ILS ELEMENT E12
STANDARDIZATION AND INTEROPERABILITY

Distribution Program and
User's Manual
Version 1.0

APJ 966-677

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This User's Manual is the complete user documentation package, and is provided for guidance in using the APJ software. This User's Manual refers to Version 1.0 of the ILS Assessment software. The software permits you to carry out a coherent, orderly and reproducible assessment of ILS Element E12, Standardization and Interoperability. The software automates the assessment of ILS Element E12, Standardization and Interoperability and follows the requirements of APJ Report 966-214, Structured Design – ILS Review Element E12 – Standardization and Interoperability. It is designed to assess ILS performance as defined in AR 700-127. ILS software guides the user through the assessment by providing a series of questions which may readily be tailored to the weapon system and life cycle stage.

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ILS ELEMENT E12
STANDARDIZATION AND INTEROPERABILITY

Distribution Program and
User's Manual
Version 1.0

under

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for

HQ US AMCCOM
INTEGRATED LOGISTIC SUPPORT OFFICE
AMSMC-LSP
ROCK ISLAND, IL

by

AMERICAN POWER JET COMPANY

RIDGEFIELD, NJ   **ST. LOUIS, MO**

WILLIAMSBURG, VA   **ARLINGTON, VA**

April 1991

PLEASE READ THIS

This manual is intended to demonstrate the ILS Assessment Software and aid the user in becoming familiar with its operation. The screens illustrated in this manual, are intended as a guide to help the analyst through the software operation and provide a sense of "what it looks like". The following ILS review areas have been made the subject of automation:

        E1   — Maintenance Planning
        E11 — Design Influence
        E12 — Standardization and Interoperability
        E13 — RAM-D
        E14 — Support Management and Analysis
        E15 — Cost Analysis and Funding

Because a single automated procedure with a consistent human interface is the objective of APJ's efforts, the analysis structure, screens and operating procedure are identical for each ILS assessment area.

To avoid cumbersome repetition, we have used E1 Maintenance Planning as illustrative displays for all manuals regardless of subject.

The specific assessment questions for each of the other ILS areas (E1, E11, ... etc.) are set forth in the respective automated screens, reports, and Help. To facilitate review and planning of each assessment task, the Data Flow Diagrams and questions are reproduced in Appendices A and B respectively of the manual corresponding to the given task.

The information contained in this manual is generic, and is weapon system and life cycle phase independent. It is designed to be readily structured for any specific weapon system and life cycle stage, and facilities are provided to tag each pertinent question so that attention may be focused on remunerative issues.

FOREWORD

This manual supports the automation of the Structured Analysis of Integrated Logistics Support (ILS) functions. It is the complete user documentation package, and is provided solely for guidance in using the APJ software.

The ILS assessment software is a unified and iterative approach to the management of logistic support throughout the life of a Weapon System. It enables the user to review logistic support decisions and, if required, establish corrective actions.

The automated ILS system is being developed by the American Power Jet Co. (APJ), under contract to Hqs AMCCOM. A major goal of the project is to unify the military and contractor approach to the performance of ILS. This approach was validated by AMCCOM, and necessary adjustments were made to attain a fully useful and user-friendly program.

APJ has used Structured Analysis and Design to develop the ILS assessment logic in accordance with AR 700-127 "Integrated Logistic Support".

The Structured Analysis and Design for ILS Element E12 (Standardization and Interoperability) was presented in APJ Reports 966-205 and 966-214. APJ's task performance has been closely coordinated with the Army Logistic Evaluation Agency and AMCCOM. Their assessment experience has been captured in APJ's logic through continued coordination and review at the working level.

The application software functions as an automated assessment technique and data repository that insures the ILS review is complete and yields actionable results. The assessment logic provides a determinate definition of data requirements, detailed implementation processes, and standard output reports. Additionally, a cost, performance, and schedule risk module has been created for each process.

The ILS assessment software is available through HQ AMCCOM, AMSMC-LSP to program managers, ILS functional area representatives, and review activity personnel. It provides guidance and a means of assessing ILS performance by using the automated assessment procedure. Through the use of this procedure, problems may be quickly identified and resolved before testing and milestone reviews.

The Structured Analysis for ILS Element E12, Standardization and Interoperability, contains the following five (5) major modules:

1. Review Interface Requirements with other Army, Services and Allied Equipment
2. Review Parts, Design Processes & Supply Standardization
3. Review S&I Implementation Plans and Resources
4. Assess Execution of S&I Plans and Resources
5. Assess Overall S&I Status

NOTE

A bar in the left hand margin of any paragraph indicates changes from the Beta Test version of this manual.

All comments on this version are welcome and should be addressed to:

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CHAPTER 1

INTRODUCTION

1.1 GENERAL.

*USER'S
GUIDE*

1.1.1 This User's Manual accompanies Version 1.0 of the ILS Assessment software. The software permits you to carry out a coherent, orderly and reproducible assessment of ILS Element E-12, Standardization and Interoperability. It is part of an APJ originated structure for addressing all of the ILS areas in AR 700-127.

1.1.2 This is designed to serve activities concerned with assessing ILS performance as defined in AR 700-127 and establishing its cost, schedule, performance and sustainability implications. Provision is made for such assessments at both the overall and detailed levels.

1.1.3 The user is guided through a series of questions which may readily be tailored according to the weapon system characteristics and life cycle stage. The overall set of questions and their organization are provided in Appendices A and B.

1.1.4 An important feature is a fully articulated guide to performing the assessment through a system of help screens, with a hypertext selection menu. This help system may likewise be tailored to the specific weapon system and life cycle stage.

1.2 SCOPE.

*COVERS
AR 700-127*

1.2.1 The Department of the Army has a requirement for management control of contractor and government requirements for implementation of AR 700-127, (Integrated Logistic Support). Headquarters AMCCOM has initiated action to structure the review of each ILS element, as to the form of the results and the detailed processes involved. This action is necessary to ensure consistency with current US Army policies, procedures and techniques.

REVIEW SCOPE

1.2.2 This computer-assisted system will result in uniform development of a logistical database. It addresses all aspects of the ILS assessment elements, as set forth in Department of Army and Department of Defense administrative publications. Furthermore, it will insure uniformity in efforts and products, reproducibility of analyses, and a well defined structure. This system can be coordinated among all participants in the logistic process to arrive at standardized procedures and a common basis for understanding assessment results.

GENERIC MANUAL

1.2.3 This user's manual is baselined on ILS Assessment Element E1, Maintenance Planning. The examples of screens and reports shown in this manual are intended to illustrate the operation of the software independent of the assessment element. The process titles may be different is the various element, but the operation is unchanged.

1.3 ILS REVIEW LOGIC AND ORGANIZATION.

1.3.1 This software automates the assessment of ILS Element E12 - "Standardization and Interoperability" and follows the requirements of APJ Report 966-214, "Structured Design-ILS Review Element E12-Standardization and Interoperability".

1.3.2 A detailed Structured Analysis of this review element was developed in APJ report 966-205, "ILS Review Element E12". The detailed Data Flow Diagrams (DFDs) from this Structured Analysis are included as Annex A to this manual, and provide the user with an overview of the logic and approach taken with the analysis.

1.4 ILS SOFTWARE ARCHITECTURE

1.4.1 The overall concept of assessment is illustrated in Figure 1-1 and is weapon system and life cycle phase independent. ILS software is designed to guide the user through an assessment by providing a series of questions for the analyst to

PROGRAM

be assessed and enter an identification before reaching the main menu. From the main menu the user can either perform an assessment or generate a report using data from previous assessments.

1.4.2 During the process of performing an assessment, the user is guided through a series of processes and/or subprocesses that enable him to select a question to be answered. Once a question is selected, the user selects one of several possible responses. After responding to the question the user enters an assessment of the selected answer.

1.4.3 From the main menu the user can generate a report of the information that has been entered during a current or previous sessions. The output of the generate report can be directed to a printer, screen or stored as a file.

1.5 SOFTWARE PROVIDED.

1.5.1 The ILS Review Element E12 - Standardization and Interoperability software is loaded on 360K 5-1/4 inch floppy disks that are provided separately. Refer to Chapter 2 for the equipment required to run this software.
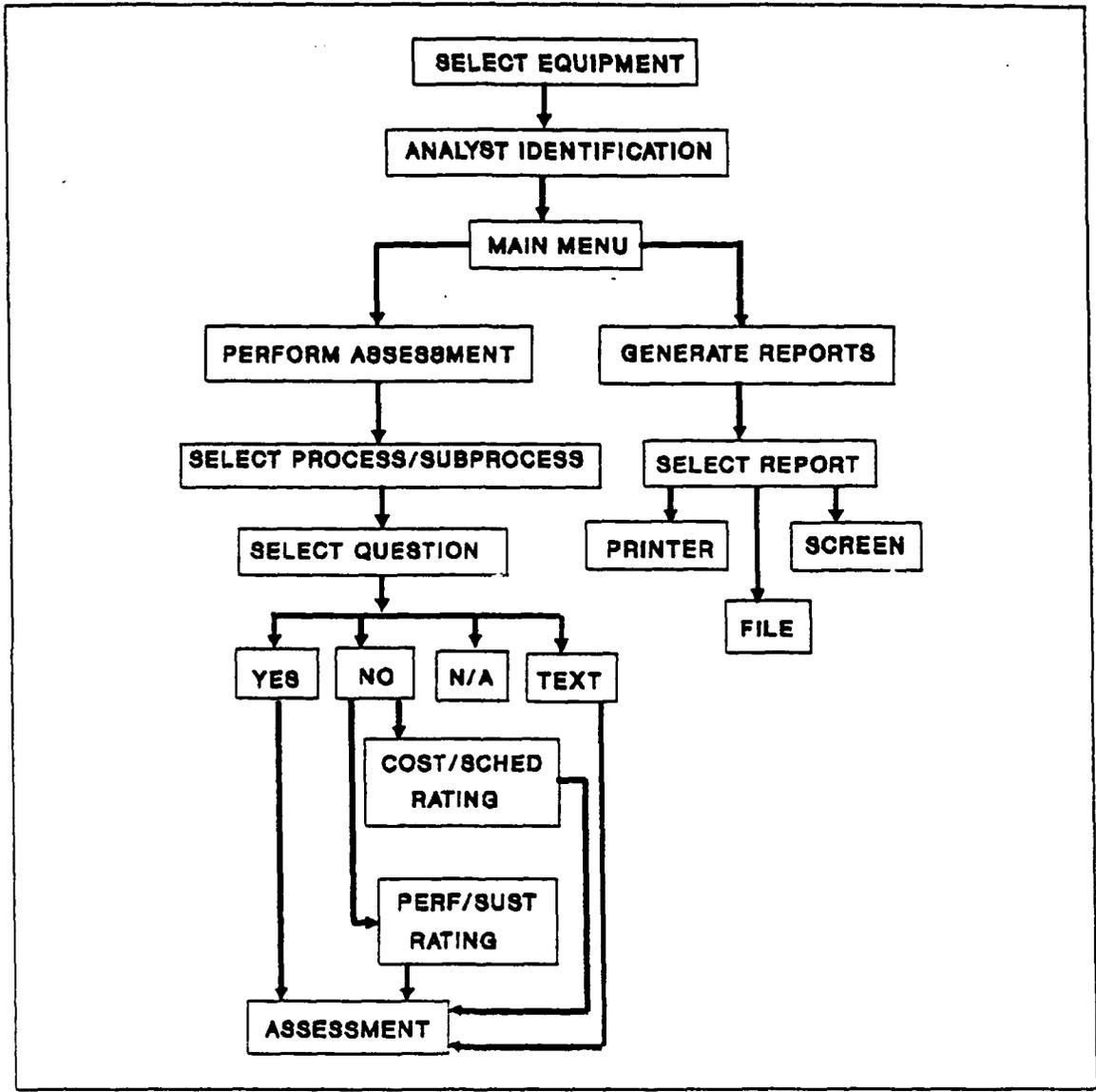
Figure 1-1. ILS Software Architecture

CHAPTER 2

SOFTWARE INSTALLATION
AND BACKUP

2.1 GENERAL

2.1.1   This chapter describes the installation of
the executable software and the procedures for
making a backup file.

2.2 EQUIPMENT REQUIREMENTS

2.2.1   To operate the ILS Review Element E1
software, the user must be equipped with at least
the following equipment, or its equivalent.

1.   IBM-PC-XT with DOS version 3.3 or later
     and 640K RAM
2.   360K or 1.2MB Floppy Disk Drive and 20MB
     Hard drive
3.   Printer: The following printers are
     supported by the software printer drivers

HARDWARE

     Epson E/F/J/RX/LQ
     HP Laserjet 500/+/II
     IBM 80 CPS Matrix

NOTE

If your printer is not one of those
listed, select the "IBM 80 CPS Matrix"
which allows you to tailor the report
generator for any printer.

POWER

2.3 POWER ON/OFF

2.3.1   Since each system is slightly different, follow the manufacturer's specific start-up instructions for the personal computer being used to perform the assessment. Make sure that both the Central Processing Unit (CPU) and the Monitor are powered up.   Proceed to the system installation section for the instructions on installation of the Logistics Assessment Software.

2.4 SYSTEM INSTALLATION

MAKE
DUPLICATE
COPY OF
DISKS

2.4.1   This section describes the procedure to load the executable software residing on the floppy disk onto the computer's hard disk and instructions for making copies of the executable program and associated data bases for field use.

2.4.2   Before installing the software for the first time, duplicate the supplied disks.   Apply write protect tabs to the original disks and store in a safe place.   Use the copy of the software for system installation.

MODIFY
CONFIG.SYS

2.4.3   In order for the ILS software to operate properly, the CONFIG.SYS file must contain the statements: FILES=50 and BUFFERS=20.   Add these statements to the indicated files if they do not already exist.

2.5 INSTALLATION ON A HARD DISK.

HARD DISK

2.5.1   To install the software on a hard disk of the personal computer, perform the following procedures.

1.   Turn the computer and monitor on. The computer should boot-up and the hard disk drive prompt (usually C) should appear on the screen.

2.   Insert the copy of disk 1, ILS Assessment Software, into Drive A.

3. After the C:\ prompt, type "MD C:\ILS" and
    press <Enter>. This creates an ILS directory
    on the hard disk and the C:\ prompt will
    appear.

4. Type "Copy A:*.* C:\ILS" and press <Enter>.
    This copies all of the files from the Logistic
    Assessment Software floppy disk into the ILS
    directory on the hard disk.

5. Upon completion of copying the files into the
    ILS directory, the C:\ prompt appears.
    Remove the software disk just copied from
    Drive A and store in a safe place.

6. Insert the copy of each disk provided into
    Drive A, and repeat steps 4 and 5.

2.6 INSTRUCTIONS FOR FIELD USE.

*WORKING
COPY*

2.6.1 The following procedures are for copying the
ILS assessment software onto a single 1.2MB floppy
disk from the computer's hard disk drive. This
provides a working copy of the software for use at
a field location, or on a laptop computer. Refer to
paragraph 2.7 for procedures to copy the ILS
assessment software onto 360K floppy disks.

1. Turn the computer and monitor on. The
    computer should boot-up and the hard disk
    drive prompt (usually C:\) should appear on
    the screen.

2. Insert a 1.2 M blank formatted floppy disk
    into Drive A.

3. After the prompt type "Copy C:\ILS*.EXE
    A:"and press <Enter>. This copies the
    executable file from the ILS directory onto the
    disk in Drive A.

4. After the prompt type "Copy C:\ILS*.DBT A:"
    and press <Enter>. This copies the files from
    the ILS directory onto the disk Drive A.

5. After the prompt type "Copy C:\ILS*.DBF A:"
    and press <Enter>. This copies the files from
    the ILS directory onto the disk in Drive A.

6. After the prompt type "Copy C:\ILS*.MEM A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

7. After the prompt type "Copy C:\ILS*.RTL A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

8. After the prompt type "Copy C:\ILS*.TXT A:" and press <Enter>. This copies the files from the ILS directory onto the disk in Drive A.

9. After the prompt type "Copy C:\ILS*.OVL A:" and press <ENTER>. This copies the files from the ILS directory onto the disk in Drive A.

10. Remove the disk from Drive A. Label this disk with file identification and date. This is the working copy that can be used at a field location to perform an assessment.

2.7 MAKING A FIELD COPY

360K
FIELD
COPY

2.7.1 The following procedures are provided for copying the ILS assessment software onto multiple 360K floppy disks from the computer's hard disk drive.

1. Turn the computer and monitor on. The computer should boot-up and the hard disk drive prompt (usually C:\) should appear on the screen.

2. Insert a 360K blank formatted floppy disk into Drive A.

3. After the prompt type "Copy C:\ILS*.EXE A:" and press <Enter>. This copies the executable file from the ILS directory onto the disk in Drive A.

4. Remove the disk from Drive A and insert a new 360K blank formatted disk into Drive A. Label this disk with file identification and date.

5. Repeat the procedures of steps 2 through 4 using the following commands to copy the files to the disks.

NOTE

More than one disk is required
during the process of copying
the following files.

---

a. After the prompt, type "Copy C:\ILS*.DBT
   A:".
b. After the prompt, type "Copy C:\ILS*.DBF
   A:".
c. After the prompt, type "Copy C:\ILS*.MEM
   A:".
d. After the prompt, type "Copy C:\ILS*.OVL
   A:".
e. After the prompt, type "Copy C:\ILS*.TXT
   A:".

2.8 SOFTWARE BOOT-UP PROCEDURE

*BOOT-UP
FROM HARD
DRIVE*

2.8.1 The following procedures should be followed
each time the software is initiated. Paragraph 2.9
contains procedures for using a hard disk drive,
and paragraph 2.10 contains procedures for using a
floppy disk.

2.9 BOOT-UP SOFTWARE USING HARD DISK

2.9.1   The following procedure is used for
accessing software installed on the computer's hard
disk drive.

1. Turn the computer and monitor on. The computer
    will boot-up and the hard disk drive prompt
    (usually C:\) will appear on the screen.

2. Type "CD\ILS" and press <Enter> to change to
    the ILS directory. C: ILS appears on the
    screen.

3. Type "ILS" and press <Enter>. The program is
    now initialized and an introductory screen
    appears. Refer to Chapter 3 for identification
    of screens, and Chapter 4 for instructions on
    performing an assessment.

2.10 BOOT-UP PROGRAM USING FLOPPY DISK.

2.10.1 . The following procedure is used for accessing the program from a floppy disk.

1. Boot-up the computer with the DOS system disk.

BOOT-UP
FROM
FLOPPY

2. Insert program disk into Drive A.

3. At the A drive prompt, type "ILS" and press <enter>. The program is initialized and the ILS screen appears. Refer to Chapter 3 for identification of screens, and Chapter 4 for assessment entering procedures.

2.11 CREATING BACK-UP FILES

2.11.1 At the end of a day, make a back-up copy of the files. The back-up disk may be useful under the following conditions:

(1) If there is a computer hardware problem and another computer is used.
(2) Data files are corrupted or become otherwise unusable and restoration of the files is required.
(3) Transportation of the files from the user site to another management site.

2.11.2 Prior to creating any back-up files that will be restored to another machine, the analyst must ensure that:

PRE-
BACKUP
INSTRUC-
TIONS

1. Formatted disks are available.

2. The machine that the back-up will be restored to has a DOS release version that is equal to or higher than the DOS release version on the back-up machine.

3. The backup and restore .COM files are in a directory specified in the autoexec.bat file path. If not, the complete paths for the back-up and restore must be specified at the time each is processed.

BACKUP PROCE- DURES

2.11.3 Perform the following procedures to create a back-up disk:

1. At the end of a session, place a formatted disk in Drive A. <Exit> from the ILS program to return to the C:\ILS DOS prompt.

2. Type "BACKUP A:\ILS" and press <Enter> to create a set of back-up disks.

3. Remove the back-up disks from Drive A, label and date them. No more than two days' worth of files should be maintained on such back-up disks. On the third day, the back-up files made two days ago should be updated and overwritten.

2.12 RECOVERY PROCEDURES

RESTORE

2.12.1 When file restoration is required, place the latest backup disk in drive A and type "RESTORE A:C:\ILS/S" and press <Enter>. The files will be restored.

RECOVERY FROM CORRUPTED INDEX FILES

2.12.2 If one or more index file associated with the data bases becomes corrupted, use the utility program procedures described in paragraph 3.4.3.

NOTE

Re-indexing and packing is recommended at least every 2-3 days.

2.12.3 The following is a list of files comprising the ILS Review/Software.

FILE
NAMES

ANALYST.DBF	HELPILS2.TXT	QLIST.DBT
CHOICEN.DBF	ILS.EXE	REPWELC.MEM
CHOICEN.DBT	ILSYS.OVL	RESPONSE.DBF
CHOICET.DBF	ILSYS2.OVL	RR_PR1.MEM
CHOICET.DBT	INSTR.TXT	SESSION.DBF
CHOICEY.DBF	INTRO.TXT	SUBROC.DBF
CHOICEY.DBT	PROCESS.DBF	SUMMARY.DBF
EQUIP.DBF	PROCLOOK.DBF	SUMMARY.DBT
HELPILS.TXT	QLIST.DBF	WELC.MEM

CHAPTER 3

START-UP
OPERATIONS

3.1. INTRODUCTION.

BACKGROUND

3.1.1 The U. S. Army ILS Assessment Software is an interactive menu driven system. The software is accessed by completing a series of identification screens prior to accessing the Main Menu. From the Main Menu, you can perform an assessment, generate reports, obtain help, or exit the program. This chapter explains the purpose of each screen and the required response.

3.2 EQUIPMENT IDENTIFICATION SCREEN.

3.2.1 After system initialization, the introductory screen appears. When any key is pressed, the Equipment Identification Screen appears as shown in Figure 3-1.

EQUIPMENT SIGN-ON SCREENS

3.2.2 To sign on to the system either enter the equipment ID (20 alphanumeric characters maximum), or press <Enter> to view a list of previously entered equipments. Use the arrow keys to move the highlight bar to the equipment desired. Select the equipment by pressing <Enter>. The Equipment Sign-On Screen is displayed as shown in Figure 3-2.

ADDING NEW EQUIPMENT

3.2.3 If the equipment desired is not on the list, select [NEW] and press <Enter>. The equipment Sign-On Screen is displayed as shown in Figure 3-2. Complete each field up to the number of characters indicated in Figure 3-2, and press <Enter> to proceed to the next field. After completion of the last field, press <Enter> and the Analyst Identification Screen appears.

```
ENTER EQUIPMENT END-ITEM I.D.:
        <RETURN> FOR EQUIPMENT LIST


                        SELECT EQUIPMENT
                        _____
                        [NEW]
                        AH-64
                        GRENADE
                        HELICOPTER
                        LASER
                        LAUNCHER

                        _____
```

Figure 3-1 Equipment Identification Screen

EDIT
OPTION

3.2.4 If the Equipment Sign-On Screen has been previously completed, an ACCEPT-EDIT command appears on the bottom of the screen. To change an entry use the arrow keys to highlight the EDIT option and press <Enter>. This places the cursor on the top line and enables the user to make corrections. Use the arrow keys to move the cursor to the line requiring correction. After completion of all corrections use the arrow keys to highlight the ACCEPT option of the ACCEPT-EDIT selection. Press <Enter> to proceed to the next screen.

3.3 ANALYST IDENTIFICATION SCREEN

ANALYST
SCREENS

3.3.1 After completion of the Equipment Identification Screen, two Analyst Sign-On Screens must be completed. The first screen requires you to enter your analyst ID as shown in Figure 3-3 (4 Alphanumeric characters maximum).

```
EQUIPMENT IDENTIFICATION.........: 20A
MILITARY NOMENCLATURE............: 20A    INDENTURE LEVEL : 1N
COMMON NAME......................: 20A
NEXT HIGHER ASSEMBLY.............: 20A
NEXT HIGHER ASSEMBLY.............: 20A
NEXT HIGHER ASSEMBLY.............: 20A
PROGRAM MILESTONE................: 20A
DEVELOPMENT PHASE MILESTONE......: 20A
ACQUISITION MGMT MILESTONE.......: 20A
PROJECT MANAGER LAST NAME........: 15A    FIRST NAME: 15A
PROJECT MANAGER OFFICE SYMBOL....: 15A    PHONE #: 1(999)-999-9999
PROJECT MANAGER AUTOVON PHONE....: 999-9999
DISCREPANCY REPORTS TO...........: 20A
MANUFACTURER.....................: 20A
NATIONAL STOCK NUMBER............: 20N
```

Figure 3-2 Equipment Sign On Screen

NOTE

Underlined entries in the sample screens
indicate user input and character limits.
A=Alphanumeric; N=Numeric

3.3.2 Upon entering your Analyst ID, the Analyst
Sign-On Screen appears as shown in Figure 3-4. If
an analyst has signed on before, the software
recalls the stored information, and this screen
appears with the information previously entered.
For an ID recognized by the program, the Analyst
Sign-On Screen appears with a two choice menu
(ACCEPT or EDIT). Use the arrow keys to highlight
either the ACCEPT or EDIT choice. Press the <Enter>
key to select the desired choice. If the
information is correct, choose ACCEPT and the Main
Menu is displayed.

```
ENTER ANALYST ID: 4A
```

Figure 3-3. Analyst Identification Screen

```
ANALYST ID...................:4A
ANALYST FIRST NAME...........:15A
ANALYST LAST NAME............:15A
COMMAND OFFICE SYMBOL........:15A
COMMAND OFFICE PHONE.........: 1(999)-999-9999
AUTOVON PHONE................:999-9999
```

Figure 3-4. Analyst Sign On Screen

EDITING EXISTING INFORMA-TION

3.3.3 If the information is to be changed, select the EDIT option, the cursor moves to the first field where the user can make changes. Use the arrow keys to move the cursor to any of the fields requiring change. Move the cursor to the last field (AUTOVON PHONE) and press <Enter> to store the changes and access the Main Menu.

ADDING NEW ANALYST

3.3.4 The first time an analyst uses the software, the information on the Analyst Sign-On Screen must be completed. After completion of the last field, an ACCEPT-EDIT command appears on the bottom of the screen. Press <Enter> to accept the information.

3.4 MAIN MENU

3.4.1　The Main Menu is shown in Figure 3-5. It enables the user to select one of the options described below. Using the arrow keys; move the highlight bar to the desired option and press <Enter>. At the completion of any option, the program returns to the Main Menu and allows another selection to be made or the session to be terminated.

OPERATIONS	UTILITIES	INTRODUCTION	INSTRUCTIONS	EXIT

Figure　3-5.　Main Menu

*MAIN
MENU
OPTIONS*

3.4.2 OPERATIONS.　Selecting this option displays two choices: PERFORM ASSESSMENT and REPORT GENERATION. The first option allows the analyst to perform an ILS assessment on the equipment that was selected via the Equipment Identification Screen. The second is used to access the Report Generation Module. In this module, the analyst can generate management and technical reports that document the results of the assessment. A further description on performing an assessment is provided in Chapter 4 and report generation is discussed in Chapter 5.

3.4.3 UTILITIES. Two utility programs have been included in this option.　The utilities are: REORGANIZE INDEX FILES and PACK DATABASES.　These options allow the user to rebuild index files when they become corrupted.　Files can become corrupted when the ILS program is ended abnormally.　This occurs when the power is shut off without exiting normally (i.e., a power failure, or turning off the computer before exiting ILS).　It can also occur when data is written to bad spots on disks (hard or floppy) and then cannot be read again.

3.4.3.1 In order to execute the utility programs, use the arrow keys to place the cursor on the UTILITIES option and press <Enter>.　The two options REORGANIZE INDEX FILES and PACK DATABASES will be displayed.

NOTE

Corrupted files can be recognized by the user when bad or incorrect data is displayed. If the user suspects that any files are corrupted, both utility programs should be run to rebuild the indices. Once that is complete, the user may proceed.

RE-ORGANIZING INDEX FILES

3.4.3.2 To select REORGANIZE INDEX FILES option, use the down arrow key to highlight REORGANIZE INDEX FILES and press <Enter>. This displays a window on the Main Menu Screen entitled "REINDEXING ALL ILS SYSTEM WORK AREAS". As each database index file is rebuilt, the message within the box "Reindexing: Database (file name.DBF)" and the number of records being reindexed are shown. After all databases have been reindexed, a message line appears below the box stating "ILS System Successfully Reindexed, any <Key> to continue."

PACKING DATABASES

3.4.3.3 To select the PACK DATABASES option, use the down arrow key to highlight the selection and press <Enter>. This displays a window on the Main Menu screen entitled PACKING ALL ILS SYSTEM WORK AREAS. As each database file is packed, the message within the box reads "Packing: Database (filename.DBF)" and the number of records that are being packed. Upon completion of packing each file, a message line below the window appears stating "ILS System Successfully Packed, any <Key> to continue."

3.4.4 INTRODUCTION. This option displays a brief narrative about the computer-aided ILS Assessment System Software.

3.4.5 INSTRUCTIONS. This option displays suggestions on how to use the application software, and what to expect when operating the software. In addition, system navigation terminology is also displayed.

TERMI-
NATING
THE
SESSION

3.4.6 EXIT. This option displays a pull down menu with a YES and NO option. If the YES option is selected, a second menu is displayed to verify the choice to exit the session. If OK is selected, the program exits and returns to the DOS prompt C:\ILS. If NO is selected, you are returned to the Main Menu.

3.5 OPERATIONS

PERFORM
ASSESSMENT

3.5.1 From the Main Menu selection, begin the ILS assessment by selecting the PERFORM ASSESSMENT option under OPERATIONS. This option reveals a list of pertinent topics relating to the ILS Element as shown in Figure 3-6.

NOTE

The titles shown in the illustrative figures are provided to show the format of the screen. The actual titles of the ILS Assessment in use may be different, but the software operation is the same.

ASSESSMENT
TOPICS

3.5.2 The Assessment Selection Screen shown in Figure 3-6, indicates the process number and abstract (title) of the assessment topic. This permits the user to choose topics that are pertinent for assessing a Weapon System in its current stage of development. Some topics are further divided into subtopics. Use the arrow keys to move the highlight bar to the desired topic and press <Enter> to select it.

3.5.3 Occasionally, and more often as the equipment assessment progresses, the reviewer will note an asterisk (*) on the left hand side of an assessment topic. The * indicates that a process summary has been entered for that topic. It is recommended that the process summary be updated when the reviewer completes most of the questions for the assessment topic.

```
                  .[SELECT ASSESSMENT AREA]

PROCESS #:              ABSTRACT:
E1.1 - Review Design Status Assessments for Logistical Impacts
E1.2 - Review Program Management Documentation for Completeness
E1.3 - Review Design Status Assessments for Logistical Impacts.
E1.4 - Review Program Management Documentation for Completeness
```

Figure 3-6. Assessment Selection

3.5.4 The user can create, review, or edit a process summary by pressing <F3>. The analyst can enter or revise the process summary on the narrative input screen shown in Figure 3-7. After completion of the summary, press <F10> to save. This saves the summary and allows the analyst to make two ratings that assess the Program Cost & Schedule Impact and Equipment Performance & Sustainability Impact.

```
                  [ENTER YOUR PROCESS SUMMARY]




                  [<F10> TO SAVE, <ESC> TO EXIT]
```

Figure 3-7. Process Summary Screen

QUESTION
LIST

3.5.5 When an assessment topic is selected, either a subprocess list appears as shown in Figure 3-8, or a question list is superimposed on the Assessment Selection Screen. The question list shown in Figure 3-9 displays a list of question numbers.

3.5.6 Displayed to the right of each question is its status; DONE, NOT DONE, or N/A(Not Applicable). The status for DONE or NOT DONE is automatically recorded by the software during any of the previous sessions. If the question was answered during any session, it is labeled DONE. It is labeled NOT DONE if it has never been worked on. A N/A (Not Applicable) is displayed when the analyst, during a previous session, determined that the question was not relevant to the equipment or life cycle phase. Refer to Chapter 4 for procedures on performing the assessment.

```
                    [SELECT ASSESSMENT AREA]

SUBPROCESS #:              ABSTRACT:
S1.1A1 - Review Tasks or Functions to Mission Requirements Driven
S1.1A2 - Review Maintenance Principles and Level of Repair
S1.1A3 - Review Personnel/Non-Personnel Resource Requirements
S1.1A4 - Review (B) MC use of B Level Army Maintenance Structure
S1.1A6 - Review Maintenance Task and Level of Repair Trade-Offs
```

Figure 3-8. Subprocess Menu Selection

NOTE

In some ILS Assessment Elements, another level of subprocessess exists before the question list is displayed. The selection of topics in this sublevel is identical with the subprocess selection.

```
        QUESTION #:        ANSWERED
        E1.1-01            NOT DONE
        E1.1-02            DONE
        E1.1-03            DONE
        E1.1-04            N/A
        .
        .
        .
        .
        E1.1-17            NOT DONE
```

Figure 3-9. Question Menu

3.5.7 When the question list is displayed, the
<F4> key can be used to review the last answer to
the question that is highlighted. The information
that is displayed is the narrative text portion of
the assessment. Use the up and down arrow keys or
<Page Up> and <Page Down> keys to scroll through
the text. To return to the question list press
<ESC>. Either review the answer to another
question or select a question to answer.

3.6 HELP SYSTEM

3.6.1 The Help System is available to the analyst
throughout the operation of the software program.
When the analyst presses the <F1> key a help
screen is displayed giving information on the
particular operation being performed. Use the
arrow keys to navigate through the help screens.
If additional information is required, press the
<F1> again. This displays an ILS Help System Index
Selection Screen. Use the arrow keys to highlight
the desired selection and press <Enter> to review
the Help Screen. Press <ESC> to return to the
program.

3.7 NAVIGATION.

3.7.1 NAVIGATION MENU. The navigation menu
appears at the top of the screen when each
question is displayed. It enables the user to
answer the question displayed or go to another
question. The user accesses the navigation menu
by pressing the <ESC> key when the YES/NO/NA
choices are displayed beneath the question. The
navigation menu becomes activated on the upper
portion of the screen as shown in Figure 3-10.
This menu gives the user the options defined in
Table 3-1.

```
                          [NAVIGATION MENU]

ASSESSMENT    FIRST    LAST    NEXT    PREVIOUS    SEARCH    EDIT    EXIT
```
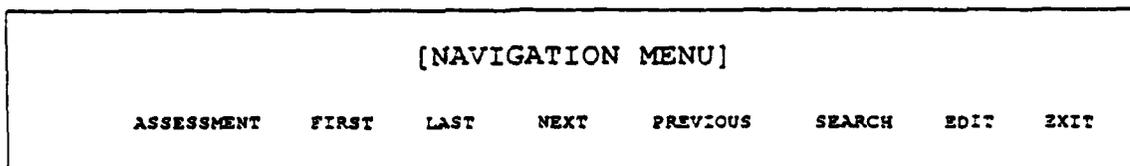
Figure 3-10. Navigation Menu

Table 3-1. Navigation Menu Option Descriptions

NAVIGATION
KEYS

SELECTION	FUNCTION
ASSESSMENT	Makes question appearing on the screen active, enabling the analyst to answer it.
FIRST	Displays the first question in the assessment.
LAST	Displays the last question in the assessment.
NEXT	Displays the question after the currently selected question. This option is used to skip a question.
PREVIOUS	Displays the question before the currently selected question. This option is used for answering a question that was skipped or to modify the last answer.
SEARCH	Allows the user to either select a specific question by entering the question number, or searching for a question in another topic. The user selects the topic, a subtopic (if available) and then the specific question desired. This option quickly moves you from one part of the question list to another.
EDIT	Allows the user to edit questions previously answered during this session. The user is returned to the question from which edit was invoked. This option may be used if the analyst wants to review the details of a previously answered question without exiting the software.
EXIT	Allows the user to return to the Main Menu.

CHAPTER 4

ASSESSMENT TECHNIQUES
AND PROCEDURES

4.1 INTRODUCTION

4.1.1 This chapter provides the user with the procedures required to perform an ILS assessment. It includes procedures on reviewing previous entries, manipulating of the program and generating assessment results.

4.2 HISTORICAL RESULTS

HISTORICAL RECORDS

4.2.1 The ILS Assessment software is designed to generate a historical record of events over the life cycle of a weapon system. The historical record is developed one session at a time.

CURRENT SESSION

4.2.2 A session begins when an analyst signs on by selecting a weapon system to assess, and ends when he elects to exit. During that current session, all answers to questions are recorded and saved by the software. Changes can be made only to questions answered during a current session. Questions previously answered, may be answered again without affecting data already in the system. Once the analyst exits a current session, no additional changes can be made.

AUDIT TRAIL

4.2.3 As additional sessions are held, the saved records become an audit trail of events that have occurred over the life of the weapon system. This information is used when generating the reports described in Chapter 5.

4.3 MULTIPLE ANALYST USAGE

DIFFERENT
USERS

4.3.1   The ILS Assessment software can be used by multiple analysts (one at a time) on one computer. These analysts can assess the same or different aspects of selected equipment. Each analyst can assess the same or a different piece of equipment.

TAGGING
RESULTS

4.3.2 Each time a new user enters the program, he completes the Analyst Identification and Sign-on Screens as described in Chapter 3. The program stores the information for each user in a separate record. Every question answered by the analyst during an assessment is tagged with the analyst identification, equipment identification, date, and time the session started.

4.4 PERFORMING AN ASSESSMENT

MAIN
MENU

4.4.1 The ILS Assessment Program is entered from the Main Menu. Refer to Chapter 3 for procedures on completing the preliminary screens necessary to reach the Main Menu. From the Main Menu, select the PERFORM ASSESSMENT option under OPERATIONS. This brings up the assessment program.

STARTING
ASSESSMENT

4.4.2 Upon selecting the PERFORM ASSESSMENT option from the MAIN MENU, a list of assessment topics is displayed. Each topic has a series of questions which must be answered to perform the assessment. Refer to Appendix B for a complete list of these questions. To select an assessment topic, use the arrow keys to move the highlight bar to the topic desired and press <Enter>. For a further discussion of selecting an assessment topic, see Chapter 3, paragraph 3.5.1 PERFORM ASSESSMENT.

4.5 ANSWERING QUESTIONS

*QUESTION
SELECTION*

4.5.1 After selecting a topic, and a subtopic (if required), the related question list is superimposed on the Assessment Selection Screen. To answer a question, use the arrow keys to move the highlight bar to the desired question number and press <Enter>.

NOTE

The assessment of an answered question can only be changed if it was answered during the current session.

4.5.2 The Question Screen is displayed. The Navigation Menu (see Figure 3-9) appears at the top of the Question Screen, and becomes active (e.g., the program is in a "wait state" while the user makes a selection). The default selection is ASSESSMENT.

4.5.3 To begin answering a question, use the arrow keys to highlight and select the ASSESSMENT option. There are two types of questions that may appear during an assessment. The first type requires either a YES, NO or N/A answer, while the second type requires an explanation.

*QUESTION
RESPONSE*

4.5.4 After reading the question, you can choose to answer it or activate the Navigation Menu by pressing <ESC>. For YES/NO/NA questions, the responses appear below the question and for explanation questions, a box containing a message is displayed.

4.5.5 To answer the first type of question, use the arrow keys to highlight YES, NO, or N/A and press <Enter> to select. Refer to figure 4-1 for an example of how a question screen is displayed.

NOTE

During the assessment procedure, the <F2> function key is used to toggle between the question and the assessment screens. After toggling back to the question, a series of subquestions that discuss additional points are displayed beneath the main question. The <F10> function key is used to save the assessment, and the <ESC> key is used to abort the assessment and proceed to the next question.

```
QUESTION NUMBER:     E1.1-04

      QUESTION:      Have the estimated fielded
                     quantities been identified
                     and relayed to the
                     logistician? (Equipment
                     densities have an effect
                     on support methodologies).
```

Figure 4-1. Sample Question Screen

4.5.6 Questions of the second type require an explanation instead of a YES, NO, or N/A response. The question types are predetermined and cannot be changed by the user.

4.6 QUESTIONS WITH "EXPLANATION" ANSWERS

EXPLANA-
TION
RESPONSE

4.6.1 When an explanation question is selected, a box with the following instructions is displayed at the bottom of a text question screen shown in Figure 4-2.

"<Enter> to proceed, any <Key> next
   question, <F3> to mark Not Applicable."

4.6.2 ENTERING AN ASSESSMENT. To proceed with your explanation, press <Enter>. The software displays the assessment screen (see Figure 4-3).

4.6.3 NEXT QUESTION. If you decide not to answer the question at this time, press any <Key> other than <Enter> or <F3>. This question is skipped and the software automatically moves to the next question without recording your answer.

QUESTION NUMBER:E1.1-02
QUESTION: How are system designers, maintenance engineers and other logistical element managers communicating on the design and support planning effort?

POINTS TO CONSIDER: Explain mechanism for exchanging information.

Figure 4-2. Text Question Screen

4.6.4 NOT APPLICABLE. If this question is not applicable to the equipment or life cycle phase press <F3>. The software records your answer and automatically moves to the next question.

4.7 QUESTIONS WITH "YES" ANSWERS

YES RESPONSE

4.7.1 If the response is YES, an assessment screen is displayed (Figure 4-3) for you to enter an assessment (e.g., narrative text answering the question). The assessment screen provides you with a word processing capability. On this screen you may type up to 14 pages of information concerning each question. Your assessment may consist of the work planned or accomplished in the project that deals with the main issue of the question, or actions required to comply with the intent of the question. If you would like to see the question while entering the assessment, press <F2>. After typing in the narrative text of your assessment, the results must be saved by pressing the <F10> key.

```
                    ENTER YOUR ASSESSMENT




   ALERT DATE:  /  /    ACTION DATE:  /  /
```

Figure 4-3.   Example of the Assessment Screen

ALERT/ ACTION DATE

4.7.2 After completing the assessment and pressing <F10>, the ALERT DATE and ACTION DATE fields are activated. The ALERT DATE field allows the analyst to record a follow-up date to check on specific actions which should be occurring to resolve a problem. The software only accepts the Alert Date if it is greater than or equal to the session date.

4.7.3 The ACTION DATE field permits the analyst to indicate when specific actions must be completed. Action Dates must be greater than or equal to Alert Dates or they will not be accepted by the software. If these dates were completed for the same question during a previous session, the dates appear in the fields provided. To complete or edit the dates, proceed as follows:

a. Complete these fields using the DD/MM/YYYY format. For a single digit, enter a blank space or zero to the left of the digit. The program accepts only actual dates. If an incorrect date is entered, the computer beeps and returns to the first character in the field.

b. Once both fields are completed, a verification message is displayed. If the dates are correct, press <Enter>. If not, type "N" and press <Enter>. The cursor then returns to the ALERT DATE field for editing.

c. There is no requirement to complete these fields. To skip either or both of these fields, press <Enter> once or twice. <Enter> can also be used to accept a field that was previously completed. The verification message is displayed. Press <Enter> to select "Y".

4.8 QUESTIONS WITH "NO" ANSWERS

*NO
RESPONSE*

4.8.1 If the response to the question is NO, a sequence of screens follows. The first is a Cost and Scheduling Impact Screen which is displayed beneath the question as shown in Figure 4-4. This screen gives you the ability to rate the impact on the Weapon System program by selecting CRITICAL, INTERMEDIATE, or ROUTINE.

SELECT THE RATING FOR THE COST AND SCHEDULE IMPLICATION

CRITICAL   INTERMEDIATE   ROUTINE

Figure 4-4. Cost and Schedule Rating Screen

SELECT
OPTIONS

4.8.2   The user must select one of these options which indicates the time frame for resolving issues that may cause a program schedule slip or cost increase. The CRITICAL option indicates immediate resolution; the INTERMEDIATE option indicates resolution within 30 days; and the ROUTINE option indicates resolution within cost and schedule constraints.

MILESTONE
ASSESSMENT

4.8.3   After selecting one of the options, the Milestone Assessment Screen is displayed (Figure 4-5). On this screen, briefly explain what part of the schedule has been impacted or identify the significant cost driver. To save this information, press <F10>. Following completion of the Milestone Schedule Assessment Screen, the user is asked to rate   the   Performance   and   Sustainability Implications.

PERF. &
SUST.

4.8.4 The Performance and Sustainability Rating Screen is shown in Figure 4-6. The rating options are again CRITICAL, INTERMEDIATE, or ROUTINE. After making the appropriate selection, a Milestone Performance Assessment Screen is displayed.   The user enters a brief explanation of how system performance and sustainability is impacted by the issues addressed in the question. To save the information, press <F10>.

```
QUESTION NUMBER: E1.1-03
QUESTION:  Have  logistical  design  parameters  been
incorporated into design analytical efforts?



-------------[MILESTONE SCHEDULE IMPACT: ]-------------
```

Figure 4-5. Milestone Assessment Screen

```
        RATE THE PERFORMANCE AND SUSTAINABILITY IMPACT

           CRITICAL          INTERMEDIATE     ROUTINE
```

Figure 4-6. Performance and Sustainability Rating Screen

ASSESSMENT RESULTS

4.8.5 The next screen displayed is the Enter Assessment Results Screen. The user enters the assessments results stating why the question was answered "NO". If appropriate, the user should enter a list of actions that must be accomplished to correct any deficiency along with a schedule. Press <F10> to save the information and activate the ALERT DATE and ACTION DATE fields prior to answering the next question. Complete the ALERT DATE fields as indicated in paragraph 4.7.2.

4.9 QUESTIONS WITH "N/A" ANSWERS

MARKING A QUESTION N/A

4.9.1 The user may determine during the course of the assessment that a question is not applicable. A question is not applicable when it is deemed not relevant to the equipment under analysis or does not pertain to the current life cycle phase. To make a question not applicable, use the arrow keys

to highlight the N/A choice and press <Enter> to select it.. The software records the response and automatically moves to the next question.

CHANGING THE N/A

4.9.2   If a question was marked not applicable during a previous session (by any analyst assessing the equipment), a message to that effect is displayed, when the question is selected again. If the user determines that the question is now relevant, the N/A response may be changed. Use the <F3> key to return the question to its original state so it can be answered following the procedures described in paragraph 4.5.2

4.10 FUNCTION KEYS

NAVIGATION KEYS

4.10.1 The function keys are used as an aid to the user. If you would like to go to another question, instead of answering the present question, press <ESC>. This displays the navigation menu.

4.10.2 Use the arrow keys to highlight one of the other options of the Navigation Menu. These options are ASSESSMENT, FIRST, LAST, NEXT, PREVIOUS, SEARCH, EDIT, and EXIT. For a description of these selections, refer to Chapter 3, Table 3-1.   To return to the Main Menu from the Navigation Menu, the user may press the <ESC> key or highlight and select the EXIT option.

<F10> KEY

4.10.3 <F10> KEY. The <F10> key is available on the Assessment Screen and the two milestone screens. It is used to save the narrative text after the user has finished typing a response.

<ESC> KEY

4.10.4 <ESC> KEY. The <ESC> key has several functions. If you press the <ESC> key prior to selecting a response (i.e. YES/NO/NA) to a question, the Navigation Menu becomes active and the arrow keys can be used to make a selection.

4.10.5 Pressing the <ESC> key from the Navigation Menu, returns you to the Main Menu. If you press <ESC> from the Main Menu, you exit the program.

4.10.6 Pressing the <ESC> key while filling out the assessment screen aborts the answer and displays the next question. Any narrative that is written is not saved.

HELP KEY

4.10.7 <F1> Key. The <F1> key is the help key. Pressing this key displays information to assist the user on using the software, explaining Menu choices or inputting data for a specific screen, and defining the topics on the Assessment Selection Screen. The help key also displays a help menu. This menu allows the user to get context sensitive help for the listed topics.

4.10.8 WORD PROCESSING FUNCTION KEYS. The keys shown in table 4-1, are used when entering text into the program.

Table 4-1. Word Processing Function Keys

KEY	FUNCTION
<Insert>	Used to insert a letter, word or phrase between existing words at the location of the cursor.
<Delete>	Used to delete a single letter located under the cursor.
<Backspace>	Used to backspace and erase the previous letter.
<Caps Lock>	Used to enter all upper case letters.
<Enter>	Used to create a hard return to move the cursor to the next line.
<Tab>	Used to indent text line 5 spaces.

WORD PROCESSING KEYS

CHAPTER 5
REPORT GENERATION

5.1 INTRODUCTION

5.1.1 This chapter provides the user with the information required to generate reports for the ILS assessment performed. All reports can be output to the screen, printer or file.

5.2 SELECTING A REPORT

5.2.1 The user enters the report generator program from the OPERATIONS option on the Main Menu. After selecting the OPERATIONS option, the user selects the REPORT GENERATOR option. A Reports Welcome Screen is displayed, followed by the Reports Generator Main Menu. The user must press <Enter> on the Report Generation Screen to reach the Main Menu.

REPORT
CHOICES

5.2.2 The Main Menu has seven report selections and one exit selection. Reports 1 and 2 are executed directly off this menu, while reports 3 through 7 have several submenu options. To select a report, move the highlight bar to the desired choice and press <Enter>. Either a message indicating the report is processing or a window containing a submenu of reports will be displayed. The report options are shown in Figure 5-1 and described in the following paragraphs.

5.2.3 SYSTEM/EQUIPMENT DATA. This option generates a report containing the system/equipment data for this session to the output device selected.

5.2.4 OVERALL ASSESSMENT RESULTS. This option generates a report containing the overall assessment results for the selected equipment to the output device selected.

```
SYSTEM/EQUIPMENT DATA
OVERALL ASSESSMENT RESULTS
ASSESSMENT STATUS
ASSESSMENT RESULTS
COST AND SCHEDULE IMPACTS
PERFORMANCE AND SUSTAINABILITY IMPACTS
ALERT AND ACTION SCHEDULE DATES
EXIT TO MAIN ILS MENU
```

Figure 5-1. Report Generator Main Menu

5.2.5 ASSESSMENT STATUS. This option displays a submenu which allows the user to generate either a WEAPONS SYSTEM CURRENT STATUS REPORT or a CURRENT REVIEW SESSION REPORT. The report is directed to the selected output device.

5.2.6 ASSESSMENT RESULTS. This option displays a submenu which allows the user to select an ASSESSMENT HISTORY REPORT, WEAPONS SYSTEM CURRENT STATUS REPORT or a CURRENT REVIEW SESSION REPORT. The generated report is then directed to the output device selected.

5.2.7 COST AND SCHEDULE IMPACTS. This option displays a submenu which allows the user to select a WEAPONS SYSTEM CURRENT STATUS REPORT, CURRENT REVIEW SESSION REPORT, CRITICALITY ANALYSIS REPORT or a WEAPONS SYSTEM SUMMARY REPORT. The generated report is then directed to the output device selected.

5.2.8 PERFORMANCE AND SUSTAINABILITY IMPACTS. This option displays a submenu which allows the user to select a WEAPONS SYSTEM CURRENT STATUS REPORT, CURRENT REVIEW SESSION REPORT, CRITICALITY ANALYSIS REPORT or a WEAPONS SYSTEM SUMMARY REPORT. The generated report is then directed to the output device selected.

5.2.9 ALERT AND ACTION SCHEDULE DATES. This option displays a submenu which allows the user to select an ALERT DATE ITEMS REPORT or an ACTION DATE ITEMS REPORT. The generated report is then directed to the output device selected.

5.2.10 EXIT TO MAIN ILS MENU. This option terminates the report generator program and returns the user back to the ILS Main Menu.

5.3 CHANGING REPORT DESTINATION

5.3.1 The ILS Assessment software allows the User to output reports to the screen, printer, or file. The mechanism to control the output, device is located on the last line of the Report Menu Screen. Pressing the <F2> key toggles between the three options.

SCREEN
OUTPUT

5.3.2 SCREEN OUTPUT. The default device for Report Output is the Screen or Video Display. After the report module loads, the output device is set to screen. After selecting the output device, select any report from the menu and the software generates it. After several minutes the report is displayed to the screen in a format that is analogous to one of the figures presented in Chapter 5. To scroll through the report use the up & down arrow, page up, page down, home, and end keys. Once you have finished reviewing the report, use <ESC> to exit and return to the Report Menu.

PRINTER
OUTPUT

5.3.3 PRINTER OUTPUT. Press the <F2> key once to change the output device to printer. Make sure that your printer is on-line. Select the report from the Report Menu. After several minutes your report will begin to print out. Depending on the amount of data in the report, it may take a long period of time for the complete report to print out. At the conclusion of the report, a message indicating the report has finished will be displayed.

FILE
OUTPUT

5.3.4 FILE OUTPUT. To change the output device to file, press <F2> twice from the Screen Device option or once from the Printer Device option. When this option is chosen, the file name must be entered. The file name must be eight characters or less. Type the name of the file and press <ENTER>. An .RPT file extension is automatically appended to the name of the file. Choose the Report you wish to generate from the Report Menu and after several minutes a message is displayed indicating the report is complete.

NOTE

Caution should be used when naming reports, since a newly created report file can overwrite an existing report file with the same name.

REPORT
FILES

5.3.5 REPORT FILES. The files created from the File Output option are stored in the directory containing the ILS Program. The file is an ASCII text file devoid of any special control characters. The page layout of the information contained in the file is formatted exactly like the printed output. This file maybe imported into a word processor in order to print out only pertinent parts of the report or redirected to a printer at a later date. For instructions on printing a text file from DOS, consult your DOS manual.

SYSTEM/
EQUIPMENT
DATA
REPORT

5.4 SYSTEM/EQUIPMENT DATA REPORT

5.4.1 This report provides information on the system/equipment being assessed (the system/equipment selected on the Equipment Sign-On Screen). Information related to the life cycle phase, project manager and reviewer is included. Refer to Figure 5-2 for an example of this report.

5.5 OVERALL ASSESSMENT RESULTS REPORT

OVERALL
ASSESSMENT
RESULTS
REPORT

5.5.1 This report contains the narrative text, Cost and Schedule (C/S), and the Performance and Sustainability (P/S) ratings input for each review topic. The C/S and P/S ratings are CRITICAL, INTERMEDIATE, and ROUTINE. The report is sorted by process number and contains the last assessment for each topic. The topic title and the date of the last assessment are also included. Refer to Figure 5-3 for an example of this report.

5.6 ASSESSMENT STATUS REPORT

ASSESSMENT
STATUS
REPORT

5.6.1 This report has two options: WEAPON SYSTEM CURRENT STATUS and CURRENT REVIEW SESSION REPORT.

5.6.2 These reports contain seven columns. The columns are labeled: Question, Answer, Review Date, Reviewer Initials, C/S Rating, P/S Rating and Action Date. For the questions answered YES, N/A, or Text, the C/S and P/S ratings will not appear. The Action Date may or may not be completed. Any question not answered will have blank columns to the right of the question number.

5.6.3 CURRENT WEAPON SYSTEM STATUS. This report is used to determine the assessment status of the selected System/Equipment. It lists all questions and shows which are answered. A summary is included at the end of the report which indicates the number of questions answered YES/NO/NA/TEXT, and NOT ANSWERED. Following this is a Criticality Summary for the C/S and P/S showing the total number of questions rated as Critical, Intermediate, or Routine. Refer to Figure 5-4 for an example of this report.

5.6.4 CURRENT REVIEW SESSION. This report has the same format as the CURRENT WEAPONS SYSTEM STATUS REPORT. However, it contains only those questions answered during the current session. Refer to Figure 5-5 for an example of this report.

5.7 ASSESSMENT RESULTS REPORT

5.7.1 This report has three options: ASSESSMENT HISTORY REPORT; WEAPON SYSTEM CURRENT STATUS REPORT; and CURRENT REVIEW SESSION REPORT. All versions of this report are generated in question number order, but list only those questions that have been answered. In addition, each topic (e.g., process) begins on a new page.

5.7.2 All reports start with the question number and question. This is followed by any related subquestion (if applicable). The answer (i.e., YES/NO/NA/TEXT), session date, and reviewer's name follow the question. If a YES response was made, the assessment (narrative text) will follow.

5.7.3 If a NO response was entered, the Cost and Schedule Rating and short explanation of the rating will follow. Next, the Performance and Sustainability rating with its short explanation will appear. The last item is the assessment results (narrative text) which may include any actions.

5.7.4 HISTORICAL REPORT. The historical report prints each question and subquestion once. This is followed by all the answers to the question in descending date order (latest to earliest). The answers to a question are separated by a line, and the questions are separated by a gray band. Refer to Figure 5-6 for an example of this report.

5.7.5 CURRENT WEAPON SYSTEM STATUS. This report has the same format as the historical report. However, it contains only one answer to every question. The last answer entered, regardless of the analyst who entered it, is included. Refer to Figure 5-7 for an example of this report.

5.7.6 CURRENT REVIEW SESSION. This report has the same format as the historical report. However, it contains only the answers input by the analyst performing the assessment during the current session. Refer to Figure 5-8 for an example of this report.

5.8 COST AND SCHEDULE IMPACTS REPORTS

COST AND SCHEDULE IMPACTS REPORT

5.8.1 This report has four options: Current Weapon System Status; Current Review Session; Criticality Analysis; and Weapon System Summary.

5.8.2 CURRENT WEAPON SYSTEM STATUS REPORT. This report is sorted by rating. All CRITICAL issues are grouped together followed by INTERMEDIATE and ROUTINE issues. Within each rating group, the questions are broken down by topic where the first question for each topic starts on a new page.

5.8.3 This report is formatted so that question number, question, subquestion (if applicable) appear first. This is followed by the Cost and Schedule Impact (short narrative), and a detailed action field. Refer to Figure 5-9 for an example of this report.

5.8.4 CURRENT REVIEW SESSION. This report has the same format as the Current Weapon System Status Report. However, this report contains only the answers input by the analyst during the current session. Refer to Figure 5-10 for an example of this report.

5.8.5 CRITICALITY ANALYSIS REPORT. This report provides a summary of problem areas for the equipment being assessed. The report is grouped by rating (CRITICAL, INTERMEDIATE, or ROUTINE). It contains all questions whose last answer was NO. Within each grouping, the topics are sorted by topic number and within each topic, the questions are sorted by question number. For each question, the alert and action dates are listed. At the conclusion of each group, the total number of questions within each rating group is provided. At the end of the report, the total number of questions (e.g. TOTAL ACTIONS) counted in the report is provided. Refer to Figure 5-11 for an example of this report.

5.8.6 WEAPON SYSTEM SUMMARY REPORT. This report compares, by topic, the number of questions rated CRITICAL, INTERMEDIATE, and ROUTINE to the number answered satisfactorily and also includes those remaining to be answered.

5.8.7 This report contains seven columns labeled: Process #; Title; Critical; Intermediate; Routine; Satisfactory; and To Do. It is sorted by process number and reflects only the last answer to each question. All topics are included, even if no questions were answered. The report is intended to identify those topics where a large number of problems exist, and therefore require additional effort. Refer to Figure 5-12 for an example of this report.

5.9 PERFORMANCE AND SUSTAINABILITY IMPACT REPORTS

PERFORM-
ANCE &
SUSTAIN-
ABILITY

5.9.1 This report has four options: Current Weapon System Status; Current Review Session; Criticality Analysis; and Weapon System Summary.

5.9.2 CURRENT WEAPON SYSTEM STATUS REPORT. This report is sorted by rating. All CRITICAL issues are grouped together followed by INTERMEDIATE and ROUTINE issues. Within each rating group, the questions are broken down by topic where the first question for each topic starts on a new page. Refer to Figure 5-13 for an example of this report.

5.9.3 This report is formatted so that question number, question and subquestion (if applicable) appear first. This is followed by the Cost and Schedule Impact (short narrative), and a detailed action field.

5.9.4 CURRENT REVIEW SESSION. This report has the same format as the Current Weapon System Status Report. However, it contains only the answered questions entered by the analyst during the current session. Refer to Figure 5-14 for an example of this report.

5.9.5 CRITICALITY ANALYSIS REPORT. This report provides a summary of problem areas for the equipment being assessed. The report is grouped by rating (CRITICAL, INTERMEDIATE, or ROUTINE). It contains all questions whose last answer was NO. Within each grouping, the topics are sorted by topic number and within each topic, the questions are sorted by question number. For each question, the alert and action dates are listed. At the conclusion of each group, the total number of questions within each rating group is provided. At the end of the report, the total number of questions (e.g. TOTAL ACTIONS) counted in this report is provided. Refer to Figure 5-15 for an example of this report.

5.9.6 WEAPON SYSTEM SUMMARY REPORT. This report compares, by topic, the number of questions rated CRITICAL, INTERMEDIATE, and ROUTINE to the number answered satisfactorily and also includes those still remaining to be answered.

5.9.7 This report contains seven columns labeled: Process #; Title; Critical; Intermediate; Routine; Satisfactory; and To Do. It is sorted by process number and reflects only the last answer to each question. All topics are included, even if no questions were answered. The report is intended to identify those topics where a large number of problems exist, and therefore require additional effort. Refer to Figure 5-16 for an example of this report.

5.10 ALERT AND ACTION SCHEDULE DATES REPORTS

ALERT AND
ACTION
SCHEDULE
DATES
REPORTS

5.10.1 This report has two options: Alert Date List of Problem Areas; and Action Date List of Problem Areas. The Alert Date List contains a set of follow-up dates related to specific questions, while the Action Date List contains a set of completion dates related to specific actions associated with a question. Each report is a Weapon System Current Status type, but contains only those questions where dates were entered. The questions are sorted by ALERT or ACTION date.

5.10.2 ALERT DATE ITEMS LIST. This report contains all questions where the ALERT DATE has been completed. It is sorted by ALERT DATE from the oldest to the newest. There are six columns in the report that are labeled: Question, Answer. C/S Rating, P/S Rating, Alert Date, and Days Left. The report contains YES/NO/TEXT answers. For YES and TEXT answers, the ratings are blank. The Days Left column indicates the number of days remaining from the Report Date before a follow-up is required. A negative number in this column indicates that the follow-up date has passed. Refer to Figure 5-17 for an example of this report.

5.10.3 ACTION DATE ITEMS LIST. This report contains all questions where the ACTION DATE has been completed. It is sorted by ACTION DATE from the oldest to the newest. There are six columns in the report that are labeled: Question, Answer, C/S Rating, P/S Rating, Alert Date, and Days Left. The report contains YES/NO/TEXT answers. For YES and TEXT answers, the ratings are blank. The Days Left column indicates the number of days remaining from the Report Date before all actions associated with the question must be completed. A negative number in this column indicates that the actions have not been completed. Refer to Figure 5-18 for an example of this report.

PAGE #: 1　　　　　　　　　　　　　　　　　　　　10/12/90

ASSESSMENT OF ILS MAINTENANCE PLANNING
REVIEW MANAGEMENT REPORT

EQUIPMENT IDENTIFICATION:

　　　SYSTEM: XX XX XXXXXX
　　SUBSYSTEM: Not Subsystem

MILESTONE IDENTIFICATION:

　　　LOCAL ILS:　　XXX
　AMC PAM 70-20:　　XXX
　DA PAM 700-26:　　X

PROJECT MANAGER POINT OF CONTACT:

COMMAND/OFFICE:　XXXXXXXX
　CONTACT NAME:　XXX X., XXXX
　CONTACT PHONE:　1(XXX)-XXX-XXXX

REVIEWER REFERENCES:

COMMAND/OFFICE:　XXXX
　REVIEWER NAME:　XXXXX, XXXXXX
　　　　　PHONE:　1(XXX)-XXX-XXXX
　REVIEW DATE:　XX/XX/XX
AUTOVON PHONE:

SEND REPORT TO: XXXX XXXXXX

　　　　NOTES:

Figure 5-2. System/Equipment Data Report

OVERALL ASSESSMENT RESULTS
WEAPON SYSTEM CURRENT STATUS

ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

Page #1   REPORT DATE: XX/XX/XX

E1.1	Review Design for Logistical	Review Date	C/S	P/S
	Impacts	XX/XX/XX	INTERMED	ROUTINE

Summary

E1.3A1	Review Tasks or Functions to	Review Date	C/S	P/S
	Mission Requirements	XX/XX/XX	CRITICAL	CRITICAL

Summary

E1.4A1	Review (P)MAC for Accuracy &	Review Date	C/S	P/S
	Completeness	XX/XX/XX		

Summary

E1.5A1	Assess Reliability Centered	Review Date	C/S	P/S
	Maintenance (RCM) Results			

Summary

Figure 5-3. Overall Assessment Results Report

WEAPON SYSTEM CURRENT ILS STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: 1   REPORT DATE: XX/XX/XX

QUESTION	ANSWER	REVIEW DATE	INIT	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE
E1.1			Review Design for Logistical Impacts			
E1.1-01						
E1.1-02						
E1.1-03	NO	XX/XX/XX	AA	INTERMED	INTERMED	XX/XX/XX
E1.1-04						
E1.1-05	TEXT	XX/XX/XX	BB	---	---	/ /
E1.1-06						
E1.1-07						
E1.1-08						
E1.1-09						
E1.1-10						
E1.1-11						
E1.1-12						
E1.2			Review Program Management Documentation for Completeness			
E1.2-01						
E1.2-02						
E1.2-03	YES	XX/XX/XX	AA	---	---	/ /
E1.2-04						
E1.2-05	TEXT	XX/XX/XX	BB	---	---	/ /
E1.2-06	NO	XX/XX/XX	CC	ROUTINE	ROUTINE	XX/XX/XX
E1.2-07						
E1.2-08						
E1.2-09						
E1.2-10						
E1.2-11						
E1.2-12						
E1.3A1			Review Tasks or Functions to Mission Requirements			
E1.3A-01						
E1.3A-02						
E1.3A-03						
E1.3A-04						
E1.3A-05						

Figure 5-4. Assessment Status Report (Weapon System
Current Status) Sheet 1 of 2

WEAPON SYSTEM CURRENT ILS STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID:　XXXXXX　　　　　　　MILESTONE:　　XXX

PAGE #: XX　　　　　　　　　　　　REPORT DATE: XX/XX/XX

REVIEW STATUS SUMMARY

YES	10
NO	8
N/A	4
TEXT	2
UNANSWERED	198
TOTAL	222

CRITICALITY SUMMARY

	CRITICAL	INTERMEDIATE	ROUTINE
Cost and Schedule	4	3	1
Performance and Sustainability	3	3	2
Total	7	6	3

Figure 5-4. Assessment Status Report (Weapon System
Current Status) Sheet 2 of 2

CURRENT REVIEW SESSION REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XX XX XXXXX   REVIEWER: X. XXXXXX
 REVIEW DATE: XX/XX/XX   OFFICE SYMBOL: XXXXX
   MILESTONE: XXX

PAGE #: 1   XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE
E1.6A3	Review Depot Support Plans			
E1.6A3-01	YES	---	---	/ /
E1.6A3-02	YES	---	---	XX/XX/XX
E1.6A3-03	N/A	---	---	---
E1.6A4	Review ISSA, HNS, CLS, ICLS Implementation Plans			
E1.6A4-01	N/A	---	---	---
E1.6A4-02	N/A	---	---	---
E1.6A6	Review Warranty Implementation Plans			
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX
E1.6A7	Review SDC Plans and Execution			
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX
E1.7A1	Review Sub-Assessments for Overall Consistency			
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX
E1.7A4	Identify Actions Requiring Further Analysis for Resolution			
E1.7A4-01	YES	---	---	XX/XX/XX

Figure 5-5. Assessment Status Report (Current Review
Session Report)

HISTORICAL ASSESSMENT RESULTS
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

PROCESS E1.1   Review Design for Logistical Impacts

---------------------- QUESTION----------------------------
QUESTION #: E1.1-01
Do design specifications establish logistical requirements (i.e.,
maintainability, reliability) to meet system readiness objectives
and the operational scenarios?

ANSWER: YES   SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

----------------------ASSESSMENT----------------------------

ANSWER: NO   SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

COST & SCHEDULE RATING: ROUTINE
COST & SCHEDULE IMPACT:

PERFORMANCE & SUSTAINABILITY RATING: ROUTINE
PERFORMANCE AND SUSTAINABILITY IMPACT:

----------------------ACTION----------------------------------

Figure 5-6. Assessment Results Report (Assessment
History)

ASSESSMENT RESULTS
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX	MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

PROCESS E1.1   Review Design for Logistical Impacts

--------------------- QUESTION----------------------------------
QUESTION #: E1.1-02
How are system designers, maintenance engineers, and other
logistical element managers communicating on the design and
support planning effort?

--------------------SUBQUESTION--------------------------
o Explain mechanism for exchanging information.

ANSWER: TEXT SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

-------------------------ASSESSMENT---------------------------

Figure 5-7. Assessment Results Report (Weapons System
          Current Status)

ASSESSMENT RESULTS
CURRENT REVIEW SESSION
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   MILESTONE: XXX

PAGE #: XX   REPORT DATE: XX/XX/XX

PROCESS E1.1   Review Design for Logistical Impacts

------------------------ QUESTION----------------------------
QUESTION #: E1.1-02
How are system designers, maintenance engineers, and other
logistical element managers communicating on the design and
support planning effort?

ANSWER: TEXT SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXX

------------------------ASSESSMENT---------------------------

Figure 5-8. Assessment Results Report (Current Review
            Session)

COST AND SCHEDULE IMPACT REPORT
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
-------------------- QUESTION--------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

--------------------SUBQUESTION--------------------
-Identify functional groups that have placed at incorrect
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
   (A three line text field that includes a short
explanation of the cost and/or schedule impact.)

--------------------------ACTION--------------------------

Figure 5-9. Cost and Schedule Impacts Report (Weapons
System Current Status)

COST AND SCHEDULE IMPACT REPORT
CURRENT REVIEW SESSION
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

| CRITICAL ISSUE |

PROCESS # :E1.4A03   Review Compatibility of (P)MAC
QUESTION #: E1.4A1-02   with (B)MC
--------------------- QUESTION---------------------
Have adequate and accurate task times been input into the
(P)MAC?

-------------------SUBQUESTION---------------------
-Specify whether the results of testing and demonstrations
contradict these values. -Identify the reason the times in
(P)MAC and the actual times are different (e.g., training,
publications etc.)

COST AND SCHEDULE IMPACT
81 MM Mortar   Question E1.4A03-03
XX/XX/XX   C&S Rating: Critical
Session #X Analyst: XXX XXXX

----------------------------ACTION----------------------------

Figure 5-10. Cost and Schedule Impacts Report (Current
Review Session Report)

COST AND SCHEDULE IMPACT REPORT
CRITICALITY ANALYSIS REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   ILS MILESTONE: XXX
LAST SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXXX

Page #: 1   Report Date: XX/XX/XX

------------------------CRITICAL------------------------
E1.4A1   Review (P)MAC for Accuracy & Completeness
  E1.4A1.02   ALERT DATE: ACTION DATE:

E1.6A6   Review Warranty Implementation Plans
  E1.6A6-01   ALERT DATE: XX/XX/XX ACTION DATE: XX/XX/XX

E1.7A1   Review Sub-Assessments for Overall Consistency
  E1.7A1-02   ALERT DATE: XX/XX/XX ACTION DATE: XX/XX/XX

                              TOTAL CRITICAL ACTIONS: 3

----------------------INTERMEDIATE----------------------
E1.1   Review Design for Logistical Impacts.
  E1.1-07   ALERT DATE: XX/XX/XX ACTION DATE:XX/XX/XX

E1.4A1   Review (P)MAC for Accuracy & Completeness
  E1.4A1-03   ALERT DATE: XX/XX/XX ACTION DATE: XX/XX/XX

E1.6A7   Review SDC Plans and Execution.
  E1.6A7-01   ALERT DATE: XX/XX/XX ACTION DATE: XX/XX/XX

                              TOTAL INTERMEDIATE ACTIONS: 3

-----------------------ROUTINE----------------------
E1.2   Review Program Management Documentation for
                 Completeness
  E1.2-07   ALERT DATE: XX/XX/XX ACTION DATE:XX/XX/XX

                              TOTAL ROUTINE ACTIONS: 3

SUMMARY   TOTAL ACTIONS: -

   Figure 5-11. Cost and Schedule Impacts (Criticality
               Analysis)

COST AND SCHEDULE SUMMARY REPORT
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   ILS MILESTONE: XXX
LAST SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXXX

Page #: 1   Report Date: XX/XX/XX

Process #	Title	Crit	Int	Rout	Sat	To Do
E1.1	Review Design for Logistical Impacts.	0	1	0	1	14
E1.2	Review Program Management Documentation for Completeness	0	0	1	5	3
E1.3A1	Review Tasks or Functions to Mission Requirements	0	0	0	0	11
E1.3A2	Review Maintenance Principles and Level of Repair.	0	0	0	0	11
E1.3A3	Review Personnel/Non-Personnel Resource Requirements	0	0	0	0	11
E1.3A4	Review (3) MC use of 3 Level Army Maintenance Structure	0	0	0	0	2
E1.3A5	Review Host Nation Support (HNS), Interservice Support	0	0	0	0	15
E1.3A6	Review Maintenance Task and Level of Repair Trade-Offs	0	0	0	0	2
E1.3A7	Assess Achievement of SRO and Supportability Objectives	0	0	0	0	3

Figure 5-12. Cost and Schedule Impacts (Weapon System Summary)

PERFORMANCE AND SUSTAINABILITY REPORT
WEAPON SYSTEM CURRENT STATUS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
------------------- QUESTION---------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

--------------------SUBQUESTION----------------------
-Identify functional groups that have placed at incorrect.
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
 (This is a three line text field in which a short
explanation of the performance and sustainability impact
is included.)

----------------------------ACTION--------------------------

Figure 5-13. Performance and Sustainability Impacts Report
(Weapons System Current Status)

PERFORMANCE AND SUSTAINABILITY REPORT
CURRENT REVIEW SESSION
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

CRITICAL ISSUE

E1.4A1   Review (P)MAC for Accuracy & Completeness
QUESTION #: E1.4A1-02
-------------------- QUESTION---------------------
Do the functional group codes adequately reflect the
system from a top-down breakdown?

-------------------SUBQUESTION---------------------
-Identify functional groups that have placed at incorrect
level in the breakdown. -How will this functional group be
placed at the correct level? (The End Item Family Tree is
useful in performing this analysis.)

COST AND SCHEDULE IMPACT
MS_SCHED_M -the long character field for MS_SCHED_M.
Information   about   this   record: qn=E1.4A1-02,
sn=9007181406.

-----------------------ACTION-------------------------

Figure 5-14. Performance and Sustainability Impacts Report
(Current Review Session)

PERFORMANCE AND SUSTAINABILITY REPORT
CRITICALITY ANALYSIS REPORT
ASSESSMENT OF ILS MAINTENANCE PLANNING

```
EQUIPMENT ID:  XXXXXX          ILS MILESTONE:  XXX
LAST SESSION DATE: XX/XX/XX    REVIEWER: X. XXXXXX
```

Page #: 1   Report Date: XX/XX/XX

```
-----------------------CRITICAL--------------------------
E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1.02         ALERT DATE:            ACTION DATE:

E1.6A6           Review Warranty Implementation Plans
  E1.6A6-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

E1.7A1           Review Sub-Assessments for Overall Consistency
  E1.7A1-02         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

                             TOTAL CRITICAL ACTIONS:    3


--------------------INTERMEDIATE------------------------
E1.1             Review Design for Logistical Impacts.
  E1.1-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX

E1.4A1           Review (P)MAC for Accuracy & Completeness
  E1.4A1-03         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

E1.6A7           Review SDC Plans and Execution.
  E1.6A7-01         ALERT DATE: XX/XX/XX  ACTION DATE: XX/XX/XX

                         TOTAL INTERMEDIATE ACTIONS:    3


--------------------------ROUTINE------------------------
E1.2             Review Program Management Documentation for
                 Completeness
  E1.2-07           ALERT DATE: XX/XX/XX  ACTION DATE:XX/XX/XX

                             TOTAL ROUTINE ACTIONS:    ?

SUMMARY                                    TOTAL ACTIONS:   -
```

Figure 5-15. Performance and Sustainability Impacts
(Criticality Analysis)

PERFORMANCE AND SUSTAINABILITY SUMMARY REPORT
ASSESSMENT OF MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   ILS MILESTONE: XXX
LAST SESSION DATE: XX/XX/XX   REVIEWER: X. XXXXXX

Page #: 1   Report Date: XX/XX/XX

Process #	Title	Crit	Int	Rout	Sat	To Do
E1.1	Review Design for Logistical Impacts.	0	1	0	1	14
E1.2	Review Program Management Documentation for Completeness	0	0	1	5	3
E1.3A1	Review Tasks or Functions to Mission Requirements	0	0	0	0	11
E1.3A2	Review Maintenance Principles and Level of Repair.	0	0	0	0	11
E1.3A3	Review Personnel/Non-Personnel Resource Requirements	0	0	0	0	11
E1.3A4	Review (B) MC use of 3 Level Army Maintenance Structure	0	0	0	0	2
E1.3A5	Review Host Nation Support (HNS), Interservice Support	0	0	0	0	15
E1.3A6	Review Maintenance Task and Level of Repair Trade-Offs	0	0	0	0	2
E1.3A7	Assess Achievement of SRO and Supportability Objectives	0	0	0	0	3

Figure 5-16. Performance and Sustainability Impacts
(Weapon System Summary)

ACTION DATE LIST OF PROBLEM AREAS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ALERT DATE	DAYS LEFT
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX	-98
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX	-97
E1.1-07	NO	INTERMEDIATE	INTERMEDIATE	XX/XX/XX	-69
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX	228
E1.6A3-02	YES	---	---	XX/XX/XX	425

Figure 5-17. Alert and Action Schedule Dates
(Alert Date Items)

ACTION DATE LIST OF PROBLEM AREAS
ASSESSMENT OF ILS MAINTENANCE PLANNING

EQUIPMENT ID: XXXXXX   OFFICE SYMBOL: XXXXX
ILS MILESTONE: XXX

Page #: 1   Report Date: XX/XX/XX

QUESTION	ANSWER	COST & SCHED RATING	PERF & SUST RATING	ACTION DATE	DAYS LEFT
E1.7A1-02	NO	CRITICAL	CRITICAL	XX/XX/XX	-98
E1.6A7-01	NO	INTERMEDIATE	ROUTINE	XX/XX/XX	-97
E1.1-07	NO	INTERMEDIATE	INTERMEDIATE	XX/XX/XX	-69
E1.6A6-01	NO	CRITICAL	INTERMEDIATE	XX/XX/XX	228
E1.6A3-02	YES	---	---	XX/XX/XX	425

Figure 5-13. Alert and Action Schedule Dates
(Action Date Items)

APPENDIX A

ILS ELEMENT E12 STANDARDIZATION AND INTEROPERABILITY

DATA FLOW DIAGRAMS

A-3
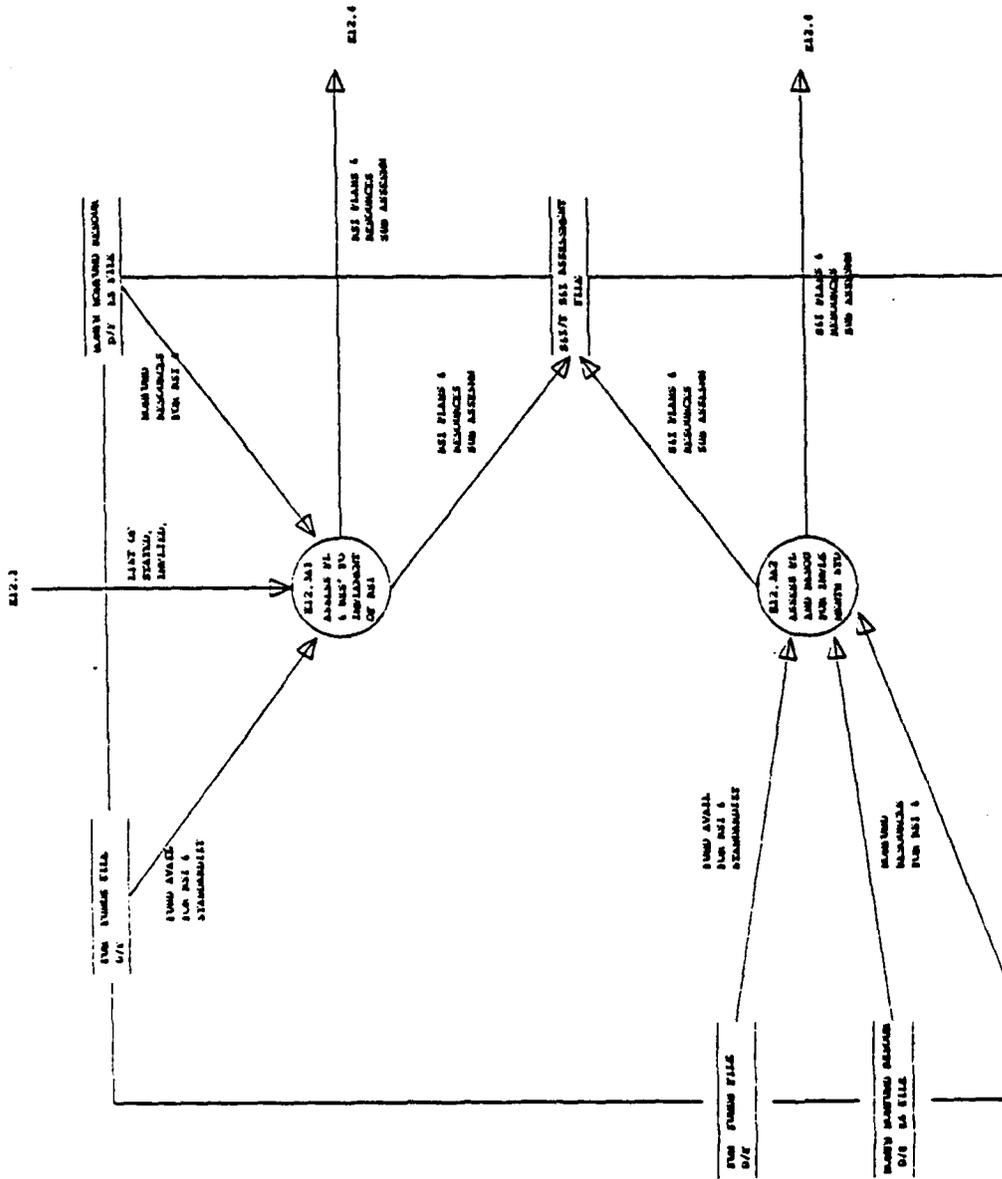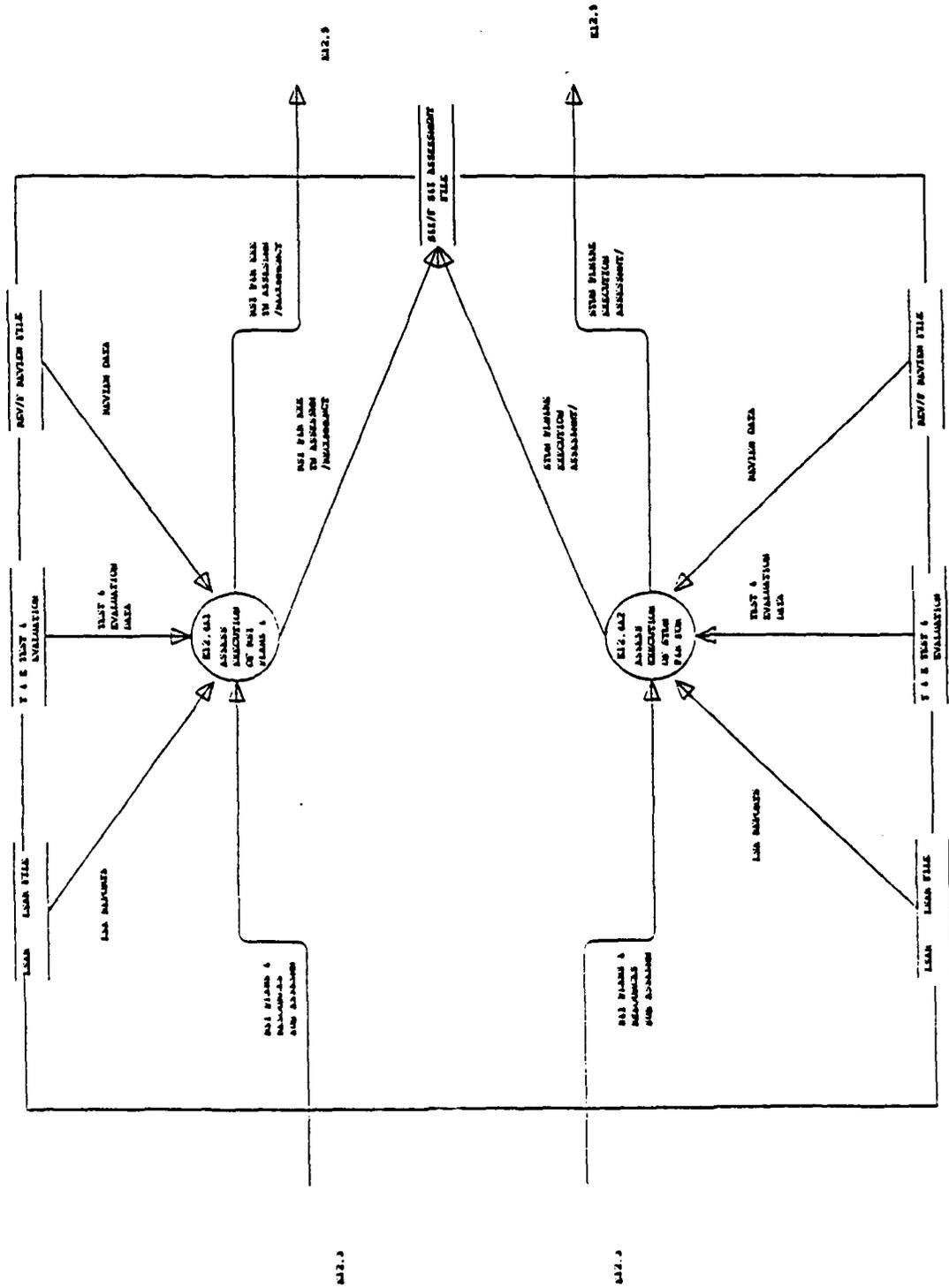
APPENDIX B

ILS ELEMENT E12
ASSESSMENT OF
STANDARDIZATION AND
INTEROPERABILITY

STRUCTURED SYSTEMS DESIGN
STANDARDIZATION & INTEROPERABILITY

<u>E12.1A1</u>:   REVIEW LIST OF STATED INTERFACES WITH OTHER
            EQUIPMENT

E12.1A1-1   Have all necessary standardization and
interoperability requirements been identified in the requirements
document been identified?

    o   YES
        - Which ones pertain to our allies (i.e., STANAGs,
          QSTAGs)?
        - Indicate whether there are any from AR 34-1 top 5
          priority list and if there are any in the Petroleum
          Oil Lubricants (POL) category.
        - Which ones pertain to standardization within the Army
          and other DOD activities?

    o   NO
        - What is not clearly defined?
        - What is being done or has been done to clarify the
          requirements?

E12.1A1-2   If the equipment has to operate in Europe and in
other allied countries, have all requirements (i.e., power,
facility, etc.) been specified?

    o   YES
        - Check to see if this specification is correct?

    o   NO

E12.1A1-3   For equipment being procured from foreign sources,
has the following been considered:

    Will access to Technical Data Packages (TDP) be given to
U.S. Army personnel?

    o   YES
        - When will the TDP be available?
        - How complete is the TDP?
        - Does it include required special support items?

o NO
- What is the impact on system acquisition & support
decision if access cannot be gained?

E12.1A1-4   Is a domestic production base being set up for
critical components for the foreign piece of equipment?

o YES
- What were the results of this consideration?

o NO

E12.1A1-5   Developing and using standardization agreement?

o YES
- What standardization agreements are in effect or
under development?
- Determine if they have been approved.

o NO
- Indicate if there is a vehicle in place to define
responsibilities of the parties involved in the
standardization agreement.

E12.1A2: REVIEW FOR IMPLIED INTERFACES

E12.1A2-1   Are there any implied S&I requirements generated
from these stated in the requirements document?

o YES
- What are they?
- Determine if they are also on the following S&I
priority list:

1. Command, Control and Communications;
2. Cross-servicing of Aircraft;
3. Interchangeable Ammunition;
4. Interoperable Battlefield Surveillance Target
Designation/Acquisition Systems;
5. Standardization/Interoperability of Components
Spare Parts.

- If not, determine what policy or directive mandates
encourage them, and if any of the implied
requirements pertain to POL.

o NO

E12.1A2-2   Are the internal Army and DOD activities standardization requirements sufficiently clear so that there are no implied requirements?

    o YES

    o EXPLAIN

   ·o NO
       - What are they?
       - What policy, standardization agreement or directive
         mandates them?

E12.1A2-3   Have all S&I requirements implied from the design approach been covered?

    o YES

    o NO
       - What S&I requirements are implied from the design
         approach?
       - Explain whether they can and should be incorporated.
       - Explain whether if special coordination is required?

E12.1A2-4   Have the language and cultural differences been considered in developing the system?

    o YES
       - How are these differences going to be handled?

    o NO
       - What language barriers have to be overcome in
         order to operate and maintain this system?
       - Comment on whether the country(ies) that the system
         will be operated in have cultural differences that
         will inhibit normal operation?

E12.1A2-5   Is the operational scenario for the new equipment consistent with the operational scenario of the system with which it must interact?

    o YES
       - How are the systems interoperable?

o NO
- Does the tactical doctrine for any of the systems
  have to be modified?
- What other ways can the systems be made
  interoperable?

E12.1A3: REVIEW FOR THE IDENTIFICATION OF S&I PRIORITY
          LIST AND STANDARD AGREEMENTS

E12.1A3-1   For S&I priority list items identified from the
requirements documents, further identify to which of the
following categories the S&I interface is pertinent: Doctrine;
Weapons Systems; Logistics; Equipment; Procedures.

E12.1A3-2   Have the S&I interface requirements been
coordinated with the appropriate allied representatives and
prioritized?

o YES
- By whom and in what priority?

o NO

E12.1A3-3   If foreign items are to be used, has the use of
foreign proprietary data and licensing privileges been addressed
in sufficient detail to satisfy Army support requirements?

o YES
- Indicate if the agreements are approved and if not,
  when the agreements will be finalized.

o NO

E12.1A3-4   If foreign items are to be used, has logistic
support analysis been conducted or will it be conducted to adopt
or modify the logistical support resources TMs, training, etc.
and procedures used by the foreign country as appropriate, to
insure the adopted item can be adequately supported in the U.S.
structure?

o YES
- What are the schedules and results to date of this
  analysis (if any)?

o EXPLAIN

o NO

CONSIDERATIONS FOR COMMAND, CONTROL AND COMMUNICATIONS
INTERFACES:

E12.1A3-5   Are the requirements for the system compatible
with the Army Battlefield Interface Concept and the Army Command
and Control Combat Development Plan?

    o YES
       - Indicate whether the appropriate standardization
         agreements are identified.

    o NO

E12.1A3-6   Have all other existing or developmental system
interfaces with allies and DOD equipment, to include the
applicable standardization agreement, been identified?

    o YES

    o NO

E12.1A3-7   Do the requirements address the need for the use
of common or compatible Automatic Data Processing and
communication equipment, as well as the ability for the system to
exchange and process data with other battlefield automated
systems?

    o YES

    o NO

E12.1A3-8   Are there plans in the technical and user tests to
verify conformance to mission essential requirements?

    o YES

    o NO

E12.1A3-9   Have the current technical and user test results shown that the requirements for Command Control & Communication are being met under actual operating conditions?

    o YES
        - Determine if these tests have been done with the participation of our allies, and if not when interoperability with our allies can be verified.

    o NO

E12.1A3-10   If the requirements will not/cannot be fully met (by the latter phases of development), but are otherwise acceptable, what actions will be taken to compensate for the shortcomings, including the logistical implications?

    o EXPLAIN

CONSIDERATIONS FOR CROSS-SERVICING OF AIRCRAFT INTERFACES:

E12.1A3-11   Do the requirements and/or contract identify the need for the aircraft ammunition POL loading, the dispensing equipment and operations to be standardized or to efficiently interoperate with U.S. and allied aircraft?

    o YES
        - Comment on whether the appropriate standardization agreements are identified and whether there are provisions for the design interfaces to be compatible to allow cross-servicing.

    o NO

E12.1A3-12   Are there plans in the technical and user tests to verify conformance to mission essential requirements?

    o YES

    o NO

E12.1A3-13   Have the current results from the technical and user test results shown that the requirements are being met under operational conditions?

 o YES
  - Indicate whether these tests have been done with our allies, and if not, when actual interoperability with our allies will be verified.

 o NO

E12.1A3-14   If the requirements will not/cannot be fully met (by the latter phases of development) but are otherwise acceptable, what actions will be taken to compensate for the shortcomings including the logistical implications?

 o EXPLAIN

CONSIDERATIONS FOR INTERCHANGEABLE AMMUNITION:

E12.1A3-15   Do the requirements and/or contract identify the allied ammunition and/or systems with which the ammunition and/or system must be standardized or interoperate?

 o YES
  - Comment on whether the appropriate standardization agreements are identified, and if not, why not and when it will be done.

 o NO

E12.1A3-16   Are there plans in the technical and user tests to verify compliance with essential requirements?

 o YES

 o NO

E12.1A3-17   Have the current technical and user test results shown that the requirements for standardized/ interoperable ammunition are being met under actual operating conditions?

 o YES
  - Indicate whether these tests been done with allied participation, and if not, when actual interoperability with our allies will be verified.

 o NO

E12.1A3-18   If the requirements will not/cannot be fully
met (by the latter phases of development) but are otherwise
acceptable, what actions will be taken to compensate for the
shortcomings including the logistical implications?

    o EXPLAIN

CONSIDERATIONS FOR INTEROPERABLE BATTLEFIELD SURVEILLANCE TARGET
DESIGNATION/ACQUISITION SYSTEMS:

E12.1A3-19   Do the requirements and/or contract identify
the other DOD and allied Friend or Foe Identification (IFF)
systems with which the proposed system must interoperate (whether
in existence or to be developed?)

    o YES
       - Determine whether the standardization agreements have
         been identified, and if not, why not and when this
         will be done.

    o NO

E12.1A3-20   Are there plans in the technical and user
tests to verify conformance to mission essential requirements?

    o YES

    o NO

E12.1A3-21   Have the current technical and user test
results shown that the requirements for these interoperability
with IFF system are being met under actual operating conditions?

    o YES
       - Determine whether these tests been done with allied
         participation, and if not, when actual
         interoperability with our allies will be verified.

    o NO

E12.1A3-22   If the requirements will not/cannot be fully
met (by the latter phases of development), but are otherwise
acceptable, what actions will be taken to compensate for the
shortcomings, including the logistical implications?

    o EXPLAIN

CONSIDERATIONS FOR STANDARDIZATION/INTEROPERABILITY OF COMPONENTS
AND SPARE PARTS AND BATTERIES:

E12.1A3-23   Do the requirements and/or contract identify
the need to standardize or to be able to interchange component
and repair parts to the extent feasible?

    o YES
            - Comment on whether the applicable standardization
              agreements been identified, and, if not, why not.
            - Determine whether the metric system is being used
              when feasible, and if not, why not.
            - What are some examples?
            - Explain whether the family concept of materiel
              systems is being utilized in this development, and
              identify which family concept.
            - Is use of an existing Military Standard battery and
              battery charger required?

    o NO
            - Why not?

    Has U.S. Army Electronics Technology & Devices Laboratory
approved use of the non-standard item?

    o YES

    o NO   Explain

E12.1A3-24   Are there plans in the technical and user
tests to verify conformance to mission essential components and
parts standardization requirements?

    o YES

    o NO

E12.1A3-25   Have the current technical and user test results shown that the requirements for components and parts standardization are being met?

    o YES
         - Determine whether these tests have been done with the participation of our allies, and if not, when actual interoperability with our allies will be verified.

    o NO

E12.1A3-26   If the requirements will not/cannot be fully met (by the latter phases of development), and are otherwise acceptable, what actions will be taken to compensate for the shortcomings, including logistics implications?

    o EXPLAIN

CONSIDERATIONS FOR PETROLEUM, OIL AND LUBRICANTS (POL):

E12.1A3-27   Do the requirements and/or contract identify the need for the development system to use military standard and compatible POL products (IAW AR 703-1 and DoD 4140.43, "Fuel Standardization)?

    o YES

         - Determine if actions have been taken to provide a satisfactory distribution system from the factory to the user.
         - Indicate whether the selection allows for sufficient flexibility.

Is the system prohibited from using gasoline, rather being required to achieve acceptable performance using distillate type (JP8), Naphtha jet fuel (JP5) and aviation herosene (JP4)?

    o YES

    o NO

Has approval of the Army Acquisition Executive been obtained to permit use of gasoline to power the system?

    o YES
        - Have specific petroleum logistics plans been
          developed to support the equipment as part of the
          acquisition strategy?

    o NO   Explain

E12.1A3-28   Are the selected POL products listed in the AMDF, TB 703-1, MIL-HDBKs 113 and 114?

    o YES

    o NO
        - Indicate if this is considered a new POL even though
          compatible for usage with other systems.
        - Determine what actions have been taken, if any, to
          get its usage approved by the DCSLOG and the
          Assistant Secretary of Defense for Production and
          Logistics, and whether they include coordination with
          the Belvoir Research Development Center.

E12.1A5:   REVIEW ARMY, OTHER SERVICES, (ALLIED) RSI
           INTERFACES

E12.1A5-1   Based on the implied and stated standardization and interoperability (S&I) requirements and future development thrusts, have all potential S&I tasks been previously identified and incorporated now or as a preplanned product improvement?

    o YES

    o NO
        - What are they?
        - Comment on whether they can or should be incorporated
          NOW or LATER.
        - If NOW--- what is the cost/schedule impact and
          special coordination required? If any.
        - If LATER -- What is the cost/schedule impact; what
          special coordination is required to schedule these
          S&I improvements?

E12.2A1: REVIEW COMPONENTS/PARTS STANDARDIZATION AND
INTERCHANGEABILITY

E12.2A1-1   Does the equipment developer have a list of
approved sources of MIL-STD Components/parts/assemblies for DOD
contracts?

    o YES
          - Indicate whether this list been reviewed for
            applicability to the system under development and the
            results of the review.
          - Determine whether the components/parts/assemblies are
            used to build the equipment procured from these
            sources.

    o NO
          - What efforts are being made by the equipment
            developer to either get his sources approved
            or find alternative sources?

E12.2A1-3   Does the equipment developer/designer use a
"Master" parts list such as the Defense Logistics Services Center
Total Item Record (i.e., has the designer selected
components/parts/assemblies used to build mature systems that
have been sold on other DOD contracts, to develop the new
System)?

    o YES
          - What percentage of the parts have NSN assigned?

    o NO

E12.2A1-4   Is the design being reviewed to eliminate using a
variety of parts to perform the same function (e.g. different
size screws, resistor, RAM chips etc.) and to maximize
interchangeability of parts?

    o YES
          - What significant part reductions have occurred and
            what were the cost savings?
          - Indicate whether any portions of the system have been
            redesigned to take advantage of using the same parts
            and what they were.

    o NO
          - Explain the cost-effectiveness of this type of
            review.

E12.2A1-5   Have the components/parts/assemblies defined
during the provisioning process been screened through the Defense
Logistics Agency (DLA)?

    o YES
        - What were the results?
        - What changes to the design or updates to part
          selection are required?
        - When will these changes/updates occur?

    o NO
        - What feedback mechanisms are in place?

E12.2A1-6   Can the new system be designed using common
hardware (standard) modules developed under another Army or DOD
program?

    o YES
        - Determine whether this design strategy has been
          stated in any of the requirements documents, which
          ones, and how this approach was specified in the
          system specification and contract, or what new design
          is required (consider both hardware and software).

    o NO
        - State whether this possibility has been investigated
          and indicate the results.

E12.2A1-7   Is the ADA programming language (MIL-STD-1815)
being utilized as part of the software design? (Reference, HQ DA
ltr 25-88-5, Subj: Army Implementation of ADA Programming
Language).

    o YES

    o NO
        - Determine what non-standard languages are being used
          and why.
        - Has the life cycle cost effectiveness, operational
          suitability, and statement of maintainability from
          the software maintainer been documented?
        - Has waiver approval to use the non-standard language
          been obtained from HQDA (SAIS-PS)?

E12.2A1-8   Have standard communication buses (e.g., IEEE-488, MIL-STD-1553B etc.) been designed into the system?

- o YES
  - Which ones?

- o NO
  - How does the use of non-standard buses affect communication with other system or test equipment?

E12.2A1-9   If the system has a distributed processing capability, is one computer/microprocessor or a family of computers/microprocessors utilized?

- o YES
  - Which types?
  - What positive effect does this have on development, operation and maintenance costs?
  - How is system reconfigurability enhanced?
  - Explain other benefits obtained by utilizing the same computer or family of computers within the system.

- o NO
  - Why were different computers/microprocessors chosen to operate in the same system?
  - What problems have this caused?
  - Determine if it is cost effective to modify the design in order to standardize.
  - How is system reconfigurability effected?

E12.2A1-10   Does the system design incorporate standard connectors and cabling both internally and externally?

- o YES
  - What types of connectors are used?
  - What types of cabling are used?

- o NO
  - What actions are being taken to promote the use of standard connectors or cables?
  - What are the impacts on operation and maintenance of the system?

<u>E12.2A2</u>: REVIEW STANDARD PROCESSES/PROCEDURES UTILIZATION

E12.2A2-1   Does the system maintenance concept adhere to established Army/DOD maintenance policies?

    o YES
            - Briefly explain the maintenance concept?
            - What types of standard support are being utilized?

    o NO

            - What deviation/waivers are going to be obtained and
              when?
            - Which policies have been violated and what is the
              rationale for this?
            - What is the cost impact of using non-standard
              maintenance procedures?

E12.2A2-2   Was the test measurement diagnostic equipment (TMDE) and Automatic Test Equipment (ATE) selected from the Army Inventory or another DOD agency?

    o YES
            - Was it from DA PAM 700-21-1 TMDE preferred items list
              or DA PAM 700-20 "Standard items in current
              inventory?

    o NO

            - Have the U.S. Army Central TMDE activity and the
              Program Manager, TMDE granted approval to develop new
              TMDE or ATE?
            - Determine whether it is more cost effective to use
              non-standard TMDE/ATE.

E12.2A2-3   Have personnel with existing MOS's been identified to perform maintenance?

    o YES
            - Which ones?
            - Determine whether impacts to the force structure have
              been considered based on this new requirement for
              these MOS personnel.
            - What is the impact on training time of this MOS based
              on this new requirement?

o NO
        - If a new MOS is required, state whether QQPRI forms
          have been completed by the appropriate agencies, or
          who will operate and maintain equipment.
        - Has the new MOS been approved by DCSPER?
        - Indicate whether the proper coordination with
          TRADOC has taken place and its results; otherwise,
          what impact it will have if TRADOC doesn't approve
          this new MOS, and how the system Life Cycle Cost will
          be affected.

E12.2A2-4   If training equipment and/or simulators have been
identified as a method of training, has the equipment been
selected from the Army Inventory?

o YES
        - Which equipments have been identified?
        - What additions or modifications to the equipment
          hardware and software are required?
        - Specify whether coordination with the appropriate
          agency has been made.

o NO
        - Determine whether arrangements been made to
          obtain/develop this piece of equipment.

E12.2A2-5   Has the support equipment (i.e., maintenance
stands, tools, power generation equipment, air conditioners,
calibration equipment etc.) been selected from the Army/DOD
Inventory?

o YES
        - Comment regarding how the BOIPFD, data interchange
          proces or RPSTL reflects on these requirements, or if
          the BOIPFD requires updating and when it will be
          done.

o NO
        - Which items of SE have not been selected from
          the inventory?
        - Indicate if an analysis has been performed to
          substitute SE from the Army/DOD inventory, and the
          results of the analysis.
        - Has approval of the appropriate Army activity been
          obtained prior to development of the peculiar SE?
          (i.e., BRDEC must approve new air conditioners and
          Gen sets, TSG & CTA must approve new calibration
          equipment).

E12.2A2-6   For computer driven systems, have convention style
guides been established for screen displays (e.g. color
convention, help key location, soft-key functions, etc.)?

    o YES
        - Where are these conventions documented?
        - How were they applied in software development?
        - Determine if software developers have a copy of this
          document.

    o NO
        - Indicate whether screen conventions can be
          incorporated into the software at a minimal cost, and
          if not, what actions need to be taken to implement
          these changes.

E12.2A2-7   Does the system utilize common Army conventions
for labels, knobs, light (power lights, emergency exits etc.) and
storage areas?

    o YES
        - Explain how standardization was applied.

    o NO
        - Specify whether a Human Engineering check list was
          provided to the equipment developer, and how was it
          used.
        - Why didn't standardization occur?

E12.2A2-8   Has a safety check list been used to influence the
system design?

    o YES
        - What areas of the checklist could not be adhered to?
        - What were the results and did any actions result?

    o NO
        - Indicate whether any safety hazards have been
          exposed.

E12.2A2-9   Have the appropriate caution and warning labels been placed throughout the equipment and in the technical manuals (e.g., high voltage wires/cables identified, two person lift, etc.)?

    o YES
        - What is the overall assessment of the system?

    o NO
        - What are the deficiencies?

E12.2A2-10   Has safety equipment, from the Army inventory or currently under development (e.g. chemical warning alarm, protective entrance etc.), been selected for use within the new system?

    o YES
        - Comment on whether the requirements have been identified to the appropriate program/item managers, and if there will be any scheduling problems.

    o NO
        - Why has non-standard equipment been chosen?
        - What is being done to incorporate standard Army equipment?

E12.2A2-11   Do the Technical Manuals adhere to the MIL-STD for format, illustrations, charts, and references?

    o YES
        - Which MIL-STDs are being used?
        - Indicate if there are there any problem areas.

    o NO
        - What has this done to the usability of the manual?
        - How are deficiencies going to be corrected?

E12.2A2-12   What methods and procedures are being implemented during the system design process to ensure nuclear and non-nuclear survivability and endurance?

    o EXPLAIN

<u>E12.2A3</u>: REVIEW DEGREE OF STANDARDIZATION POLICY APPLICATION

E12.2A3-1   Does the design abide by the objectives and
policies of the Defense Parts Control Process stated in AR
700-60?

    o YES

    o NO

E12.2A3-2   ·   Do the specifications, standards, and engineering
practices imposed on the system hardware and software
design/development/production adhere to AR 700-47?

    o YES

    o NO
            - Determine whether the non-Government specifications
              and standard identified adhere to AR 700-50, MIL-STD
              -490, and/or DoD STD 100, and why there were chosen,   ·
              otherwise?
            - Explain how using these documents ensure Army
              operational requirements, and whether the system.
              going to be reviewed at the ASARC level?

E12.2A3-2   Have the engineering drawings been produced IAW
Military Standards?

    o YES
            - To what level (e.g. I,II,III, etc.)

    o NO
            - What will be the impact on Producibility,
              Maintainability, and Logistic Support Development?
            - How can spare parts be competitively procured?

E12.2A3-4   Have commercial products and common commercial
items been considered for use in developing the system under
design?

    o YES
            - What were the results?
            - What was the screening criteria for eliminating these
              items?

    o NO

E12.2A3-5 Have the equipment designers considered using existing
military designs, commercial designs, or modification to each?

  o YES
            - What were the results?
            - What was ruled out based on cost?

  o NO

E12.2A3-6 In systems that use existing designs, has advantage
been taken of existing documentation, hardware, software, and
facilities?

  o YES
            - Explain

  o NO

            - What is being done to utilize these existing
              assets and lower development production, and
              support costs?

E12.2A3-7   Has a Parts control program been implemented IAW
DOD instruction 4120.19?

  o YES

  o NO
        - What type of Parts control program has been
          established?

     Have commercial products and common commercial items been
considered for use in developing the system under design?

  o YES
        - What were the results?
        - What was the screening criteria for eliminating these
          items?

  o NO
        - Why not?

E12.2A3-8   Does the system design conform to the Army Command and Control System specification and the Army Battlefield Interface Concept?

o YES
   - What other system can the new system interface with?

o NO
   - Determine if there is any plan to make the system compatible with the other equipment?

E12.2A4: REVIEW REQUIREMENTS DOCUMENTS FOR S&I INTERFACES

E12.2A4-1   Have all the stated standardization and interoperability requirements for the subsystem, components, assemblies and parts in the requirements documents been identified and understood?

o YES
   - How are these requirements going to be incorporated into the system design?
   - Which ones pertain to standardization within the Army and other DOD activities?
   - Which ones relate to hardware and software?
   - What problems are posed to system designers which require technical breakthroughs?

o NO
   - What aspect of the S&I interface at the sub-system level or below remain to be defined?
   - What is being done or has been done to clarify the requirements?

E12.2A4-2   Are from the system requirements documents at the subsystem level or below sufficiently complete so no further S&I implications can be determined?

o YES

o NO
   - What are they?
   - How are the system design or interfaces affected?
   - What will be the effect of not incorporating these requirements into the system design?

E12.2A4-3   Are the Army or other DOD standardization
policies/directives requirements designated for the subsystem
level or below complete so that no further S&I implications can
be determined.

    o YES

    o NO
          - What are they (e.g., testability, parts selection,
            communication protocol, bus structure)?
          - What policy, standardization agreement or directive
            mandates them? EXPLAIN

E12.3A1: ASSESS PLANNING AND RESOURCES FOR IMPLEMENTATION OF
         RSI INTERFACE LIST

E12.3A1-1   Have adequate funds been provided to implement the
standardization actions called for by the S&I requirements?

    o YES

    o NO
          - What funding is required?
          - What actions have been taken to obtain adequate
            funding by the project manager?

E12.3A1-2   What non-monetary resources are available from
within DOD and our allies which will facilitate the
implementation of the standardization effort?

    o Personnel resources?

    o Working group standardization committees?

    o Equipment, materiel and facilities?

    o Services?

E12.3A1-3   Has adequate funding been provided to support
technical and user testing of RSI requirements?

    o YES
          - Indicate if these funds have been allocated to the
            organization performing the test, and if not, when
            these funds are going to be transferred.

o NO
    - What funding is required?
    - What steps are being taken to fund required testing
      activities?

E12.3A1-4   When a system is being procured from NATO allies,
have funds been programmed for either direct purchase, licensing
arrangements, cooperative R&D, or Co-production?

o YES
    - For which activities?
    - What allies are involved?
    - Indicate whether the funding is sufficient.

o EXPLAIN

o NO
    - What arrangements/agreements have been made or are in
      process?
    - Who is responsible for making these arrangements/
      agreements?

E12.3A2: ASSESS PLANNING AND RESOURCES FOR IMPLEMENTATION OF
         STANDARDIZATION EFFORTS ON PROJECT WITHIN THE ARMY AND
         DOD

E12.3A2-1   Has the correct amount of funding been allocated
to procure the standard subsystems or components (e.g. Power
Generator, Shelters, Air Conditioners, etc.)?

o YES
    - Determine if these funds have been provided to the
      appropriate item manager, what the schedule is for
      delivering these items and how this will affect
      testing or fielding, otherwise?

o NO
    - What funding is required?
    - Where are these funds coming from?

E12.3A2-2   Has funding been considered to increase the
quantity of spare or repair parts required for system support
when the design takes advantage of standard parts?

     o   YES
             - State whether item managers have been notified of
               increased quantity requirements.

     o   NO
             - What is the impact on availability spare/repair
               parts?
             - What plans are being made to procure additional
               quantities of parts that have large usage rates?

E12.3A2-3   Have funds been allocated for acquisition,
maintenance, and operation of additional quantities of other
standard logistic support resources required for system support
(e.g., TMDE, tools)?

     o   YES
             - Determine if planning has been accomplished to allow
               the support groups/units to prepare for the new
               system.

     o   NO
             - How will the use of standard logistic resources be
               funded?
             - What plans are being made to share these costs with
               other programs?

E12.4A1: ASSESS EXECUTION OF S&I PLANS AND RESOURCES

E12.4A1-1   Have the previously planned S&I efforts for this
system been followed?

     o   YES
             - How successful have the S&I efforts been in achieving
               the objectives?
             - What is the projected outlook for the remaining
               planned effort on the system?
             - Indicate whether any modifications are in the RSI
               planned effort or should be made.
             - Determine if the resources allocated have been
               utilized as planned.
             - Are remaining allocated resources
               satisfactory for completion of the S&I effort?
             - What is the nature of the resource shortfall/surplus?

o NO
  - Why haven't the S&I planned efforts been followed?
  - Should the planned effort be modified in order to achieve the S&I objectives for the system?
  - What can and should be done to get the S&I effort back on track with the plans?
  - What resources are needed to get the S&I effort back on track with the plan?
  - If sufficient efforts have been expended on achieving the S&I objectives, should the objectives themselves be modified?

E12.4A2: ASSESS EXECUTION OF PLANS AND RESOURCES FOR NON-RSI RELATED STANDARDIZATION EFFORTS

E12.4A2-1   Have the previously planned non-S&I related standardization efforts for this system been followed?

o YES
  - How successful were system designers in incorporating standard modules, components, assemblies, data buses, microprocessor, etc. into the system design?
  - What were the results of utilizing standard logistic support processes?
  - What were the results of selecting standard subsystems?
  - Determine whether there are any or should any modifications to planned standardization efforts be made.
  - Indicate whether the resources allocated have been utilized as planned, and if remaining allocated resources are satisfactory for completion of standardization efforts; also, if shortfalls/surplus exist and why.

o NO
  - Why haven't standard design practices been followed for parts selection, sub-system identification, and logistic resources?
  - State whether planned activities in these areas should be modified to achieve standardization objectives.
  - What can and should be done to get standardization efforts back on track?
  - How can remaining resources be utilized to achieve standardization objects?
  - Assess whether additional resources could help in achieving the standardization objectives.

- Determine if sufficient efforts have been expended on achieving the RSI objectives and whether the objectives themselves should be modified.

E12.5: ASSESS OVERALL S&S STATUS

E12.5-1   Has there been provision by the Contractor or your office for the consolidation of all applicable S&I subassessments for this program and the preparation of a summary review of the total ILS Element review?

    o YES
            - Indicate whether you have reviewed the results of your assessment of the S&I aspects of this program?
            - State whether you are satisfied that the Contractor has met all his contractual commitments relative to S&I.
            - Indicate if a copy of the S&I assessment details and summary reports has been provided.
            - Determine if the planned distribution of the S&I assessments and summary review are adequate to provide copies to all key personnel in the program.

    o NO
            - State whether there is any particular reason why the results of your assessments have not been made available to you yet?

E12.5-2   Did you prepare a separate summary of your major findings, recommendations, and conclusions for the PM or the ILSMT? In particular did you point out any program criticality, safety considerations, or activities that may neutralize the system/equipments capabilities in the threat environment defined by the O&O plan or ROC?

    o YES

    o NO

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