ENGINEERING CHANGE NOTICE

1. ECN 627883

Page 1 of 2 *KW*Proj.
ECN

2. ECN Category (mark one) Supplemental ☐ Direct Revision ☒ Change ECN ☐ Temporary ☐ Standby ☐ Supersedeure ☐ Cancel/Void ☐		3. Originator's Name, Organization, MSIN, and Telephone No. Facility Configuration Management Integration, S4-43, 373-1711		4. USQ Required? ☐ Yes ☒ No		5. Date January 20, 1997	
		6. Project Title/No./Work Order No. MEL Phase I, ATP/Version 1.32, 1.33/FOKLRI		7. Bldg./Sys./Fac. No. N/A		8. Approval Designator Q	
		9. Document Numbers Changed by this ECN <i>KW</i> (includes sheet no. and rev.) HNF-WHC-SD-WM-ATP-175, Rev. 01		10. Related ECN No(s). N/A		11. Related PO No. N/A	
12a. Modification Work ☐ Yes (fill out Blk. 12b) ☒ No (NA Blks. 12b, 12c, 12d)		12b. Work Package No. N/A		12c. Modification Work Complete N/A Design Authority/Cog. Engineer Signature & Date		12d. Restored to Original Condition (Temp. or Standby ECN only) N/A Design Authority/Cog. Engineer Signature & Date	
13a. Description of Change Changes to the "Acceptance Test Procedure for the Master Equipment List (MEL) Database System - Phase 1", WHC-SD-WM-ATP-175							
13b. Design Baseline Document? ☐ Yes ☒ No							
1. Section 2.3 describes the software versions for this ATP. 2. The software version and date on the Appendix A supplement is changed from Version 1.22, 11/05/96 to Version 1.32, 11/21/96. The remainder of Appendix A is unchanged. 3. Appendix B for the version 1.33 multi-user testing is added.							
14a. Justification (mark one) Criteria Change ☐ Design Improvement ☒ Environmental ☐ Facility Deactivation ☐ As-Found ☐ Facilitate Const ☐ Const. Error/Omission ☐ Design Error/Omission ☐							
14b. Justification Details Approval and release of MEL Phase 1 - Acceptance Test Procedures (ATP). Related EDT No., is 611807							
15. Distribution (include name, MSIN, and no. of copies) M. L. Hermansen G1-50/1-Copy D. B. Hert S4-43/1-Copy J. B. Jech S4-43/1-Copy R. L. Nelson R2-54/1-Copy M. W. Thornton E6-11/2-Copies S. G. Sterling E6-11/1-Copy CENTRAL FILES A3-88 <i>KW</i>

ENGINEERING CHANGE NOTICE

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1. ECN (use no. from pg. 1)

627883

16. Design Verification Required [] Yes [X] No	17. Cost Impact ENGINEERING Additional [] \$ Savings [] \$ CONSTRUCTION Additional [] \$ Savings [] \$	18. Schedule Impact (days) Improvement [] Delay []
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19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[X]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]	User's Manual	[X]
Environmental Permit	[]	Inventory Adjustment Request	[]	WHC-SD-WM-UM-031	[]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number/Revision
WHC-SD-WM-ATP-175 Rev.0		

21. Approvals

Signature	Date	Signature	Date
Design Agent Manager/S. G. Sterling/ <i>[Signature]</i>	2/6/97	Design Agent/M. W. Thornton/ <i>[Signature]</i>	2/6/97
Cog. Eng./J. B. Jech/ <i>[Signature]</i>	1/30/97	PE	
Cog. Mgr./R. L. Nelson/ <i>[Signature]</i>	1/30/97	QA	
QA/M. L. Hermansen/ <i>[Signature]</i>	2/11/97	Safety	
Safety		Design	
Environ.		Environ.	
Other/D. B. Hert/ <i>[Signature]</i>	2/2/97	Other	

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL

Acceptance Test Procedure For The Master Equipment List (MEL) Database System -- Phase I

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Fluor Daniel Northwest
P. O. Box 1050
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U.S. Department of Energy Contract DE-AC06-87RL10930

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Master Equipment List (MEL) Phase I

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Karen H. Noland 4/10/97
Release Approval Date

Approved for Public Release

ACCEPTANCE TEST PROCEDURE

FOR THE

MASTER EQUIPMENT LIST (MEL)

DATABASE SYSTEM--PHASE I

Revision 2

Prepared by:

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Data Automation Engineering & Services
Fluor Daniel Northwest

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November 1996

Prepared for:
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ACCEPTANCE TEST PLAN FOR THE MASTER EQUIPMENT LIST (MEL) DATABASE SYSTEM

1.0 INTRODUCTION

1.1 Purpose

The Waste Remediation System/./Facilities Configuration Management Integration group has requested development of a system to help resolve many of the difficulties associated with management of master equipment list information. This project has been identified as *Master Equipment List (MEL) database system*. Further definition is contained in the system requirements specification (SRS), reference 7.

1.2 Scope

This document satisfies the requirement for acceptance planning and acceptance testing as stated in the MEL Work Plan, reference 6.

After the acceptance testing has been completed, an Acceptance Test Report (ATR) describing the results of testing shall be issued.

1.3 Overview

This Acceptance Test Procedure (ATP) provides test plan information and defines the test procedures for the MEL. It includes the requirements and criteria as taken from the SRS, reference 7. The ATP has been prepared following the WHC-CM-3-10 "Software Practices" (ref. 3) guidelines. The ATP shall serve as the testing document to ensure the specific requirements of the MEL are met with regard to assurance of the accuracy and quality of data managed with MEL.

1.4 Definitions

The following are abbreviations and definitions of terms used in this document:

AD	Approval Designator
DAES	Data Automation Engineering & Services Department/Fluor Daniel Northwest
ATP	Acceptance Test Plan
ATR	Acceptance Test Report
DOE	Department of Energy
ECN	Engineering Change Notice
EDT	Engineering Data Transmittal
FDNW	Fluor Daniel Northwest, Inc.
MEL	Master Equipment List (MEL) database system
HLAN	Hanford Local Area Network
LMHC	Lockheed Martin Hanford Corporation
OTP	Operability Test Procedure
OTR	Operability Test Report
QA	Quality Assurance
PC	Personal Computer

RCR	Review Comment Record
SC	Safety Class
SCR	Software Change Request
SRS	System Requirements Specification
TS	Test Specifications

Application -- The use of quality-affecting computer software, programs, models, or other computer items to perform engineering design analysis, calculations, scientific analysis, data acquisition or to operate hardware or facilities.

Approval Designator -- Defined in WHC-CM-3-5, section 12.7 (Ref. 2).

Computer Software -- A set of computer codes, procedures, rules, and associated documentation and data pertaining to the operation of computer systems. This includes user-provided instructions and data that implement preprogrammed algorithms in control systems; computer codes and data that shall reside in firmware, and when specified by the cognizant manager, user-provided instructions and data used by commercial software such as spread sheet and database packages.

Computer Software/System Requirements Specification -- The documentation of essential requirements (functions, performance, design constraints and attributes) of the computer software and its external interfaces.

Database -- A generic term referring to the storage of data by a computer in a certain data structure.

Design Agent -- Previously the *project* Cognizant Engineer under WHC-CM-6-1, Standard Engineering Practices (ref. 5) and WHC-CM-3-10, Software Practices (ref. 3.) was the lead engineer in the organization chartered with developing the product. Implementing procedure deviation is contained in ICFKH-CM-SRM 1.2D1, Manuals, Procedures, and Instructions, reference 11)

Engineering Practices -- Documented management methods (ref. 5) which establish the manner and the order for the performance of common configuration management practices relating to engineering tasks.

Lead Engineer -- Responsible engineer within the performing development organization that assumes Design Agent Engineer responsibility for development of the system.

Safety Class -- Defined in WHC-CM-4-46 (see ref. 1.)

Software Practices -- Documented management methods (3) which establish the manner and the order for the performance of common configuration management practices relating to software and systems engineering tasks.

Design Authority -- Responsible engineer delegate of the system owner. Has responsibility for the *system* as defined by WHC-CM-6-1, Standard Engineering Practices, for the facility and user. Implementing procedure deviation is contained in ICFKH-CM-SRM 1.2D1, Manuals, Procedures, and Instructions, reference 11)

Quality Record -- A completed document that furnishes evidence of the quality of items and/or activities affecting quality.

2.0 TEST PLAN

2.1 Test Items

This ATP is designed to test the functional requirements of the MEL and to determine whether or not they have been satisfied based on the defined Testing and Acceptance Criteria. The functional requirements can be found in the System Requirements Specification for Master Equipment List (MEL) database system (Ref. 7), Section 3.0 "SPECIFIC REQUIREMENTS". The test criteria is contained in Section 3.6.6, "Testing and Acceptance Criteria" of the same document. The requirements and criteria have been mapped into the procedures and test cases provided herein. Other related tests may also be performed.

2.2 Software Version Control

The software under test will be controlled. When the software is readied for acceptance testing, the version will be recorded and released. Backups of the released software will be prepared on optical discs and stored by the DAES Manager.

It is recognized that the ATP may be executed more than once if necessary due to the magnitude of changes required in the software. The version of the software will be incremented per the Configuration Management Plan (ref. 9) as changes are made. Each version that undergoes acceptance testing will be recorded, released, and copied to optical disc.

Software Revision Records are signed and kept in the project files, 1200 Jadwin, Suite 16, Room 11.

2.3 Division of Tests

The ATP is designed to be performed in two parts - a single-user test which emphasizes the details of the system functionality, and a multi-user test which focuses on the system's ability to support multiple concurrent users utilizing specific sets of functions. Some tests in these two parts will overlap by testing the same system functions. The single-user test will be performed with version 1.32 of the MEL Phase I. The multi-user test will be performed on version 1.33. The version change accounts for minor updates made to correct isolated problems found in the single user test that will be retested in the multi-user test.

The single-user part of the ATP will be performed prior to the multi-user test with enough time between them to resolve problems encountered.

2.4 Features to Test/Not Test

Each test/test-case listed in the Acceptance Test Procedure & Record (Appendix A) identifies the Tester by the name of the Design Authority representative, or as 'Deferred' by that representative, or as "Multiple Users". Those marked by the representative's name will be performed in the single-user part of the ATP. Those marked as "Multiple Users" will be performed in the multi-user part of the ATP. Those marked as "Deferred" will not be performed.

Deferrals are indicated where test cases will not be performed until a later version of the software. These test cases are included in the ATP for completeness. The SCR log includes a list of specific functions that are being deferred to future versions, and why. In general, these deferrals are the decision of the customer based upon available time, budget, and priority of need.

2.5 Designated Testers

The single-user ATP will be performed by a Design Authority (LMHC, Facilities Configuration Management Integration) representative and will be witnessed by a Design Agent (FDNW, Data Automation

Engineering) representative. Together, these key testers will record the test findings. The multi-user test will be conducted jointly by the same representatives with an additional 5 to 10 testers selected by the Design Authority representative. All testers will record test findings. The ATR will be prepared by the key testers.

2.6 Preparation

Testers will be prepared for executing the ATP. The key testers, performing the single-user ATP, will have considerable experience with the software application as beta testers. The multi-user ATP testers have been trained specifically for their roles in testing. The training was a 4-hour session (2 of them with 6 to 8 participants each) including written materials, hands-on experience using the pre-test version of the software. Trainees were instructed on use of the software, their roles in the test, and how to prepare problem reports.

The training materials were designed to meet the requirements of TWRS Training. A TWRS Training representative reviewed and accepted these materials for pre-release use and participated in these early training sessions. These modules, and the User Guide for the MEL version 1.0, will be the basis of the User Guide for version 2.0. Due to schedule constraints, the customer has agreed to defer final preparation of the User Guide until after the release of version 2.0 - to be included in a subsequent release within the next 6 months. These modules will also be the basis for the formal Training Plan and Modules currently under development.

2.7 Deliverables

The following items shall be delivered by the key testers upon completion of the acceptance testing for MEL.

- 1) An Acceptance Test Procedure Record.
- 2) Any problem reports completed by the testers.
- 3) An Acceptance Test Report complete with the Acceptance Test Procedure Record and problem reports completed during acceptance testing.
- 4) Problem reports will be recorded in the Software Change Request (SCR) database established for the MEL project.

2.8 Acceptance Criteria

All tests shall be performed according to criteria defined on the test procedure record without any unresolved functional exceptions. Test results shall be approved by the Change Control Board (CCB) defined in the MEL Configuration Management Plan, reference 9.

2.9 Testing Tasks

Hardware Setup

- The required hardware shall be setup and available prior to the performance of the ATP. Minimum equipment is specified as a PC-compatible with 486/33 processor, 8 mb of random access memory and 30 mb of free hard disk space.

Software Setup

- All required software shall be installed per appropriate installation procedures.

MEL Database

- The databases shall be loaded only with initial master data sets so that only known data is in the database.
- The database and application software shall have been previously configured for the ATP test stations.
- At completion of the ATP, all files shall be emptied because the data input during this test is only test data and has no value outside the test. The master data sets shall also be emptied and the MEL loaded with verifiable data.

2.10 Environmental Needs

The equipment needed to perform acceptance testing is as follows:

- a) Configured Personal Computer (PC) workstation.
- b) Attachment to the site HLAN.
- c) Established user account on the server with appropriate access rights.
- d) A LaserJet III or higher and paper for the printer.
- e) General office supplies for testing support.

2.11 Responsibilities

Organizations involved with MEL Acceptance Testing are those listed in the Configuration Management Plan, reference 9.

Table 1. Organizational Responsibilities Matrix.

DESCRIPTION	ESQ/./ QA	Design Authority	Lead Engineer
1. Acceptance Test Plan	3,4	2,3,4	1,2,3,4
2. Acceptance Test		2	1,2
3. Acceptance Test Report	3,4	2,3,4	1,2,3,4

- 1 = Initiates
- 2 = Provides Input
- 3 = Reviews
- 4 = Approves

2.12 Staffing, Training and Qualifications

Testing personnel shall be from within or a contractor to Data Automation Engineering & Services (DAES), and Plant Configuration & Drawings (PC&D). Testers shall be independent (not involved with the implementation of the sub-component being tested).

The tester shall have some familiarity with the Windows environment and a minimum one year experience with database applications. This includes the ability to successfully use windows, check boxes, menu bars, etc. However, this ATP is designed so testers shall need minimal training of the MEL application.

During acceptance testing, any questions that arise regarding the use of the MEL system shall be answered as needed by the development team.

2.13 Risks and Contingencies

Acceptance testing shall be performed on test data in a version and data set separated from live production system and data.

3.0 TEST DESIGN

3.1 Approach

This acceptance test procedure and associated acceptance test procedure record was based and is traceable to the SRS. For each identifiable and traceable requirement, there are one or more test items, each identified with a Test ID number (e.g. T1.003) and test item description. For each test item, there are one or more test procedures. Each test procedure has a procedure ID and test procedure description. Also for each test item, there are one or more test cases. For each test case, there is a test case ID and test case description. Each test case is tested, and the test result (pass or fail,) date, time, and initials of tester is placed on the acceptance test procedure record.

The acceptance testing of the specific requirements for MEL is to be to the best extent possible without unnecessary retesting. All specific requirements for MEL are to be tested.

This ATP is written to give the tester flexibility in selecting test data. Any data that is used to test the system shall be documented by the tester into the test log. The purpose of journalizing test data is to ensure the system is maintaining and reporting correct data. The tester is responsible for ensuring that all data meets the data requirements listed in the requirements document. The tester is also responsible for ensuring that the data is reported according to the requirements document for the Master Equipment List (MEL) database system. Any data inputs that create a system error shall also be documented by the tester. This shall provide information to help the developmental team track the error and perform the necessary corrections.

Hold points are not defined for this test. If testing must stop due to a failure that inhibits further testing, the test can be placed on hold. The decision to restart the test from the hold point will be made by CCB based upon the changes made to correct the impasse.

3.2 Pass/Fail Criteria

If a particular test case meets the functional requirement, based on criteria shown or referenced, it shall pass. If a particular test case does not meet all of the functional requirement, it shall be failed. On review, the CCB may disposition any test case.

3.2.1 Data Criteria

All criteria for data can be found in section 3.6.1 "Data" of the SRS for MEL (Ref. 7) and Appendix A of the same document.

3.2.2 Report Format Criteria

All report format criteria can be found in section 3.2.4 "Report Functions" of the SRS for MEL (Ref. 7).

4.0 TEST PROCEDURES

Test procedures are specified in the acceptance test procedure record. Pass/fail, date, time, and tester information shall be recorded on the acceptance test procedure record to be provided to the tester. The test procedure record shall be treated as a quality record.

5.0 TEST PROBLEM REPORT

Any test failures shall be documented on a System Change Request/Problem Report as described in the MEL Configuration Management Plan, reference 9. The sheet shall be filled out in detail, with the SCR/PR number recorded under "test result" on the acceptance test procedure record.

6.0 ACCEPTANCE TEST REPORT

Upon completion of the Acceptance Test and recording of the results, an Acceptance Test Report (ATR) will be prepared for review and approval. The ATR will include;

- A summary description of the test results,
- A copy of the SCR log which will record all problems,
- Definitions of terms used in the SCR log,
- Conditions for release of the software to become version 2.0, and
- An explanation of how final exceptions will be resolved, retested, and passed.

7.0 REFERENCES

1. WHC-CM-4-46, Non-Nuclear Facilities Safety Analysis Manual, February 1996.
2. WHC-CM-3-5, Document Control and Records Management Manual.
Section 12.7, Rev. 0, "Approval of Environmental, Safety, and Quality Affecting Documents", February 1, 1994.
3. WHC-CM-3-10, Software Practices.
SP-3.3, Rev. 0, "Testing," January 31, 1993.
SP-6.1, Rev. 0, "Document Control," January 31, 1993.
SP-6.2, Rev. 0, "Software Control," January 31, 1993.
SP-6.3, Rev. 0, "Change Request and Problem Report," January 31, 1993.
Appendix J, Rev. 0, "System Test Documentation," January 31, 1993.

4. WHC-CM-4-2, Quality Assurance Manual.
QR-3.0, Rev. 5, "Design Control," September 30, 1993.
QR-19.0, Rev. 1, "Software Quality Assurance Requirements," September 30, 1993.
5. WHC-CM-6-1, Standard Engineering Practices.
EP-2.2, Rev. 7, "Engineering Document Change Control", August 5, 1994.
EP-4.1, Rev. 5, "Design Verification Requirements", May 27, 1994.
6. WHC-SD-^{KN}~~WE~~^{WM}-SDP-012, Software Development Plan (Work Plan) for MEL-Phase 1, Rev. 0, J. B. Jech, November, 1995.
7. WHC-SD-^{KN}~~WE~~^{WM}-CSRS-023, System Requirements Specification For The Master Equipment List - Phase 1, Rev. 1, J. B. Jech, April, 1995.
8. WHC-SD-^{KN}~~WE~~^{WM}-SDD-065, System Design Description for the Master Equipment List, C. D. Starghill and M. W. Thornton, Rev A, TBD.
9. WHC-SD-^{KN}~~WE~~^{WM}-CSCM-033, Master Equipment List Configuration Management Plan, S. G. Sterling, Rev. 0, March 1996.
10. ICFKH-CM-SRM 1.2D1, Manuals, Procedures, and Instructions, October 25, 1996.

APPENDIX A ACCEPTANCE TEST PROCEDURE RECORD (SINGLE-USER)

Master Equipment List Database Phase 1 Acceptance Test Procedure & Record

Version 1.32
11/21/96

Approved : _____
for Use J. B. Jech, Engineer (Owner's Representative)

Approved : _____
for Use M.W. Thornton, Principal Engineer (Project Lead)
Data Automation Engineering and Services, Fluor Daniel Northwest, Inc.

Approved : _____
for Use S. G. Sterling, Manager, Data Automation Engineering and Services
Fluor Daniel Northwest, Inc.

**Master Equipment List Database
Phase 1
Acceptance Test Procedure & Record**

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Requirement ID : R3.1, B3
Requirement Ref : SRS 3.1 (bullet 3), Gen Reqs (Acc Criteria #3)
Requirement Description : The MEL Phase 1 Application code shall provide comments to support future code changes.

Test ID : T1.001

Test Item Description : MEL Phase 1 Application as a whole.

Proc ID	Test Procedure Description
PI.010	Manually review and inspect the appropriate documentation.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.001	Manually 'spot check' the code to verify readability and clarity of the comments that support the Delphi coding.			JB JECH

Requirement ID : R3.1, B4
Requirement Ref : SRS 3.1 (bullet 4), Gen Reqs (Acc Criteria #1)
Requirement Description : The MEL Phase 1 Application shall have user-friendly features integrated throughout the Db.

**Master Equipment List Database
Phase 1
Acceptance Test Procedure & Record**

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Test ID : T1.002

Test Item Description : MEL Phase 1 Application as a whole (supports User-Friendly Interface).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH
C1.307	Verify Help buttons provide on-line assistance.			DEFER PER JB JECH

Requirement ID : R3.1, B5

Requirement Ref : SRS 3.1 (bullet 5), Gen Reqs (Acc Criteria #4)

Requirement Description : The MEL Phase 1 Application shall support a multiple user and multiple task environment.

Master Equipment List Database
Phase 1
Acceptance Test Procedure & Record

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Test ID : T1.003

Test Item Description : MEL Phase 1 Application as a whole (supports Multiple Tasks).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.008	Ensure the system enables operation of multiple tasks and that they can be performed concurrently.			MULTIPLE USERS
C1.400	Ensure the system can manage multiple queries, Folder viewing, and multiple reporting.			MULTIPLE USERS
C1.401	Ensure the system can manage, concurrently, the multi Edit/Lock sessions and multi Posts/Cancel. Verify posted changes are in View mode and in Change Log.			MULTIPLE USERS
C1.402	Ensure the system can manage, concurrently, the multi Edit/Lock sessions and view the pending changes.			MULTIPLE USERS
C1.403	Ensure the system can manage the locked record functionality.			MULTIPLE USERS
C1.404	Ensure the system can manage multiple Finds and Quick Searches.			MULTIPLE USERS
C1.407	Ensure the system can support running itself and multiple software applications concurrently.			MULTIPLE USERS
C1.502	Verify that multiple users (5-10) can concurrently log onto the system, remain logged on, and utilize the application's functions without failure.			MULTIPLE USERS

**Master Equipment List Database
Phase 1
Acceptance Test Procedure & Record**

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Test ID : T1.022
Test Item Description : MEL Phase 1 Application as a whole (supports Multiple Users).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.009	Ensure the system enables operation of multiple users and that various access levels can be logged on concurrently.			MULTIPLE USERS
C1.405	Ensure the system can manage, concurrently, Label Administrator and System Administrator creating a new EIN.			MULTIPLE USERS
C1.406	Ensure the system can manage a System Administrator's functionalities in a concurrent session with multiple users.			MULTIPLE USERS
C1.407	Ensure the system can support running itself and multiple software applications concurrently.			MULTIPLE USERS
C1.500	Verify that a user can log on as a Read Only user while another logs on as an Edit user with tester-chosen privileges.			MULTIPLE USERS
C1.501	Verify that a user can log on as a Label Administrator user while another logs on as a System Administrator user.			MULTIPLE USERS
C1.502	Verify that multiple users (5-10) can concurrently log onto the system, remain logged on, and utilize the application's functions without failure.			MULTIPLE USERS

Requirement ID : R3.1, B6
Requirement Ref : SRS 3.1 (bullet 6), Gen Reqs (Acc Criteria #5)
Requirement Description : The MEL Phase 1 Application shall support query selections/ modifications and print query-selected reports.

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Test ID : T1.010

Test Item Description : One or more tester-chosen query selections for tester-chosen privileges.

Proc ID	Test Procedure Description
PI.007	Operate the application exercising appropriate query functions.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.222	Build query combinations by field selection, verify use of collapse or expand, and verify fields were selected with the query answer.			JB JECH
C1.223	Verify a query setup can be saved, retrieved, modified, and reran.			JB JECH
C1.224	Verify previously queried information can be retrieved and modified.			JB JECH
C1.225	Verify that queried information can be exported and printed from tester-chosen export application.			JB JECH
C1.226	Perform Quick Search and verify the record was located.			JB JECH
C1.227	Perform Find Function for locating records and verify the records were located.			JB JECH

Requirement ID : R3.1, B7

Requirement Ref : SRS 3.1 (bullet 7), Gen Reqs (Acc Criteria #6)

Requirement Description : The MEL Phase 1 Application shall operate efficiently in the HLAN environment.

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Test ID : T1.023

Test Item Description : MEL Phase 1 Application as a whole (supports HLAN standard/ESOE environment operation efficiency).

Proc ID	Test Procedure Description
PI.001	Operate system in the HLAN standard/ESOE environment.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.200	Verify the user can log on to HLAN standard/ESOE environment.			JB JECH
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH

Requirement ID : R3.1, B8

Requirement Ref : SRS 3.1 (bullet 8), Gen Reqs (Acc Criteria #7, 8)

Requirement Description : The MEL Phase 1 Application shall support control access using passwords.

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Test ID : T1.014
Test Item Description : Privilege as a Data Entry User.

Proc ID	Test Procedure Description
PI.002	Launch application using access privilege.
PI.003	Operate the application exercising appropriate functions and features.
PI.004	Enter new information in the MEL Phase 1 Application.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.202	Verify that access is accomplished with appropriate access privileges.			JB JECH
C1.204	Verify that use of appropriate User ID/Password enable entry authorizations.			JB JECH
C1.212	Verify a new EIN can be created (using appropriate privilege) and posted and is present in View mode.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH
C1.215	Verify that pending changes and locked records are identified by color and are available to print out.			JB JECH
C1.216	Verify that the pending changes can be posted or cancelled and the change is present in View mode.			JB JECH
C1.217	Verify a new EIN can be exported in a tester-chosen format and retrieved.			JB JECH
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH

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Test ID : T1.015
Test Item Description : Privilege as a Data Editor User.

Proc ID	Test Procedure Description
PI.002	Launch application using access privilege.
PI.003	Operate the application exercising appropriate functions and features.
PI.005	Select and edit information via appropriate folders or windows.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.202	Verify that access is accomplished with appropriate access privileges.			JB JECH
C1.203	Verify that use of appropriate User ID/Password enable editing authorization.			JB JECH
C1.211	Select Folder (Pointer/References/Nameplate/Specifications/Safety) and verify it was the Folder selected.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH
C1.214	Verify that the edited information can be viewed and verify changes are pending by initializing the right mouse button and icon.			JB JECH
C1.215	Verify that pending changes and locked records are identified by color and are available to print out.			JB JECH
C1.216	Verify that the pending changes can be posted or cancelled and the change is present in View mode.			JB JECH
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH

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Test ID : T1.016
Test Item Description : Privilege as a System Administrator User.

Proc ID	Test Procedure Description
PI.002	Launch application using access privilege.
PI.003	Operate the application exercising appropriate functions and features.
PI.004	Enter new information in the MEL Phase 1 Application.
PI.005	Select and edit information via appropriate folders or windows.
PI.006	View information via appropriate folders or windows.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.122	Verify that System Admin. can track user changes.			JB JECH
C1.123	Verify that System Admin. can assign user access information.			JB JECH
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.202	Verify that access is accomplished with appropriate access privileges.			JB JECH
C1.207	Verify that use of appropriate User ID/Password enable System Admin. authorizations.			JB JECH
C1.208	Verify that System Admin. can maintain definition lists.			JB JECH
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH

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Test ID : T1.017
Test Item Description : Privilege as a Label Administrator User.

Proc ID	Test Procedure Description
PI.002	Launch application using access privilege.
PI.003	Operate the application exercising appropriate functions and features.
PI.004	Enter new information in the MEL Phase 1 Application.
PI.005	Select and edit information via appropriate folders or windows.
PI.006	View information via appropriate folders or windows.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.202	Verify that access is accomplished with appropriate access privileges.			JB JECH
C1.205	Verify that use of appropriate User ID/Password enable Label Admin. authorizations.			JB JECH
C1.212	Verify a new EIN can be created (using appropriate privilege) and posted and is present in View mode.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH
C1.216	Verify that the pending changes can be posted or cancelled and the change is present in View mode.			JB JECH
C1.217	Verify a new EIN can be exported in a tester-chosen format and retrieved.			JB JECH
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH

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Test ID : T1.018
Test Item Description : Privilege as a Read Only User.

Proc ID	Test Procedure Description
PI.002	Launch application using access privilege.
PI.003	Operate the application exercising appropriate functions and features.
PI.006	View information via appropriate folders or windows.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH
C1.202	Verify that access is accomplished with appropriate access privileges.			JB JECH
C1.206	Verify that use of appropriate User ID/Password enable view authorizations.			JB JECH
C1.211	Select Folder (Pointer/References/Nameplate/Specifications/Safety) and verify it was the Folder selected.			JB JECH
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.305	Verify the system can manage itself by displaying system resources and continue to be operable in the HLAN standard/ESOE environment.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH

Requirement ID : R3.1, B9
Requirement Ref : SRS 3.1 (bullet 9), Gen Reqs (Acc Criteria # 7,9,10,16,17)
Requirement Description : The MEL Phase 1 Application shall have System Administrative features.

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Test ID : T1.001
Test Item Description : MEL Phase 1 Application as a whole.

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.122	Verify that System Admin. can track user changes.			JB JECH
C1.123	Verify that System Admin. can assign user access information.			JB JECH
C1.207	Verify that use of appropriate User ID/Password enable System Admin. authorizations.			JB JECH
C1.208	Verify that System Admin. can maintain definition lists.			JB JECH
C1.209	Verify that System Admin. corrective action and error messages make sense when identifying a problem.			DEFER PER JB JECH
C1.210	Verify that System Admin. corrective action messages make sense when correcting a problem.			DEFER PER JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH

Requirement ID : R3.2 (3.2.1)
Requirement Ref : SRS 3.2.1, Sys Admin Functions (Acc Criteria #7, 8, 18)
Requirement Description : The MEL Phase 1 Application shall have System Administrative features.

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Test ID : T1.001
Test Item Description : MEL Phase 1 Application as a whole.

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.011	Verify automatic log off occurs after idle time periods.			DEFER PER JB JECH
C1.122	Verify that System Admin. can track user changes.			JB JECH
C1.123	Verify that System Admin. can assign user access information.			JB JECH
C1.207	Verify that use of appropriate User ID/Password enable System Admin. authorizations.			JB JECH
C1.208	Verify that System Admin. can maintain definition lists.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH

Requirement ID : R3.2 (3.2.2)
Requirement Ref : SRS 3.2.2, Data Input/Update Functions (Acc Criteria #12,13)
Requirement Description : The user shall be able to enter new data (via popup windows), modify existing data (via folders), and import "Label Table" data into the MEL Phase 1 Db.

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Test ID : T1.012

Test Item Description : Data Input (Entry) Functions. Add additional information to an existing record/enter new records.

Proc ID	Test Procedure Description
PI.004	Enter new information in the MEL Phase 1 Application.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.204	Verify that use of appropriate User ID/Password enable entry authorizations.			JB JECH
C1.211	Select Folder (Pointer/References/Nameplate/Specifications/Safety) and verify it was the Folder selected.			JB JECH
C1.212	Verify a new EIN can be created (using appropriate privilege) and posted and is present in View mode.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH
C1.214	Verify that the edited information can be viewed and verify changes are pending by initializing the right mouse button and icon.			JB JECH
C1.215	Verify that pending changes and locked records are identified by color and are available to print out.			JB JECH
C1.216	Verify that the pending changes can be posted or cancelled and the change is present in View mode.			JB JECH
C1.217	Verify a new EIN can be exported in a tester-chosen format and retrieved.			JB JECH

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Test ID : T1.013

Test Item Description : Data Edit (Update) Functions. Update information to an existing record.

Proc ID	Test Procedure Description
PI.005	Select and edit information via appropriate folders or windows.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.203	Verify that use of appropriate User ID/Password enable editing authorization.			JB JECH
C1.211	Select Folder (Pointer/References/Nameplate/Specifications/Safety) and verify it was the Folder selected.			JB JECH
C1.213	Verify appropriate information can be edited in a specific Folder by selecting the field and initializing the edit with the right mouse button.			JB JECH
C1.214	Verify that the edited information can be viewed and verify changes are pending by initializing the right mouse button and icon.			JB JECH
C1.215	Verify that pending changes and locked records are identified by color and are available to print out.			JB JECH
C1.216	Verify that the pending changes can be posted or cancelled and the change is present in View mode.			JB JECH

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Test ID : T1.020
Test Item Description : Importing Data Procedures/Functions.

Proc ID	Test Procedure Description
PI.010	Manually review and inspect the appropriate documentation.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.012	Verify that data from specific tables can be imported via the conversion program.			DEFER PER JB JECH

Requirement ID : R3.2 (3.2.3)
Requirement Ref : SRS 3.2.3, Query /Retrieve Functions (Acc Criteria #5)
Requirement Description : The MEL Phase 1 Application shall have query and retrieval functions.

Test ID : T1.010
Test Item Description : One or more tester-chosen query selections for tester-chosen privileges.

Proc ID	Test Procedure Description
PI.007	Operate the application exercising appropriate query functions.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.222	Build query combinations by field selection, verify use of collapse or expand, and verify fields were selected with the query answer.			JB JECH
C1.223	Verify a query setup can be saved, retrieved, modified, and reran.			JB JECH
C1.224	Verify previously queried information can be retrieved and modified.			JB JECH
C1.225	Verify that queried information can be exported and printed from tester-chosen export application.			JB JECH
C1.228	Verify queried result (EIN) information can be utilized to generate Folder reports.			JB JECH

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Requirement ID : R3.2 (3.2.4)
Requirement Ref : SRS 3.2.4, Report Functions (Acc Criteria #5)
Requirement Description : The MEL Phase 1 Application shall have reporting functions to the screen and printer.

Test ID : T1.019
Test Item Description : One or more tester-chosen reporting selections for tester-chosen privileges.

Proc ID	Test Procedure Description
PI.008	Operate the application exercising appropriate reporting/printing functions.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.118	Prepare tester-chosen Folder report and verify functions can be performed.			JB JECH
C1.119	Display preview information report and verify a view on the screen.			JB JECH
C1.120	Display preview information report and verify the report can print.			JB JECH
C1.121	Display preview information report and copy to file; verify file was copied.			JB JECH
C1.218	Prepare tester-chosen report (i.e., revise or customize) using System Admin. functions and verify function(s) can be performed.			JB JECH
C1.219	Display preview information report and verify a view on the screen.			JB JECH
C1.220	Display preview information report and verify the report can print.			JB JECH
C1.221	Display preview information report and copy to file; verify file was copied.			JB JECH

Requirement ID : R3.2 (3.2.5)
Requirement Ref : SRS 3.2.5, Multi-Use Functions (Acc Criteria #4)
Requirement Description : The MEL Phase 1 Application shall support a multiple user environment.

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Test ID : T1.022

Test Item Description : MEL Phase 1 Application as a whole (supports Multiple Users).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.009	Ensure the system enables operation of multiple users and that various access levels can be logged on concurrently.			MULTIPLE USERS
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			MULTIPLE USERS

Requirement ID : R3.2 (3.2.6)

Requirement Ref : SRS 3.2.6, BackUp Functions (Acc Criteria 14)

Requirement Description : The MEL Phase 1 Application shall have menu options for backup support.

Test ID : T1.004

Test Item Description : MEL Phase 1 Application as a whole (supports Backups).

Proc ID	Test Procedure Description
PI.011	Attempt to backup MEL Phase 1 Application information.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.002	Verify that the HLAN Administrator is providing backup support per System Admin. instructions.			DEFER PER JB JECH
C1.003	Verify that the menu options provide backup support.			DEFER PER JB JECH

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Requirement ID : R3.3 (3.3.1)
Requirement Ref : SRS 3.3.1, User Interfaces (Acc Criteria #1, 13)
Requirement Description : The user shall be able to interface with the MEL Phase 1 Application through use of menu/mouse driven selections , on-line help, and pop-up windows.

Test ID : T1.002				
Test Item Description : MEL Phase 1 Application as a whole (supports User-Friendly Interface).				
Proc ID	Test Procedure Description			
PI.003	Operate the application exercising appropriate functions and features.			
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.			

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH
C1.307	Verify Help buttons provide on-line assistance.			DEFER PER JB JECH

Requirement ID : R3.3 (3.3.2)
Requirement Ref : SRS 3.3.2, Hardware Interfaces
Requirement Description : The MEL Phase 1 Application shall operate on the minimum hardware requirements of a IBM pc 486/33, 8Mb main processor memory and 30 meg free hard disk space.

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Test ID : T1.005
Test Item Description : MEL Phase 1 Application as a whole (supports Minimum Hardware Requirements).

Proc ID	Test Procedure Description
PI.009	Use a minimum system as specified in the requirements.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.004	Verify with the developer that by design, test item meets requirements.			JB JECH
C1.005	Verify with the beta testers that the application can be installed and is compatible and operable using minimum hardware requirements.			JB JECH

Requirement ID : R3.3 (3.3.4)
Requirement Ref : SRS 3.3.4, Communications Interfaces (Acc Criteria #6, 15)
Requirement Description : The MEL Phase 1 Application shall be accessible via the HLAN. Installation of the system shall setup and be compatible with the user's computer environment.

Test ID : T1.006
Test Item Description : MEL Phase 1 Application as a whole (supports HLAN Standard/ESOE Environment).

Proc ID	Test Procedure Description
PI.001	Operate system in the HLAN standard/ESOE environment.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.006	Verify the application can install and is compatible with the HLAN standard/ESOE computer environment.			JB JECH
C1.201	Verify the user can launch the application, log on, and ensure the application is operable.			JB JECH

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Requirement ID : R3.4

Requirement Ref : SRS 3.4, Performance Requirements (Acc Criteria #4)

Requirement Description : The MEL Phase 1 Application shall meet reponse times of < 2 secs for input/edits, < 30 secs for data queries, < 1 min/page for re- porting, and < 1 min for startup. Times for multi-use is 6-10 users (data entry & editing) and 25-50 users (query & reports).

Test ID : T1.007

Test Item Description : MEL Phase 1 Application as a whole (supports Adequate Response Times).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.007	Ensure test cases are performed and accepted.			JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH

Requirement ID : R3.5 (3.5.1)

Requirement Ref : SRS 3.5.1, Standards Compliance (Acc Criteria # 19, 20)

Requirement Description : The MEL Phase 1 Application shall have the appropriate documentation that meets quality affecting software requirements.

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Test ID : T1.008

Test Item Description : MEL Phase 1 Application as a whole (supports Standard Compliance).

Proc ID	Test Procedure Description
PI.010	Manually review and inspect the appropriate documentation.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.007	Ensure test cases are performed and accepted.			JB JECH
C1.010	Manually verify system Quality Assurance documentation are written and approved.			DEFER PER JB JECH

Requirement ID : R3.6 (3.6.4)

Requirement Ref : SRS 3.6.4, Reliability/ Recovery (Acc Criteria # 9,10,16,17)

Requirement Description : The MEL Phase 1 Application shall be reliable during normal operation interaction. Failure to restart or to recover data during a system failure is not critical. For recovery, an activity log and system admin features and functions shall be available.

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Test ID : T1.009
Test Item Description : MEL Phase 1 Application as a whole (supports Reliability/ Recovery of Db).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.002	Verify that the HLAN Administrator is providing backup support per System Admin. instructions.			JB JECH
C1.003	Verify that the menu options provide backup support.			JB JECH
C1.006	Verify the application can install and is compatible with the HLAN standard/ESOE computer environment.			JB JECH
C1.011	Verify automatic log off occurs after idle time periods.			DEFER PER JB JECH
C1.122	Verify that System Admin. can track user changes.			JB JECH
C1.123	Verify that System Admin. can assign user access information.			JB JECH
C1.208	Verify that System Admin. can maintain definition lists.			JB JECH
C1.209	Verify that System Admin. corrective action and error messages make sense when identifying a problem.			DEFER PER JB JECH
C1.210	Verify that System Admin. corrective action messages make sense when correcting a problem.			DEFER PER JB JECH
C1.304	Verify the operation of the system is interactive, providing immediate processing of actions.			JB JECH

Requirement ID : R3.6 (3.6.7)

Requirement Ref : SRS 3.6.7, Training (Acc Criteria #1)

Requirement Description : The MEL Phase 1 Application shall have on-line help functions to minimize the training involved for users.

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Test ID : T1.021
Test Item Description : MEL Phase 1 Application as a whole (supports On-Line Help).

Proc ID	Test Procedure Description
PI.003	Operate the application exercising appropriate functions and features.
PI.012	For each test case, perform test, record test results (Pass/Fail), date tested, and initials of testers. Enter comments in the Comment Logsheet.

Test Case ID	Test Case Description	Test Result	Date/Time	Tester
C1.300	Verify that windows and menus provide navigation to appropriate Folders and their associated mini-screens or drop-down lists.			JB JECH
C1.301	Verify on-line hint (yellow) boxes provide correct field definitions.			JB JECH
C1.302	Verify user/error mini-screens make sense.			JB JECH
C1.303	Verify mouse and key drive the selection for windows, menus, and tool bar buttons.			JB JECH
C1.306	Verify the menu/tool bar buttons provide navigation to exit.			JB JECH
C1.307	Verify Help buttons provide on-line assistance.			DÉFER PER JB JECH

APPENDIX B ACCEPTANCE TEST PROCEDURE RECORD (MULTI-USER)

**MASTER EQUIPMENT LIST DATABASE
PHASE 1, VERSION 1.33
MULTI-USER
ACCEPTANCE TEST PROCEDURE & RECORD**

**AN ATTACHMENT TO: MASTER EQUIPMENT LIST DATABASE
PHASE 1, VERSION 1.32
ACCEPTANCE TEST PROCEDURE & RECORD
WHC-SD-WM-ATP-175, REV. 1**

PERFORMED BY:

FACILITY CONFIGURATION MANAGEMENT INTEGRATION

Approved for Use: J. B. Jech

Date: _____

Approved for Use: M. W. Thornton

Date: _____

MASTER EQUIPMENT LIST - MULTI-USER ACCEPTANCE TEST PROCEDURE
TEST CASE/TIME ASSIGNMENTS
December 9, 1996 (9:00 am - 12:00 pm)

Time												
Name	8:00 8:15	8:15 8:30	8:30 8:45	8:45 9:00	9:00 9:15	9:15 9:30	9:30 9:45	9:45 10:00	10:00 10:15	10:15 10:30	10:30 10:45	10:45 11:00
Baker-RO	1a-d	1a-d	1h-1j	1h-1j	BREAK	2	2	2	2	BREAK	7	7
Douka-LA	1a-1d	1e	1f	1g	BREAK	3a-3f	3a-c 3g-i	4	5	5	8a, f, h, i, j, k	8a, f, h, i, j, k
Duerr-P/R/S	3a-3f	3a-c 3g-i	4	4	BREAK	1a-d	1a-d	1h-j	1h-j	2	2	2
Fordham-P/NP/SP	3a-f	3a-c 3g-I	4	4	BREAK	1a-d	1a-d	1h-j	1h-j	2	2	2
Geiss - P/NP	7	7	2	2	2	BREAK	1a-d	1a-d	1h-j	1h-j	3a-f	3a-f
Jech-SA	3	3	3	4	4	BREAK	1a-d	1a-d	1e-g	1e-g	8a, f, h, i, j, k	8a, f, h, i, j, k
Weddle - R/S	1a-d	1a-d	1h-j	1h-j	BREAK	2	2	3a-3f	3a-c 3g-i	4	4	7a, 7e-f
White-RO	1a-d	1a-d	1h-j	1h-j	BREAK	7	7	2	2	BREAK	8c, d, e	8c, d, e
Wyatt-NP/SP	1a-d	1a-d	1h-j	1h-j	BREAK	2	2	3a-f	3a-c 3g-i	4	8c, d, e	8c, d, e

Access Control:

-Edit Data by Folder: Pointer (P), Safety (S), Reference (R), NamePlate (NP), Specifications (SP).

-Admin Levels: Label Administrator (LA) is accessible to EIN Related Fields, System Administrator (SA) is accessible to All Functions.

-Read Only (RO) is accessible to view information; no editing.

MASTER EQUIPMENT LIST - MULTI-USER ACCEPTANCE TEST PROCEDURE
TEST CASE/TIME ASSIGNMENTS
December 9, 1996 (8:00 am - 12:00 pm)

Test Case	Description
1) Perform Queries	<p>a) Build a query for an EIN and four fields. For the four fields' value, select All Values.</p> <p>b) View results and select one of the fields' values to narrow the results. Define the value of the field in the query setup and execute.</p> <p>c) View results and verify that the defined value is part of the result. Continue to define fields to narrow down a data set. Verify that the functions Collapse and Expand work.</p> <p>d) Write down the query built as parameters are defined, to assist in verifying the results.</p> <p>e) Export the query results to a .db file. Verify it can be retrieved in Paradox.</p> <p>f) Export the query results to a .txt file. Verify it can be retrieved in WordPerfect.</p> <p>g) Save the query results to Reports. Print out the appropriate Folder reports (s) using the Query Results EIN List.</p> <p>h) Save the query to (Save Query) in order to retrieve it later. Verify it can be retrieved.</p> <p>i) Retrieve the saved query, build upon it, execute it, and resave it (Save Query As) with a different filename.</p> <p>j) Verify there are two saved query files.</p>
2) Reporting	<p>a) Without building a query, select three Folder reports to print.</p> <p>b) Select 5 EINs to print for each of the Folder reports.</p> <p>c) Print two Folder reports to the printer and print one to the screen.</p> <p>d) Verify that the 5 EINs printed out in the appropriate Folder reports.</p> <p>e) In View, manually verify for two Folder reports (for each data field) that the data printed out exactly what is presented on the screen.</p> <p>f) Verify that the Folder report can be exported to a .txt file and retrieved.</p>

3) Edit Session	<p>a) Perform a Quick Search to locate an EIN (system) that needs editing.</p> <p>b) Begin an edit session and verify all information is required to proceed. Note the “Reminder.</p> <p>c) Verify that an edit session cannot begin unless the right mouse button is initiated.</p> <p><u>Single Record Edits:</u></p> <p>d) Verify that changes can be made for a single record, but leave one field unchanged (will still be locked).</p> <p>e) Do not release the session. Verify while you’re still in Edit, that the Padlock icon enables the Locks and Changes Pending form and that the record can be re-edited. Verify the changes are present. Click Folders icon.</p> <p>f) Verify that from the Edit Menu, “View Changes”, enables the Changes Pending form and that the record can be re-edited again. Verify on the Folder that the fields are blue. Exit from Edit mode.</p> <p><u>New Record Edits:</u></p> <p>g) Verify that changes can be made for a multi-record (i.e., procedures field). Enter 2 new records (procedure numbers). Verify on the Folder that the fields are blue (temporarily - until record moves to Changes Pending).</p> <p>h) Verify on 2 more new records that immediately after inserting that the change can be posted individually.</p> <p>i) Verify on the 2 new records that after entering it AND moving off the cell that it cannot be posted. Verify that from the Edit Menu, “View New Records”, enables the New Record Pending form. Verify that in this form that the new record cannot be re-edited. Exit from Edit mode.</p>
4) Release Session	<p>a) Click on the Padlock icon and verify that it enables the Locks and Changes Pending form.</p> <p>b) Verify that pending changes and locks can be viewed by Session.</p> <p>c) By User, verify that the pending changes and locks are correct values and post. Click on Folders icon.</p> <p>d) By Session, verify that the pending changes and locks are correct values and post. Click on Folders icon.</p> <p>e) In View, verify that once posted, each of the values are no longer colored blue.</p> <p>f) Verify that in Change Log that the changes are present.</p>

5) Label Admin.	<p><u>Creating a new EIN</u></p> <ul style="list-style-type: none"> a) Begin an edit session and verify all information is required to proceed. b) Verify that a new EIN can be created and exported to a .db file. Verify it can be retrieved in Paradox. c) Verify that the new EIN can be posted to the Locks and Changes Pending form. From there release the session by posing. d) Verify that the EIN can be located using Quick Search and begin an edit session to add more information to the Folders. e) Verify that the 'new record' is enabled from the Edit menu. Verify that information can be inserted in all the Folders, all fields. Add two for each of the multi-record fields (i.e., procedures, drawing nos.). f) Post the pending changes and verify that the information is present in View. <p><u>Delete</u></p> <ul style="list-style-type: none"> g) Begin an edit session and verify all information is required to proceed. h) Mark one individual record in a Folder for deletion. Delete the record via the Edit Menu. i) Mark an entire EIN record for deletion and delete via the Edit Menu in the Equipment Identification area.
6) System Admin.	<ul style="list-style-type: none"> a) Verify edit sessions are recorded in the Change Control Activity form. b) Verify the fields, Time and User are correct. c) Edit the Definitions List. Verify that the drop-down lists are updated. d) Perform refresh test with a new EIN that has been posted by the Label Admin. e) Mark an EIN record and multi-record for deletion. Post individually. Delete the full EIN from the Edit menu and verify that it is no longer present. f) Change the access level of one User from an editing privilege to a Read Only (see 8k).
7) Read Only	<ul style="list-style-type: none"> a) Perform a Quick Search to locate a set of EINs. b) View all Folders. c) Verify that the buttons and icons on the toolbar are functional. d) Verify that editing privileges are not available. e) Identify specific fields and their values for EINs that could be used in a Find. f) Verify that performing a Find and Find Next functions work.

8) Conflicting Test Cases	<ul style="list-style-type: none"> a) 2 Testers - Mark a full EIN locked (do not post) and verify that it can be queried. b) 2 Testers - Perform a Find on a specific field and at the same time set that field up as part of a query and execute. c) 2 Testers - Perform a Quick Search on the same EIN. d) 2 Testers - Perform the same query set up and execute it at the same time. e) 2 Testers - View the Change Log while another person posts an edit. Verify it updates after a Refresh. f) 2 Testers - Have both users enable an edit session and attempt to edit the same EIN, using different Folders, and then the same Folder, and then the same Field. g) SA/LA - Perform a Refresh test of a newly created and posted EIN. h) SA/LA - Perform a Refresh test of a newly created and posted record in an EIN. i) SA/LA - Perform a Refresh test of a newly deleted EIN. j) SA/Tester - Change a user's privilege in the middle of an edit session to Read Only. Verify that when the User exits MEL and logs back on that the new privilege is present.
Notes: <ul style="list-style-type: none"> o During the test cases, if there is a time that the system is not responding to an mouse click, hit the ESC button. o For each Test Case in #8, please write out the results. o Remember for each problem occurrence, complete the Problem Report form. Write out each step that made you think there was a problem. 	