS A04 Beta testing. This problem occurred in the Supervisor-Technician Rotation function (PSR), which is part of the Personnel Certification and Training (PCT) subsystem. An attempt was made to rotate (SF13) a technician who was not certified. The message PERSONNEL DOES NOT HAVE CERTIFICATION STATUS was displayed with the technician field fully highlighted. The Establish and Maintain Personnel Profile function (PPA) was accessed to ascertain if this was correct. A retrieve (F7) was attempted on the above technician's record. KBD LOCK occurred. The keyboard did not unlock. From another terminal, Pathcom (which showed the affected terminal to be in a RUNNING state) was used to abort and restart the terminal. The restarted terminal was used again. An attempt was made to access PCT from the MMS Main Menu screen, but KBD LOCK occurred again. Any attempt to access any PCT function caused KBD LOCK. Also, users logged on to MMS at other terminals also experienced KBD LOCK if they attempted to access PCT and its functions. There were no \$OSP messages/printouts. Only by doing a PATHCOLD was the system brought back to a normal state. This problem was reported to Unisys via the MMS Hotline (7/92).

2.1.10 PC/MMS.

2.1.10.1 PC/MMS Documentation.

a. The PC/MMS Software Installation and Operation Notes and the MMS User's Manual (Chapter 5.0) should indicate that local mode is synonymous with disconnected mode. The documentation refers to both local and disconnected modes without indicating that they are one and the same. To start a local/disconnected mode session, the user must type LOCAL. During a local/disconnected mode session, the software displays DISCONNECTED MODE in the lower right corner of every screen. However, on the System Access screen, LOCAL MODE is also displayed under SYSTEM ACCESS. To prevent confusion, ACN-100D recommends changing the software (see 2.1.10.4.a) and the MMS User's Manual and PC/MMS Software Installation and Operation Notes as follows:

MMS User's Manual

5.2, lines 1 and 2 should read:

PC/MMS is available in two separate operational modes, local (disconnected) and connected.

5.2.1, lines 1 and 2 should read:

Local (disconnected) mode is available for use on the MDT when no connection to the MPS can be acquired.

PC/MMS Software Installation and Operation Notes

1.0, third paragraph, lines 1 and 2 should read:

Two similar but unique operational capabilities, called connected and local (disconnected) modes, are available.

1.0, fifth paragraph, lines 1 - 3 should read:

Local (disconnected) mode operation enables the technician to use a portable MDT (PMDT) independent of a communication connection to MMS resident on the MPS.

3.4, title, should read:

MDT LOCAL (DISCONNECTED) MODE OPERATION

3.4, line 1 should read:

MDT local (disconnected) mode is intended for use by field technicians at sites where a communications line is unavailable.

b. In the PC/MMS Software Installation and Operation Notes, references to the logging utilities screens in the document are different from the screen names in the application. The document refers to LIN as Logging Initialization, LDV as Logging Download for Verification, LDP as Logging Download, PM Records, and LDL as Logging Download, Logging Records. The application refers to LIN as Logging Identification, LDV as Logging Download - Validation, LDP as Logging Download - PM Data, and LDL as Logging Download -Logging.

c. The PC/MMS Software Installation and Operation Notes states that the LIN record establishes a unique identifier that is combined with each log entry for audit trail purposes but does not state how this information can be retrieved. The retrieval process should also be documented in the MMS System Administrator's Guide and/or the MMS User's Manual.

d. The LIN function is only documented in the PC/MMS Software Installation and Operation Notes. Should the LIN function be documented in the MMS System Administrator's Guide and/or the MMS User's Manual?

e. Information on the DOS files created during the execution of PC/MMS should be added to the User's Manual to facilitate any cleanup maintenance the user may want to perform on his/her disks.

f. The PC/MMS Software Version J0.5 Installation and Operation Notes states in Section 4.6, OTHER, that "Download occurs for only the most recent sequence number of a entry". This information should be emphasized in the MMS User's Manual, Section 5.3.1, Downloading Log Entries to the MDT (LDL).

2.1.10.2 PC/MMS Software Installation Screens.

ACN-100D recommends that the PC/MMS software installation screens be changed as follows:

"Select(Yes)" should be
"select (YES)"

"Use the SpaceBar" should be
"Use the spacebar"

"DeSelect(No)" should be
"deselect (NO)"

"The Tandem directory MUST NOT BE A SUBST DRIVE LETTER!" should be
"The Tandem directory MUST NOT BE A SUBSTITUTE DRIVE LETTER!"

2.1.10.3 PC/MMS Software/Local Mode.

a. The System Access screen displays "PC/MMS VERSION J0.5". The PM/Cert Scheduling Subsystem Menu screen displays "MDT VERSION J01.0". The Main Menu and Logging Activity Subsystem Menu screens do not display the PC/MMS version number. ACN-100D recommends that all PC/MMS screens display the correct PC/MMS version number as PC/MMS VERSION XX.X. Alternately, if space is a problem, the version number could be displayed on only the System Access screen or on the System Access and Main Menu screens.

b. On the System Access and Main Menu screens, UNISYS FTS-366-6284 should be changed to the AOS Hotline telephone number.

c. When the user enters only the region and sector as the selection criteria and attempts to generate the LSR report, the message *** NO LOGS FOUND UNDER THE CRITERIA ENTERED *** is displayed, even when there are records that meet the criteria. When the user enters only the date as selection criteria, the correct records will be retrieved the first time the report is run. All subsequent attempts to run the same report, before leaving the LSR function, will result in the date selection criteria being ignored. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

d. In the Help screens for SECTOR, INITIALS, and PASSWORD, ACN-100D recommends changing the following:

ENTER YOUR SECTOR, USER ID, AND PASSWORD should be

ENTER YOUR SECTOR, INITIALS, AND PASSWORD

Page 2-6 of the MMS User's Manual states that the USERID consists of the sector and initials. Alternately, this message could read as follows:

ENTER YOUR USERID (I.E., SECTOR, INITIALS) AND PASSWORD

YOUR USER ID should be

YOUR USERID or

YOUR USERID (I.E., SECTOR, INITIALS)

LOGGING SUB MENU should be

LOGGING ACTIVITY SUBSYSTEM MENU

NECESSARY should be

NECESSARY

DISCREPENCIES should be

DISCREPANCIES

AS IS USED should be

AS YOU USE

IF THE MDT HAS YET NOT BEEN INITIALIZED WITH MDT AND USER INFORMATION
should be

IF THE MDT HAS NOT YET BEEN INITIALIZED WITH MDT AND USER INFORMATION,

ONLY LIMITED CHECKING IS DONE ON SECTOR, USER ID AND PASSWORD should be
ONLY LIMITED CHECKING IS DONE ON SECTOR, INITIALS, AND PASSWORD

WITH AN INVALID ID\PASSWORD should be
WITH INVALID SECTOR, INITIALS, AND PASSWORD

OPERATIONS should be
OPERATION

e. The Help screens for the GO TO = field for both the LOG and PMS subsystems should be reviewed for consistency and availability. For example, EXT is not listed on the LOG menu Help screen, but it is listed on the PMS menu Help screen. LUT is not listed on the PMT menu Help screen, but it is listed on the LOG menu Help screen. When F2 is pressed while the cursor is on the GO TO = field on the LOG Menu screen, the Help screen lists the three-letter identifier APR. However, APR is not available in A04.

f. When Alt Shift F4 is pressed on the Main Menu, the message "Check printer Paper Supply." is displayed. Is this correct?

2.1.10.4 PC/MMS Software/Connected Mode.

a. ACN-100D recommends that the PC/MMS software connected mode screens be changed as follows:

"Dis-Connected entries exist for UPLOAD - upload should be performed,"
should be

"Local (disconnected) mode entries exist for UPLOAD - upload should be performed."

b. The following problem was experienced as a result of three different test cases. The user was switched into the terminal emulation application with numbers appearing at the top of the screen and CONV * at the bottom. Pressing the Ctrl End key combination to exit the emulator caused the message AN EXIT TO DOS AT THIS POINT IS DIASLLOWED PLEASE USE ALT-SHIFT-F6 FROM THE MMS SCREEN Strike a key when ready . . . to be displayed. Striking a key called the terminal emulation application and another connection was made which used the correct phone number but did not call the script file, MDT.ASP. Therefore, the connection was now with A04 MMS but not with PC/MMS. Pressing the Shift-Alt-F6 key combination to exit the application brought the user back to the terminal emulation application, therefore, in a looping state. The test cases were as follows:

- Case (1) Retrieval of the MCS screen;
- Case (2) After an LSR report is generated and, from the LSR report screen, OUT is entered into the F1 = GO TO field and F1 is pressed;

Case (3) Retrieval of the RST screen when not at the Report Generation/Distribution menu.

This problem was reported to Unisys via the MMS Hotline on 8/14/92.

c. In the connected mode, an LSR report was generated with selection criteria entered for date, region, and sector. The correct records were retrieved. Shift-F5 was pressed and the LSR screen was displayed. F10 was pressed to generate the same report and the records retrieved for display were selected ignoring the date as selection criteria. When the retrieved records are paged through with Shift-F2, upon pressing Shift-F2 the third time, the line is disconnected. No message appears to the user to inform of the disconnected line but the condition was observed on the modem connected to the MPS. An OSP message shows "\$MMBS(\$B99M): ERROR - *3217* TCP TRAP : T=%00 P=%031356". Typically, the TCP restarts although all terminals are disconnected. One test using the above scenario caused the MDT-TCP to stop with an error 1121, Autorestart Disabled. All terminals using the MDT-TCP were in the stopped state, and the TCP and terminals needed to be restarted. This problem was reported to Unisys via the MMS hotline on 8/11/92.

d. In the connected mode, the selection of the LRM screen causes the PC to hang. There is no PC activity yet the connection remains. The PC must be rebooted and the line must be disconnected using PCPLUS or, if this does not disconnect the line, the terminal must be stopped in the pathway and restarted. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

e. In connected mode, after logging on and receiving the message WARNING: USER HAS UNRESOLVED UPLOAD ENTRIES; F1 TO PROCEED, LSR was entered into the F1 = GO TO field and F1 was pressed. The LSR screen was displayed. If the user then presses F6 to log off and repeats the above steps, the screen appears to hang. There is no activity on the PC. The line continues to be connected even after the PC is rebooted, until Alt-H is pressed from PCPlus.

f. In the connected mode, the RST screen can be retrieved and appears to function correctly, yet none of the keystrokes entered by the user can be seen. This is also the case when F12 is pressed from any of the Report Generation/Distribution screens. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

g. In the local mode, a LIN record was added with a region and sector that were not in the MPS database (no ASY record). In the connected mode, the upload of logs that were created after the LIN record was added with the incorrect region and sector, did not result in the expected unresolved logs. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

h. In the connected mode, the LUP screen displays the message UPLOAD COMPLETE -NO LOGS WERE UPLOADED IN ERROR, even when unresolved logs are uploaded. Due to the incorrect message, a user will not know he/she has unresolved logs until he/she logs off and on again or runs an LSR report with "?" in the

trouble code field. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

i. In connected mode, it appears that when a screen is left inactive, the message Communications Error 1 - returning to Tandem will eventually be displayed. This message appeared intermittently throughout testing, at times disconnecting the line and other times leaving the line connected. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

j. In the connected mode, upon logging on without an entry in the F1 - GO TO field, and when F1 is pressed and there are unresolved entries, the message WARNING: USER HAS UNRESOLVED UPLOAD ENTRIES; F1 TO PROCEED is displayed. If F1 is pressed as directed, the EMA screen is retrieved, since the cursor is positioned at EMA. ACN-100D recommends that the message be modified to direct the user to go to the LSR function.

k. In the connected mode, after producing an LSR report and pressing F1 to retrieve a log from the report, upon pressing Shift-F5 to return to the LSR, the message RETRIEVING LOG RECORD continued to blink at the bottom of the LSR screen. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

l. In the connected mode, upon return from an error handling screen during the upload of logs using the LUP function, the screen appears to hang. The UPLOAD COMPLETE - NN ENTRIES WERE IN ERROR message is not displayed, even though all logs are uploaded. When a key is pressed, a blinking cursor is displayed, and the PC beeps. All keys pressed from this point on cause the PC to beep, with the exception of F10. Pressing F10, however, does not free the PC from its hung state. This problem was reported to Unisys via the MMS Hotline on 8/18/92.

m. In the connected mode, during some attempts to download validation logs (LDV screen), the message DOWNLOAD CANCELED - File I/O Error was displayed. This condition was observed during the download of FACILITY AUTHORIZATION records and again while downloading FACILITY SERVICE records. None of the records for the selected REGION, SECTOR, SFO were downloaded. This appears to be a disk space problem. The message should be changed to reflect the cause of the problem. This problem was reported to Unisys via the MMS Hotline on 8/18/92.

n. In the connected mode, when F1 is pressed to go to an FEQ, FMO, FPS, FPF, or FDS screen from an AFA, ALF, or ARC screen, the FFA screen is displayed instead of the requested screen. This problem was reported to Unisys via the MMS Hotline on 8/26/92.

o. In the connected mode, the FACILITY TYPE validation records in the LDV screen should always have a record for each Facility Type that is referenced in any of the current validation records residing on the PC. Therefore, if a specific validation file is selected for download along with the FACILITY TYPE validation file, the FACILITY TYPE validation file should not be updated to contain only the Facility Types referenced in the current file being downloaded but the Facility Types of all of the current validation records residing on the PC after the download is complete.

p. The PC/MMS Software Installation and Operation Notes (Version J0.5) For MMS Version A04 document notes "The individual MMSTYPES records are selected as a result of the other file selections. MMSTYPES should be selected whenever a download request is made." ACN-100D recommends that an X be put in the S (selection) column to the left of FACILITY TYPE and make it a protected field to guarantee that MMSTYPES is always selected when a download request is made. In addition, the meaning of the column label "S" is unclear.

q. In the connected mode, ACN-100D recommends that the following information be added to the LDV help screens so that the user is given the required information to use the reporting function, to view the records to be downloaded, prior to downloading:

- FACILITY AUTHORIZATION: The records downloaded are those retrieved when the FACAUTH report is generated from REP with the LDV REGION and SECTOR information entered as selection criteria in the REP MMS USERID field.
- LINE/FREQUENCY: The records downloaded are those retrieved when the FREQREG report is generated from REP with the LDV REGION, SECTOR and SFO information entered as selection criteria in the REP REGION and SECTOR fields.
- FACILITY EQUIPMENT: The records downloaded are those retrieved when the FSREQM2 report is generated from REP with the LDV REGION, SECTOR and SFO information entered as selection criteria in the REP REGION and SECTOR fields.
- EQUIPMENT MODULE: The records downloaded are those retrieved when the FSREQM5 report is generated from REP with the LDV REGION, SECTOR and SFO information entered as selection criteria in the REP REGION and SECTOR fields.
- FACILITY SERVICE: The records downloaded are those retrieved when the FSREFAL report is generated from REP with the LDV REGION, SECTOR and SFO information entered as selection criteria in the REP REGION and SECTOR fields.
- FACILITY TYPE: The records downloaded are those records of the VFTYPES report with a Facility Type that is a Facility Type referenced in the records that have been downloaded for FACILITY AUTHORIZATION, LINE/FREQUENCY, FACILITY EQUIPMENT, EQUIPMENT MODULE, and/or FACILITY SERVICE during the current LDV execution.

r. In the connected mode, the downloading of logs using the LOGGING DOWNLOAD - LOGGING DATA screen does not give an invalid date message when a future date is entered as selection criteria in the DATE field. An invalid date message should be displayed, to be consistent with the message displayed when an attempt is made to add a log with a future date.

s. In the connected mode, the Help within the menu (ESC-MENU-BAR TOGGLE) of the LOGGING DOWNLOAD - LOGGING DATA screen is incomplete. The Help lists the

required fields for selection criteria as REGION and SECTOR. The required fields should be listed as REGION and SECTOR or FACILITY TYPE and LOCATION IDENT, and START DATE.

t. In the connected mode, during the download of PM CERTIFICATION STMTS using the LOGGING DOWNLOAD - PM DATA screen, when F10 (INTERRUPT DOWNLOAD) is pressed, the message "DOWNLOAD interrupted during PM CERTIFICATION STATEMENTS file - use F10 to Resu" is displayed. The message must be shortened to fit in the allotted space.

u. The message "AN EXIT TO DOS AT THIS POINT IS DIASLLOWED PLEASE USE ALT-SHIFT-F6 FROM THE MMS SCREEN Strike a key when ready . . ." is displayed when the user attempts to exit the application using keys other than Alt-Shift-F6. The word DIASLLOWED should be DISALLOWED.

2.1.10.5 PC/MMS Software/Local and Connected Modes.

a. In the local and connected modes, even though the Caps Lock key is off, the sector and initials entries are displayed in uppercase. This may create confusion with regard to the password, since it is a hidden field and case sensitive. The user may think that his/her password is being entered in uppercase when it is actually in lowercase. The local mode will accept the password after it is verified, even though it is not in the MPS database for that USERID. Upon uploading logs that have been created with a USERID/Password combination that is not in the MPS database, the logs will be considered unresolved and will need modification. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

b. In the local and connected modes, pressing F2 brings up a window with available field choices and allows input into that field while the help window is on the screen. Using the Alt-F2 zoom feature in the help window enables more help information to be viewed on the screen but does not permit input into that field. This problem was reported to Unisys via the MMS Hotline on 8/14/92.

c. In the local and connected modes, the LDL, LDV, LIN, and LDF screens contain a two-character subsector code field (SFO). The help screen for the subsector code indicates that the subsector code is only one character (i.e., the fifth digit of a standard cost center code). The length of the subsector code field on the LSR screen is one character. Should the length of the subsector code field be one character for the LDL, LDV, LIN, and LDF screens? This problem was reported to Unisys via the MMS Hotline on 8/14/92.

d. In the local and connected modes, the following screens do not include SF5=RETURN in the function key area, although the function is available: LUP, LDL, LDV, and LDP. When Shift-F5 is pressed from the LUP, LDL, LDV and LDP screens, the LUT screen is displayed. The function is available when the Esc key (ESC=MENU-BAR TOGGLE) is pressed. The LIN screen is the only screen within PC/MMS Logging Utilities that displays SF5=RETURN in the function key area.

e. When the LSR report is generated and no log records are retrieved, the message displayed in the local mode is *** NO LOGS FOUND UNDER THE CRITERIA ENTERED *** ; the message displayed in the connected mode is NO RECORDS SELECTED FOR CRITERIA ENTERED.

f. In the local and connected modes, when the MENU-BAR, GO TO ... function is selected from one of the PC/MMS Logging Utilities screens, ACN-100D recommends that the message "<shift TAB> or <left Arrow> returns to main Exit menu" be replaced with the message "PRESS <Shift Tab> OR <Left Arrow> TO RETURN TO EXIT MENU". Below this message should be the message "PRESS <Enter> TO SELECT FUNCTION".

g. Some of the Logging Activity Subsystem function names displayed when the user selects GO TO ... from the MENU BAR are not consistent with the names of the MMS screens as listed on the MMS LOGGING ACTIVITY SUBSYSTEM MENU screen. ACN-100D recommends that the Logging Activity Subsystem function names displayed from the GO TO ... selection of the MENU BAR be consistent with the function names listed on the MMS LOGGING ACTIVITY SUBSYSTEM MENU screen. The inconsistent names are as follows:

<u>MENU-BAR, GO TO ...</u>	<u>MMS LOGGING ACTIVITY SUBSYSTEM MENU</u>
LCE - LOGGING CERTIFICATION	LCE - CERTIFICATION/DECERTIFICATION
LFC - LOGGING COMMISSIONING/ DECOMMISSIONING	LFC - FAC COMMISSION/DECOMMISSION
LLF - LOGGING LINE FREQUENCY	LLF - LINE/FREQUENCY
LOG - LOGGING MENU	LOG - LOGGING ACTIVITY SUBSYSTEM MENU
LSM - LOGGING SPECIAL MAINTENANCE PROJECT	LSM - SPECIAL MAINT PROJECTS
LST - LOGGING SITE ARRIVAL/ DEPARTURE	LST - SITE ARRIVAL & DEPARTURE
LUT - MDT LOGGING UTILITIES	LUT - PC/MMS LOGGING UTILITIES

h. In the local and connected modes, all PC/MMS messages should be displayed in uppercase letters to be consistent with MMS.

i. In the local and connected modes, the viewing of the validation records downloaded using the LDV function is performed using the ESC=MENU-BAR TOGGLE. The screens displayed to view the validation records contain field names that are inconsistent with the field names in the MMS A04 related screens. ACN-100D does not necessarily recommend that PC/MMS be changed to what is currently in MMS A04, but that the screens be made consistent, using the field names that would be most clear to the user. Attached are copies of the LDV screens from the View validation records function and the related MMS A04 screens.

j. In the local and connected modes, selecting the Print Screen function from the menu (ESC=MENU-BAR TOGGLE) for the LUP, LDL, LDV, LIN, and LDP screens causes the menu box to be printed on the requested screen. ACN-100D recommends that the box first be closed, the screen printed, and then the box opened to position the cursor back at the Print Screen function.

k. In the local mode and in the connected mode for ported screens, the Print Screen function does not form feed after a screen is printed.

l. In the local and connected modes, when the cursor is positioned at the Help function within the STATUS menu (ESC=MENU-BAR TOGGLE) of the LOGGING DOWNLOAD - PM DATA screen (LDP), the message "Choose this selection to view complete Logging Download - Logging Data HELP" is displayed. The message should be "Choose this selection to view complete Logging Download - PM Data HELP".

m. In the local and connected modes, when the cursor is positioned at the Help function within the STATUS menu (ESC=MENU-BAR TOGGLE) of the LOGGING DOWNLOAD - LOGGING DATA screen (LDL), the message "Choose this selection to view complete Logging Download - PM Data HELP" is displayed. The message should be "Choose this selection to view complete Logging Download - Logging Data HELP".

n. In the local and connected modes, the fact that only a log with the most recent sequence number is downloaded, should be added to the Help screen from the menu (ESC=MENU-BAR TOGGLE) of the LOGGING DOWNLOAD - LOGGING DATA screen.

o. In the local mode, a number of logs were added for upload. In the connected mode, when an attempt was made to upload the logs, the system hung. Jay Wenzler, Unisys, was on detail at the Technical Center from 6/22 through 6/24. Jay copied three hidden files from the PC/MMS MDT for subsequent analysis by Unisys staff. Bob Hobbs, Unisys, stated to Frances Bayne on 9/23, that when an attempt was made to upload a log with an MPS location identification other than the MPS location identification in the LIN file, the system hung in a loop. Bob stated that, to correct the problem, Unisys had modified MMS and PC/MMS with regard to error handling.

2.2 RECOMMENDATIONS.

ACN-100D recommends that the software and documentation be modified, to the extent possible prior to fielding, to correct the problems identified herein.

3. ACN-100D OPEN AND CLOSED EXCEPTIONS.

Table 3-1 lists the open and closed exceptions identified by ACN-100D during past and present test efforts.

TABLE 3-1. ACN-100D MMS EXCEPTIONS REPORT

DESCRIPTION OF EXCEPTION	VERSION DETECTED	CURRENT STATUS
MMS/IMCS INITIALIZATION/LOADING TEST		
COBOL85 run-time library not installed on \ACTA MPS	A03.4	CLOSED A03.4

MMS LOGGING ACTIVITY SUBSYSTEM TEST

inconsistent messages displayed when user retrieves records	A03.2	CLOSED A04
displayed time not current system time upon return to Logging Menu screen	A03.3	CLOSED A04
In LEM date can be entered in ORDERED field greater than date in RECEIVED field	A04	OPEN
In LLF error message, incorrect spelling of FEILD(S)	A04	OPEN
In LRV when less than nine lines of comments and no comments added, incorrect message displayed	A04	OPEN
In LRV comment DATE and TIME fields are not entirely highlighted when in error	A04	OPEN
In LRV number of comments not displayed like LCO	A04	OPEN
In LCO when less than nine lines of comments and no comments added, incorrect message displayed	A04	OPEN

MMS FACILITY SERVICE EQUIPMENT PROFILE SUBSYSTEM TEST

In FDS, when attempt to generate data sets A, B, C, or D, error message displayed	A04	OPEN
In FFA, COST CENTER field only five characters (VDD states six)	A04	OPEN
In FMO, SHORT NAME field modified with same data, and OPERATION SUCCESSFUL message displayed	A04	OPEN
After FPF record retrieved and F12 pressed, message includes reference to FSU (not available)	A04	OPEN

MMS REPORT GENERATION SUBSYSTEM TEST

validity check not always performed on selection criteria data	A03.3	OPEN
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MMS REPORT GENERATION/DISTRIBUTION SUBSYSTEM TEST

Within REP, RNP, RPG, and RTE, there should be function key to return to RGD menu	A04	OPEN
In REP, REPORT PROCESSING message remains on screen after report generated	A04	OPEN
Report 6040-12 (FSINTDTL) could not be produced	A04	OPEN
Should PCPFF be PCFPF?	A04	OPEN
In Report Names screens in REP, subfunction and field identifiers should be spelled out	A04	OPEN
In Report Names, PMTODAY long name should be PMs AND CERTIFICATIONS ...	A04	OPEN
In Help screens for REP, RNP, and RTE, editing feature enabled	A04	OPEN

MMS EXTENDED FUNCTIONS SUBSYSTEM TEST

access allowed to TEC subfunction with T followed by any two letters	A03.3	CLOSED A04
return to EXT SYS ACCESS screen when F2 pressed for PCT, FSC, and NPR	A03.3	CLOSED A03.4

MMS PERSONNEL CERT AND TRAINING SUBSYSTEM TEST

In PPA when attempting to retrieve record, KBD LOCK remained	A04 BETA	OPEN
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MMS/NAPRS CONVERSION TEST

TACL sets for volume and subvolume set to test configuration	A03.3	CLOSED A03.31
unable to download daily NAPRS data file from MPS to PC	A03.3	CLOSED A03.4

TRANSFER NETWORK UPDATE INTERFACE TEST

TRANSFER not transmitting updates to designated MPS node	A03.4	CLOSED A03.41
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MMS SECURITY TEST

Sector and Initials remain on screen when IMCS accessed and F6 pressed to log off	A04	OPEN
When user with access level of 0 attempts to access MMS subsystems, incorrect message displayed	A04	OPEN
User with access level of 1, 2, or 3 can produce ACCLAST report--should only be 4	A04	OPEN
Process \$B961 (TERMCHKO) had error 26	A04	OPEN
When controller turned off and on, MMS Main Menu displayed (not current function)	A04	OPEN

MMS DATA ENTRY/HELP/FUNCTION KEY TEST

documentation and software inconsistent: MAIN MENU versus SYSTEM ACCESS	A03.2	CLOSED A04
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MMS USER'S MANUAL

RSEP should be FSEP	A04	OPEN
In appendix D, long report names should be consistent with software	A04	OPEN
Long name for PMTODAY should be PMs AND CERTIFICATIONS ...	A04	OPEN

MMS SYSTEM ADMINISTRATOR'S GUIDE

Table 6-6 does not specify non key or primary fields	A04	OPEN
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MMS SOFTWARE REQUIREMENTS SPECIFICATION

Modify SRS for consistency with Help screens of REP	A04	OPEN
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MMS MISCELLANEOUS

Message needed to denote 80% or 90% file full condition	A04	OPEN
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PC/MMS

MMS User's Manual should indicate local mode synonymous with disconnected mode	A04/J0.5	OPEN
PC/MMS Inst & Oper Notes should indicate local mode synonymous with disconnected mode	A04/J0.5	OPEN
PC/MMS Inst & Oper Notes, LUT screen name references should be consistent with application	A04/J0.5	OPEN
PC/MMS Inst & Oper Notes and SAG and/or User's Manual should state how LIN info can be retrieved	A04/J0.5	OPEN
LIN only described in PC/MMS Inst & Oper Notes. Should LIN be documented in User's or SAG?	A04/J0.5	OPEN
Add info on DOS files to User's Manual to facilitate cleanup maintenance	A04/J0.5	OPEN
In LDL section of User's Manual, emphasize only log with most recent sequence number downloaded	A04/J0.5	OPEN
Correct spelling and format errors on PC/MMS software installation screens	A04/J0.5	OPEN
PC/MMS local mode screens not consistent with display of version identification	A04/J0.5	OPEN
PC/MMS System Access and Main Menu screens should display AOS Hotline telephone number	A04/J0.5	OPEN
In PC/MMS local mode, problems with LSR report generation	A04/J0.5	OPEN
In PC/MMS local mode, correct grammar, spelling errors in Help screens for SECTOR, INITIALS, PASSWORD	A04/J0.5	OPEN
In PC/MMS local mode, GO TO field Help screens for LOG and PMS inconsistent	A04/J0.5	OPEN
In PC/MMS local mode, when Alt Shift F4 pressed, is message correct?	A04/J0.5	OPEN

In PC/MMS conn mode, msg "Dis-Connect entries" should be "Local (disconnected) mode entries"	A04/J0.5	OPEN
In PC/MMS conn mode, attempt to access MCS, OUT, RST exits PC/MMS and connects to MMS	A04/J0.5	OPEN
In PC/MMS conn mode, date selection criteria ignored when LSR report run a second time	A04/J0.5	OPEN
In PC/MMS conn mode, attempt to page through LSR report (Shift F2) causes TCP error	A04/J0.5	OPEN
In PC/MMS conn mode, attempt to retrieve LRM causes PC to hang	A04/J0.5	OPEN
In PC/MMS conn mode, go to LSR, then F6. Attempt to repeat steps causes PC to hang	A04/J0.5	OPEN
In PC/MMS conn mode, on RST screen, none of user keystrokes displayed	A04/J0.5	OPEN
In PC/MMS conn mode, on all Rep Gen/Dist screens, when F12 pressed, none of user keystrokes displayed	A04/J0.5	OPEN
In PC/MMS conn mode, no ASY record for LIN record, logs uploaded OK (expected unresolved error msg)	A04/J0.5	OPEN
In PC/MMS conn mode, logs in error uploaded but msg displayed NO LOGS WERE UPLOADED IN ERROR	A04/J0.5	OPEN
In PC/MMS conn mode, msg "Communications Error 1 - returning to Tandem" displayed when screen inactive	A04/J0.5	OPEN
In PC/MMS conn mode, when F1 pressed at Main Menu and unresolved logs, EMA screen displayed	A04/J0.5	OPEN
In PC/MMS conn mode, after retrieve log from LSR report and press Shift F5, retrieve msg continues to blink	A04/J0.5	OPEN
In PC/MMS conn mode, after return from error handling screen, PC hangs	A04/J0.5	OPEN

In PC/MMS conn mode, in LDV when download canceled (appears due to disk space), msg displayed is unclear	A04/J0.5	OPEN
In PC/MMS conn mode, when request FEQ, FMO, FPS, FPF, FDS from AFA, ALF, or ARC, FFA screen displayed	A04/J0.5	OPEN
In PC/MMS conn mode, when some val. records downloaded, FACILITY TYPE file may be incomplete	A04/J0.5	OPEN
In PC/MMS conn mode, in LDV, X should be default protected to left of FACILITY TYPE	A04/J0.5	OPEN
In PC/MMS conn mode, in LDV, meaning of column label "S" unclear	A04/J0.5	OPEN
In PC/MMS conn mode, LDV Help screens should describe records downloaded	A04/J0.5	OPEN
In PC/MMS conn mode, in LDL when future date entered, expected invalid date msg	A04/J0.5	OPEN
In PC/MMS conn mode, in LDL Help screen, all required fields are not listed	A04/J0.5	OPEN
In PC/MMS conn mode, in LDP when F10 pressed during PM CERTIFICATION STMTS download, msg displayed is truncated	A04/J0.5	OPEN
In PC/MMS conn mode, when other than Alt Shift F6 pressed to exit, msg "... DIASLOWED" should be "DISALLOWED"	A04/J0.5	OPEN
In PC/MMS both modes, sector and initials displayed in uppercase when Caps Lock key is off	A04/J0.5	OPEN
In PC/MMS both modes, using Alt F2 for full screen help does not allow data entry into field	A04/J0.5	OPEN
In PC/MMS both modes, in LUT, SFO field is two characters; Help indicates one character	A04/J0.5	OPEN
In PC/MMS both modes, SF5 - Return not in function key area of LUT screens (except LIN), although available	A04/J0.5	OPEN

In PC/MMS, msg when LSR report generated and no logs retrieved, inconsistent in local vs. conn modes	A04/J0.5	OPEN
In PC/MMS, both modes, MENU-BAR, GO TO function, update top message	A04/J0.5	OPEN
In PC/MMS, both modes, MENU-BAR, GO TO function, LOG function names inconsistent with MMS names	A04/J0.5	OPEN
In PC/MMS, both modes, messages should be in uppercase letters for consistency with MMS	A04/J0.5	OPEN
In PC/MMS, both modes, in LDV when viewing validation records, field names inconsistent with MMS field names	A04/J0.5	OPEN
In PC/MMS, both modes, in LUT subfunctions, when using Print Screen from menu, menu box displayed on printout	A04/J0.5	OPEN
In PC/MMS, local and conn for ported, when using Print Screen, no form feed after screen printed	A04/J0.5	OPEN
In PC/MMS, both modes, in LDP, message incorrect when cursor positioned on Help in STATUS menu	A04/J0.5	OPEN
In PC/MMS, both modes, in LDL, message incorrect when cursor positioned on Help in STATUS menu	A04/J0.5	OPEN
In PC/MMS, both modes, in LDL, Help should include that log with most recent sequence number downloaded	A04/J0.5	OPEN
In PC/MMS, in LUP, system hung when attempting to upload log with ID different than MPS	A04/J0.5	OPEN

From: PC/mms

* DATE: 8/25/92

MAINTENANCE MANAGEMENT SYSTEM

TIME: 11:22:10 *

FACILITY AUTHORIZATION FILE

FACILITY TYPE:
LOCATION IDENTIFIER:
SHORT NAME:
EQUIP IDENT:
USER FACILITY SECTOR:
USER INITIALS:
SECTOR CODE GROUP:
CERTIFICATION AUTHORIZATION:
CALL BACK PRIORITY:
UP LINK AUTHORIZATION:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

From: MMS

-----*
* MAINTENANCE MANAGEMENT SYSTEM *
* -----> FACILITY AUTHORIZATION <-----*

FACILITY TYPE: _____
LOCATION IDENT: _____
SHORT NAME: _____
EQUIP IDENT: _____
SECTOR: _____ INITIALS: _____

CERTIFICATION AUTHORIZATION: _
CALL BACK PRIORITY: _
UPLINK AUTHORIZATION: _

SECTOR CODE: CHANGE DATE: 00 00 00

F1 = GO TO AFA F2 = HELP F3=ADMIN MENU F4=MMS MENU F5 = ALARM F6 = LOGOFF
F7=RETRIEVE SF7=READ NEXT F8 = ADD F14 = CHANGE KEY F9 = MODIFY SF10 = DELETE

FROM: PC/MMS

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:23:08 *

LINE/FREQUENCY FILE

FACILITY TYPE:
FACILITY IDENT:
CHANNEL NUMBER:
ADM FACILITY MPS:
ADM SECTOR CODE GROUP:
UHF FREQUENCY:
VHF FREQUENCY:
REMOTE FACILITY REGION:
REMOTE FACILITY TYPE:
REMOTE FACILITY IDENT:
LINE NUMBER:
LINE TYPE:
LINE RESP:
NAT REP FLAG:
TELCO ID:

SERVICE START DATE: / /

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:23:46 *

LINE/FREQUENCY FILE

VHF FREQUENCY:
REMOTE FACILITY REGION:
REMOTE FACILITY TYPE:
REMOTE FACILITY IDENT:
LINE NUMBER:
LINE TYPE:
LINE RESP:
NAT REP FLAG:
TELCO ID:

SERVICE START DATE: / /

SERVICE END DATE: / /

RECORD CHANGE DATE: / /

RECORD CHANGE TIME: : :

UPDATE FACILITY REGION:

UPDATE FACILITY SECTOR:

UPDATE USER INITIALS:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

FROM : MMS

MAINTENANCE MANAGEMENT SYSTEM
> LINE/FREQUENCY DEFINITION <

SERVICE TYPE: _____
LOCATION IDENT: _____
CHANNEL NUMBER: _____

REMOTE REGION: _____
FACILITY TYPE: _____
LOCATION IDENT: _____ LINE NUMBER: _____

LINE TYPE: _____ NAT REPORTABLE LINE?(Y/N) _____ LINE RESP: _____

TELCO ID: _____ SERVICE START DATE: _____ SERVICE END DATE: _____

UHF FREQUENCY: _____ VHF FREQUENCY: _____

MPS SITE: _____ SECTOR CODE: _____ CHANGE DATE: _____

F1=GO TO ALF F2=HELP F3=ADMIN MENU F4=MMS MENU F5=ALARM F6=LOGOFF
F7=RETRIEVE SF7=READ NEXT F8=ADD F9=MODIFY SF10=DELETE F14=CHANGE KEY

From: PC/MMS

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:24:19 *

FACILITY EQUIPMENT FILE

FACILITY TYPE:
FACILITY IDENT:
SHORT NAME:
EQUIPMENT IDENT:
FSEP MPS:
FSEP SECTOR CODE GROUP:
FA CA NUMBER:
EQUIP SERIAL NUMBER:
EQUIPMENT DESCRIPTION:
EQUIPMENT LOCATION:
NON-EQUIPMENT FLAG:
MANUFACTURER'S PART NUMBER:
REVISION LEVEL:
WR AREA:
CERT STMT REF:
OLD RECORD MPS:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:24:37 *

FACILITY EQUIPMENT FILE

FA CA NUMBER:
EQUIP SERIAL NUMBER:
EQUIPMENT DESCRIPTION:
EQUIPMENT LOCATION:
NON-EQUIPMENT FLAG:
MANUFACTURER'S PART NUMBER:
REVISION LEVEL:
WR AREA:
CERT STMT REF:
OLD RECORD MPS:
OLD RECORD SEQUENCE NUMBER:
RECORD CHANGE DATE: / /
RECORD CHANGE TIME: : :
UPDATE REGION:
UPDATE SECTOR:
UPDATE USER INITIALS:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

From: mms

+-----+
* MAINTENANCE MANAGEMENT SYSTEM *
+-----+> EQUIPMENT DETAIL FILE UPDATE <-----+

FACILITY TYPE: _____
 LOCATION IDENTIFIER: _____
 SHORT NAME: _____
 EQUIP IDENT: _____

FA/CA NUMBER: _____
 SERIAL NUMBER: _____
 LOCATION: _____
 DESCRIPTION: _____
 REVISION LEVEL: _____
 MANUFACTURER'S PART NUMBER: _____
 CERTIFICATION STATEMENT REFERENCE: _____
 AREA: _____ NON-EQUIP FLAG: _____

MPS SITE: SECTOR CODE: CHANGE DATE: 00 00 00

F1 = GO TO FEQ F2=HELP F3=FSEP MENU F4=MMS MENU F5=ALARM F6=LOGOFF
F7=RETRIEVE SF7 = READ NEXT F8=ADD F9=MODIFY F14=CHANGE KEY SF10=DELETE

From: PC/MMS

* DATE: 8/25/92

MAINTENANCE MANAGEMENT SYSTEM

TIME: 11:25:05 *

EQUIPMENT MODULE FILE

FACILITY TYPE:
FACILITY IDENT:
SHORT NAME:
EQUIPMENT IDENT:
MODULE SERIAL NUMBER:
FSEP MPS:
FSEP SECTOR CODE GROUP:
MODULE DESCRIPTION:
MODULE NSN:
MANUFACTURER'S PART NUMBER:
MODULE CIRC SYMBOL:
OLD RECORD MPS:
OLD RECORD SEQUENCE NUMBER:
RECORD CHANGE DATE: / /
RECORD CHANGE TIME: : :
UPDATE REGION:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

* DATE: 8/25/92

MAINTENANCE MANAGEMENT SYSTEM

TIME: 11:26:20 *

EQUIPMENT MODULE FILE

SHORT NAME:
EQUIPMENT IDENT:
MODULE SERIAL NUMBER:
FSEP MPS:
FSEP SECTOR CODE GROUP:
MODULE DESCRIPTION:
MODULE NSN:
MANUFACTURER'S PART NUMBER:
MODULE CIRC SYMBOL:
OLD RECORD MPS:
OLD RECORD SEQUENCE NUMBER:
RECORD CHANGE DATE: / /
RECORD CHANGE TIME: : :
UPDATE REGION:
UPDATE SECTOR:
UPDATE USER INITIALS:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

FROM: MMS

+-----+
* MAINTENANCE MANAGEMENT SYSTEM *
+-----+> MODULE DETAIL FILE UPDATE <-----+

FACILITY TYPE: _____
LOCATION IDENTIFIER: _____
SHORT NAME: _____
EQUIP IDENT: _____
MODULE SERIAL NUMBER: _____

DESCRIPTION: _____
MANUFACTURER'S PART NUMBER: _____
CIRCUIT SYMBOL NUMBER: _____
NATIONAL STOCK NUMBER: _____

MPS SITE: SECTOR CODE: CHANGE DATE: 00 00 00

F1 = GO TO FMO F2 = HELP F3 = FSEP MENU F4 = MMS MENU F5 = ALARM F6 = LOGOFF
F7 = RETRIEVE SF7=READ NEXT F8=ADD F9=MODIFY F14=CHANGE KEY SF10=DELETE

FROM: PC/MMS

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:26:51 *

FACILITY SERVICE FILE

FACILITY REGION:
FACILITY TYPE:
LOCATION IDENTIFIER:
FSEP MPS:
FSEP SECTOR:
COST CENTER AREA:
COST CENTER TYPE:
COST CENTER SECTOR:
COST CENTER SUBSECTOR:
COST CENTER SUFFIX:
FACILITY STATUS:
STATUS DATE: / /
FACILITY LOCATION:
FACILITY STATE:
SYSTEM ID:
CATEGORY:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

* DATE: 8/25/92 MAINTENANCE MANAGEMENT SYSTEM TIME: 11:27:25 *

FACILITY SERVICE FILE

FACILITY TYPE ONE:
FACILITY TYPE TWO:
FACILITY MODEL:
FAC CLASS:
DIR EY:
GSA ADDR:
CONTROL IDENT:
REMOTE IDENT:
RESP CODE:
REST CODE:
FREQS-IN-PLACE:
CENTER AIRSPACE:
FACILITY REPORT FLAG:
OLD FACILITY REGION:
OLD FACILITY TYPE:
OLD FACILITY IDENT:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

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CONTINUED

From: PC/mms

* DATE: 8/25/92

MAINTENANCE MANAGEMENT SYSTEM

TIME: 11:27:47 *

FACILITY SERVICE FILE

NAPRS FAC TYPE:
NAPRS FAC IDENT:
WR AREA:
BUILD ID:
CONG DIS:
C MAINT:
AIR COND:
FAC UNITS:
INV:
POWER CODE:
ENV TRIP CO TYPE:
ENV TIME CO IDENT:
ET TRIP CO TYPE:
ET TIME CO IDENT:
SWAP DATE: / /
ORD DATE: / /

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

* DATE: 8/25/92

MAINTENANCE MANAGEMENT SYSTEM

TIME: 11:28:37 *

FACILITY SERVICE FILE

EDD DATE: / /
FAC HOURS:
FSEP REGULAR USE 1:
FSEP REGULAR USE 2:
FSEP REGULAR USE 3:
RMM TRANS MEDIUM:
MONITOR IDENT:
PHONE NUMBER: () -
SYSTEM SN:
FSEP OLD MPS CODE:
FSEP OLD SEQ NUM:
FSEP CHANGE DATE: / /
FSEP CHANGE TIME: : :
FSEP UPDATE REGION:
FSEP UPDATE SECTOR:
FSEP UPDATE USER INITIALS:

SF5=RETURN TO LDV
ESC=RETURN TO LDV

F2=HELP

F7=RETRIEVE
SF7=RETRIEVE NEXT

Page Up=SCROLL UP
Page Down=SCROLL DOWN

DISCONNECTED MODE

FROM: MMS

MAINTENANCE MANAGEMENT SYSTEM
FACILITY/SERVICE FILE UPDATE

FACILITY TYPE: _____
LOCATION IDENTIFIER: _____

REGION: _____ COST CENTER: _____ LOCATION: _____ ST: _____ GSA: _____
FAC CODE/CLASS: _____ STATUS: _____ STATUS DATE: 00 00 00 INV: _____ CONG: _____

RESP: _____ POWER: _____ A-C: _____ UNITS: _____ REST: _____ FREQS: _____ % C-MAINT: _____
REMOTE IDENT: _____ CONTROL IDENT: _____ ENV TRIP/TYP: _____ TIME/IDENT: _____
ELT TRIP/TYP: _____ TIME/IDENT: _____ REGIONAL USE 1: _____ 2: _____ 3: _____
SWAP DATE: 00 00 RMM MONITOR IDENT: _____ RMM TRANS MED: _____ NAT-2: _____

NAPRS REPORTING LEVEL: _____ NAPRS CONTROL FAC/IDENT: _____ CENTER AIR: _____
AREA: _____ HOURS: _____ BUILDING: _____ PHONE: _____ SN: _____
ORD DATE: 00 00 EDD DATE: 00 00
MPS SITE: _____ SECTOR CODE: _____ CHANGE DATE: 00 00 00

F1=GO TO FFA F2=HELP F3=FSEP MENU F4=MMS MENU F5=ALARM F6=LOGOFF F7=RETRIEVE
SF7=READ NEXT F8=ADD F9=MODIFY F12=PPF MODE F14=CHANGE KEY SF10=DELETE