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MISSILE-X PROGRAM LOGISTIC ELEMENT MANAGEMENT PLAN FOR LOGISTIC--ETC(U)
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TECHNICAL NOTE

MISSILE-X PROGRAM
LOGISTIC ELEMENT MANAGEMENT PLAN
FOR
LOGISTIC SUPPORT RESOURCE FUNDS LEM

22 August 1977

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Prepared for

DEPARTMENT OF THE AIR FORCE
SPACE AND MISSILE SYSTEMS ORGANIZATION (AFSC)
ICBM Program Office

Under Contract F04606-76-A-0087-R901

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P.O. Box 1375/Santa Ana, Calif.

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MISSILE-X PROGRAM
LOGISTIC ELEMENT MANAGEMENT PLAN
FOR
LOGISTIC SUPPORT RESOURCE FUNDS LEM

22 August 1977

One of 12 LEM Plans
Prepared for

DEPARTMENT OF THE AIR FORCE
SPACE AND MISSILE SYSTEMS ORGANIZATION (AFSC)
ICBM Program Office

Under Contract F04606-76-A-0087-R901

Prepared by
A. N. Winter
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LOGISTIC ELEMENT MANAGEMENT PLAN
FOR
LOGISTIC SUPPORT RESOURCE FUNDS LEM**

22 August 1977



**SPACE AND MISSILE SYSTEMS ORGANIZATION
AIR FORCE SYSTEMS COMMAND**

**Prepared by
Logistics (MNL)
Deputy for Intercontinental Ballistic Missiles**

**MISSILE-X PROGRAM
LOGISTIC ELEMENT MANAGEMENT PLAN
FOR
LOGISTIC SUPPORT RESOURCE FUNDS LEM**

22 August 1977



Approved _____

**Lester E. Eklund, Colonel, USAF
Director, Logistics
Deputy for Intercontinental Ballistic Missiles**

Date _____

Approved _____

**Aloysius G. Casey, Colonel, USAF
Assistant Deputy, Missile-X**

Date _____

FOREWORD

This Logistic Support Resource Funds Logistic Element Management Plan is one of twelve plans supplementing the guidance and direction for the Integrated Logistic Support (ILS) program as delineated in the Missile-X Integrated Logistic Support Plan (ILSP). Whereas the ILSP provides general guidance and direction for integrating all logistic elements into the overall program requirements, this plan treats the specific actions, milestones, and coordination efforts of the Logistic Element Manager for Logistic Support Resource Funds. It has been written to assist him in fulfilling his responsibilities toward achieving the ILS objectives of the MX Program.

The majority of information contained in Sections 1 through 4 herein is common to all plans. Sections 5 and 6 present information pertinent to the LSRF-LEM's efforts.

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1 INTRODUCTION

1.1 BACKGROUND

In accordance with DoD Directive 4100.35, the promulgating authority of AFR 800-8, and the guidance provided by AFP 800-7, the MX Program Office has implemented an Integrated Logistic Support program for the MX Weapon System. The ILS program, as delineated in the Integrated Logistic Support Plan (ILSP), is intended to ensure that the weapon system is designed with due consideration given to its supportability and that the required support will be attained within an affordable, minimum life cycle cost.

For the MX System, logistic elements – areas of support activity that collectively comprise the management concept of ILS – have been defined. These are:

- Maintainability Interface (M)
- Reliability Interface (R)
- Nuclear Hardness and Survivability Interface (NH&S)
- Maintenance Planning (MP)
- Support and Test Equipment (SE)
- Supply Support (SS)
- Transportation and Packaging (T&P)
- Technical Data (TD)
- Support Facilities (SF)
- Personnel and Training (P&T)
- Logistic Support Management Information (LSMI)
- Logistic Support Resource Funds (LSRF)

For each area of support activity, the MX Program Office has designated a logistic element manager (LEM) responsible for managing the accomplishment of the tasks associated with his element.

1.2 PURPOSE

This document is a Logistic Element Management Plan for the Logistic Support Resource Funds element. It has been written to provide the LSRF-LEM with guidance in managing this element of ILS, and assuring that funding requirements for all support elements are considered with all other budgetary and/or design constraints during the design process. This plan and those developed for the other eleven logistic elements will become supplementary documents to the ILSP.

1.3 MX PROGRAM

The MX Program has been implemented to provide the technology base for the development of an improved land-based strategic missile weapon system. Efforts are being directed toward the design, development, and deployment of an ICBM system within one of two nuclear hardened, multiple aim point (MAP) basing alternatives. The two currently favored basing options are the buried-trench and shelter-based weapon systems.

Full scale development (FSD) of the MX Weapon System is divided into two major efforts: missile development, including the missile and canister; and weapon system development, which includes the MAP basing hardware, software, and facilities, and the integration of the missile/canister with these equipments and facilities.

2
SCOPE

This Logistic Element Management Plan structures the resource funding logistic requirements of the ILSP into identifiable responsibilities of the LSRF-LEM, and delineates the tasks associated with these responsibilities. The plan is applicable to the FSD phase of the MX Weapon System, with overlap to the preceding validation and system definition phases and succeeding production/deployment phases. The plan applies to all elements of the weapon system, including the air vehicle, support functions, and the selected basing option. In addition, this plan:

- a. Provides an overview of the MX program management concept, and the LEMs' position in the management structure.
- b. Describes the ILS program and the function of the LSRF-LEM within that program.
- c. Describes the participation of the LSRF-LEM in the ILS Management Information System.
- d. Indicates the interdependencies among tasks and the coordination among all members of the Integrated Logistic Support Management Team (ILSMT), the project element officers (PEOs), and systems engineering.
- e. Presents a basic schedule for the performance of tasks by relating each task to the time frame of major program events.
- f. Indicates the interrelationships of the LSRF-LEM with the remaining logistic elements.

REFERENCE DOCUMENTS

The following document listing is provided as a reference source relating to the implementation of an ILS program and the Logistic Support Resource Funds logistic element.

| | |
|-------------------------------|---|
| DoD Directive 4100.35 | Development of Integrated Logistic Support for Systems/Equipment, 1 October 1970 |
| DoD 4100.35G | Integrated Logistic Support Planning Guide for DoD Systems and Equipment, 15 October 1968 |
| AFR 800-2 | Program Management, 16 March 1972 |
| AFR 800-8 | Integrated Logistic Support (ILS) Program for Systems and Equipment, 27 July 1972 |
| AFP 800-7 | Integrated Logistic Support Implementation Guide for DoD Systems and Equipments, March 1972 |
| AFSCP 800-3 | Guide for Program Management |
| SAMSO Supplement to AFR 800-8 | Integrated Logistic Support (ILS) Program for Systems and Equipment, 7 September 1976 |
| ICBM PO ED 77-6 | System Requirements Analysis Programs for the MX Weapon System, 24 May 1977 |
| ILSP | Missile-X Integrated Logistic Support Plan, June 1977 |
| PO Manual | ICBM PO Project Officers' Manual, 1 July 1976 |
| MN OI 27-2 | MN Program Pricing Instructions |
| MN OI 27-4 | MN Program Managers' Evaluation, Report and Program Directives |
| SAMSO-R-170-2 | Financial Program Management System for RDT&E Funded Programs and Requirements, 17 October 1975 |
| SAMSO-R-172-4 | Changes to Programs/Program Costs, 30 March 1973 |
| SAMSO-R-173-1 | Cost/Schedule Status Report, 16 June 1976 |
| SAMSO-R-173-2 | Contract Funds Status Report (CFSR), 17 July 1975 |

| | |
|--------------------------|---|
| SAMSO-R-173-3 | Cost Information Reports (CIR), 20 August 1974 |
| SAMSO-R-173-5 | Cost/Schedule Control Systems Criteria (C/SCSC), 26 September 1975 |
| SAMSO-R-173-4 | Program Breakdown Structure and Codes (PBS/C), 29 July 1976 |
| SAMSO/MNL Publication | ILS Management Information System Report, 31 August 1977 |
| PO Plan | MX Life Cycle Cost/Design to Cost Plan, 6 June 1977 |

PROGRAM MANAGEMENT

Management of the MX Weapon System Program is the responsibility of the ICBM Program Office. The Program Manager has the overall responsibility for acquisition and integration management of the program, and is supported by the following Directorates within the ICBM Program Office:

- Logistics
- Engineering
- System Acquisition Management Support
- Procurement and Production
- Deployment
- Program Control

The ICBM Program Office comprises a team of Air Force and contractor personnel. That office operates with a functionally decentralized organizational structure, which has resulted in the implementation of the Project Element Management System. In this system, the program is divided into a series of discrete, functional elements, each managed as an entity by a designated project element officer responsible for monitoring the technical, cost, and schedule performance of one or more MX associate contractors. No prime contractor will be designated for the MX Program. Rather, the ICBM Program Office will function as the system integrator.

4.1 ILS PROGRAM ORGANIZATION

4.1.1 Deputy Program Manager for Logistics

The Deputy Program Manager for Logistics (DPML) was assigned from HQ AFLC with the concurrence of the MX Program Manager, and serves as the focal point for MX logistics management. The DPML and his organization are an integral part of

the ICBM Program Office and form the Directorate of Logistics (MNL). Within the MX Program, it is the responsibility of the DPML to assure that:

- a. Continuous attention is given to logistic support posture and costs throughout the acquisition process.
- b. Tradeoff studies affecting system design are evaluated to determine their impact on supportability, life cycle cost, and operational requirements.
- c. All objectives of ILS are achieved for the MX Weapon System.

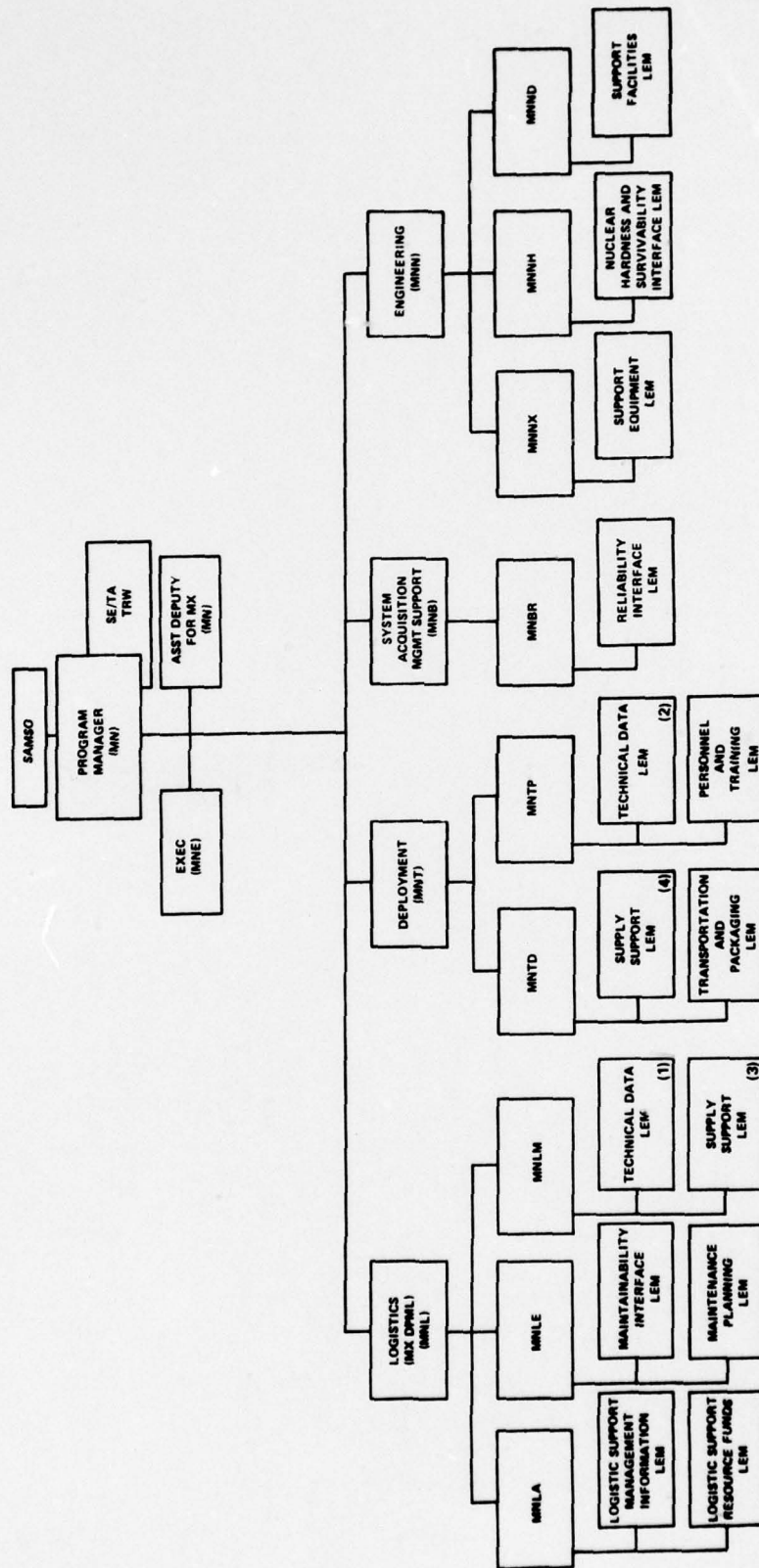
The DPML will draw upon the support of the designated logistic element managers to obtain timely contributions to those system design and support decisions which affect logistic support costs and effectiveness throughout the life of the system.

4.1.2 Logistic Element Managers

As discussed in paragraph 4, the Program Office operates with a functionally decentralized organization structure. This decentralization has positioned ILS elements (as defined by AFR 800-8) outside of the Logistics Directorate, in company with those engineering design elements (e. g., Reliability) normally external to the logistics organization. Logistic element managers have been designated within each functional logistic-related area. In addition, the Technical Data and Supply Support elements are further separated into subelements to gain maximum benefits from the decentralized organizational structure. The elements, by Directorate, are shown in Figure 4-1.

The manager for each element is the single point of contact for the DPML in the management of all logistic integration aspects of the assigned element. The LEM assures that the tasks associated with his element, as defined within this Logistic Element Management Plan, are accomplished. He provides liaison and coordination among the other logistic element managers as required for the achievement of integrated logistic support. He further assures that all relevant ILS data are collected, analyzed, reported, and disseminated, as appropriate, for his element.

Each LEM also plays a key role in supporting the Program Office's function as integrating agency for all associate contractor activities. The LSRF-LEM supports the PEOs by providing the management assistance needed to identify the logistic funds requirements relative to the PEOs' contractual efforts. In so doing, he assures that a



SUBELEMENTS:
 (1) Engineering Data
 (2) Technical Concepts
 (3) Operational
 (4) Preparational

Figure 4-1. MX Program Logistic Element Managers

system integration approach is used in determining the requirements for each associate contractor. Due to the large number of associates involved, a significant coordination effort will be required by the LEM within his logistic element to maintain cognizance of the activities that impact on logistics.

Each LEM is a member of the Integrated Logistic Support Management Team, and through active participation as a team member he supports the DPML in managing the accomplishment of the Program Office's acquisition logistics tasks.

It is through the exchange of information at ILSMT meetings and the inter-relationships of LEMs that the DPML will acquire the program information necessary to assure the integration of logistic support elements into the total program requirements.

4.2 ILS MANAGEMENT INFORMATION SYSTEM

The ILS Management Information System was developed to assist the DPML and all logistic element managers in their efforts to achieve the logistic objectives of the MX Weapon System. Management and direction of the information system's activities are the responsibility of the DPML. This responsibility is discharged primarily through his position as chairman of the ILSMT and of technical interchange meetings.

Successful implementation of the ILS MIS depends on each LEM's accomplishment of the tasks delineated in his LEM plan, through fulfilling his reporting responsibilities, and through active participation in the ILSMT.

The ILS Management Information System Report dated 31 August 1977 provides a complete description of the ILS MIS and the LEMs' role in implementing the system. Figure 4-2 depicts the information flow of the ILS MIS, and will serve as an aid in understanding the data input/output and coordination activities of the LSRF-LEM as defined in Sections 5 and 6 of this plan.

In general, much of the management information will involve estimates, or other planning data in which the quality of the data used will vary over some acceptable range. The criteria provided for use by the LEMs in describing the relative quality of MIS data are presented in tables within the Integrated Logistic Support Management Information System Report. Assistance to the LEMs for participating in the ILS MIS, as both contributor and user, will be provided by the Logistic Support Management Information LEM.

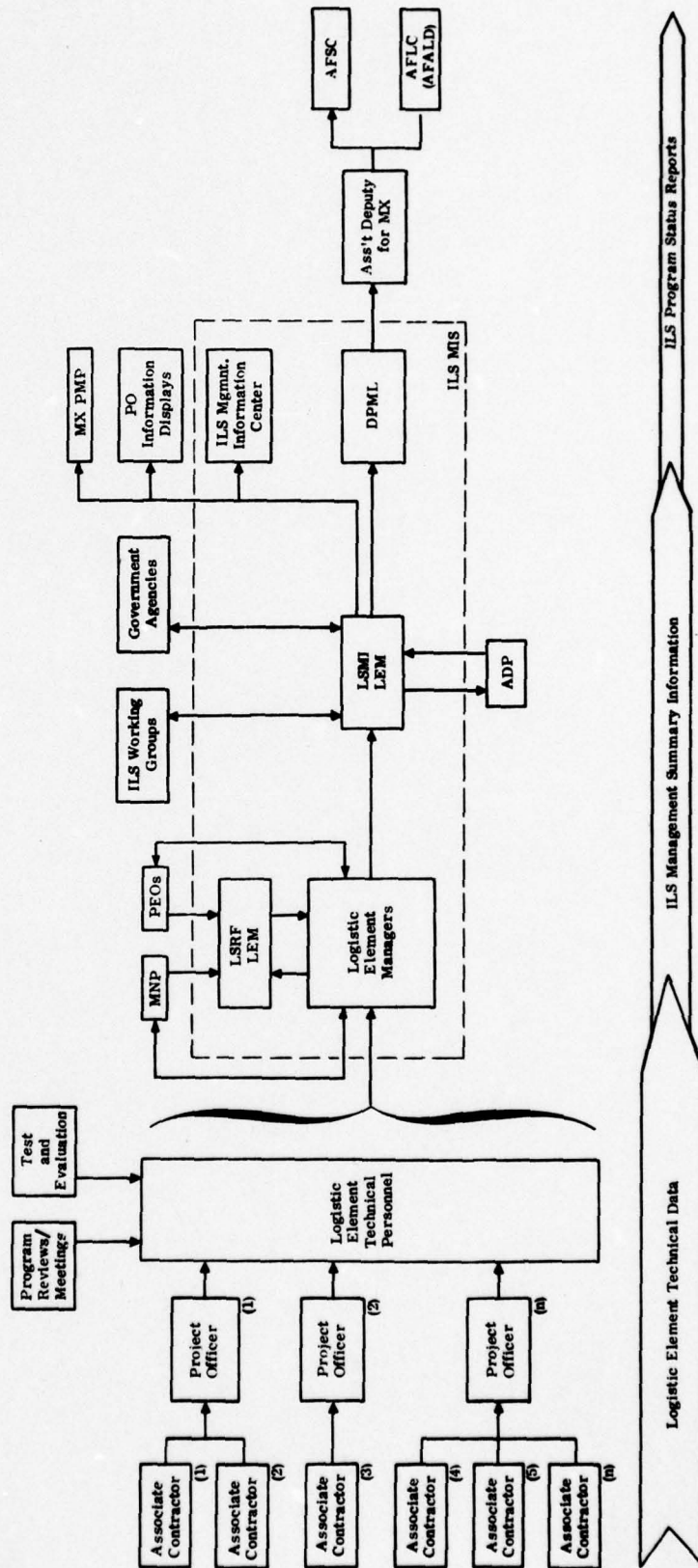


Figure 4-2. Information Flow of the ILS MIS

A typical schedule showing program events for the logistic element addressed in this plan is shown in Appendix C. This schedule depicts the general type of information required as input to the management information system for tracking the progress of each associate contractor in fulfilling the requirements for a specific logistic element. This type of information is also a prerequisite to the IEM's effort of tailoring the task schedule shown in Table 6-1 to each associate contractor's unique development activities.

5 GENERAL REQUIREMENTS

5.1 INTEGRATED LOGISTIC SUPPORT PROGRAM

Integrated Logistic Support is a concept that encompasses the total and timely support of a system/equipment, within acceptable life cycle cost criteria, for the duration of its useful life. Realization of this concept is achieved through planning and analysis tasks for the subsequent procurement of all required support as part of the total acquisition process.

An ILS program has been implemented for the MX Weapon System to assure that the ILS concept impacts the system design process in a manner that will improve supportability and control O&S costs. Within the ILS program, logistic elements have been identified (see paragraph 1.1). These elements are areas of support activity which, when collectively considered, provide the basis for the acquisition of the human, material, and financial resources required to maintain a system in an acceptable state of operational readiness within affordable cost criteria.

Essentials of the ILS program include the analysis and definition of quantitative and qualitative logistic support requirements; the prediction of logistic support costs; and the performance of tradeoff studies and evaluations. The responsibility for performance of these efforts rests with the ICBM Program Office and its supporting directorates. However, the responsibility for monitoring and assuring the accomplishment of these efforts has been assigned to the logistic element managers. Each Logistic Element Management Plan delineates the detailed areas of responsibility for a specific LEM.

Figure 5-1 depicts the information flow among the various LEMs during the performance of their ILS efforts. While the information flow will primarily be in the direction indicated by the arrows in that diagram, situations will arise where information must be passed in both directions. Additionally, the information flow might be influenced by variations in logistic information requirements among the configuration end items. Figure 5-1a (inset in Figure 5-1) indicates that the impact of the ILS concept on the system design is achieved through the logistic support analysis efforts.

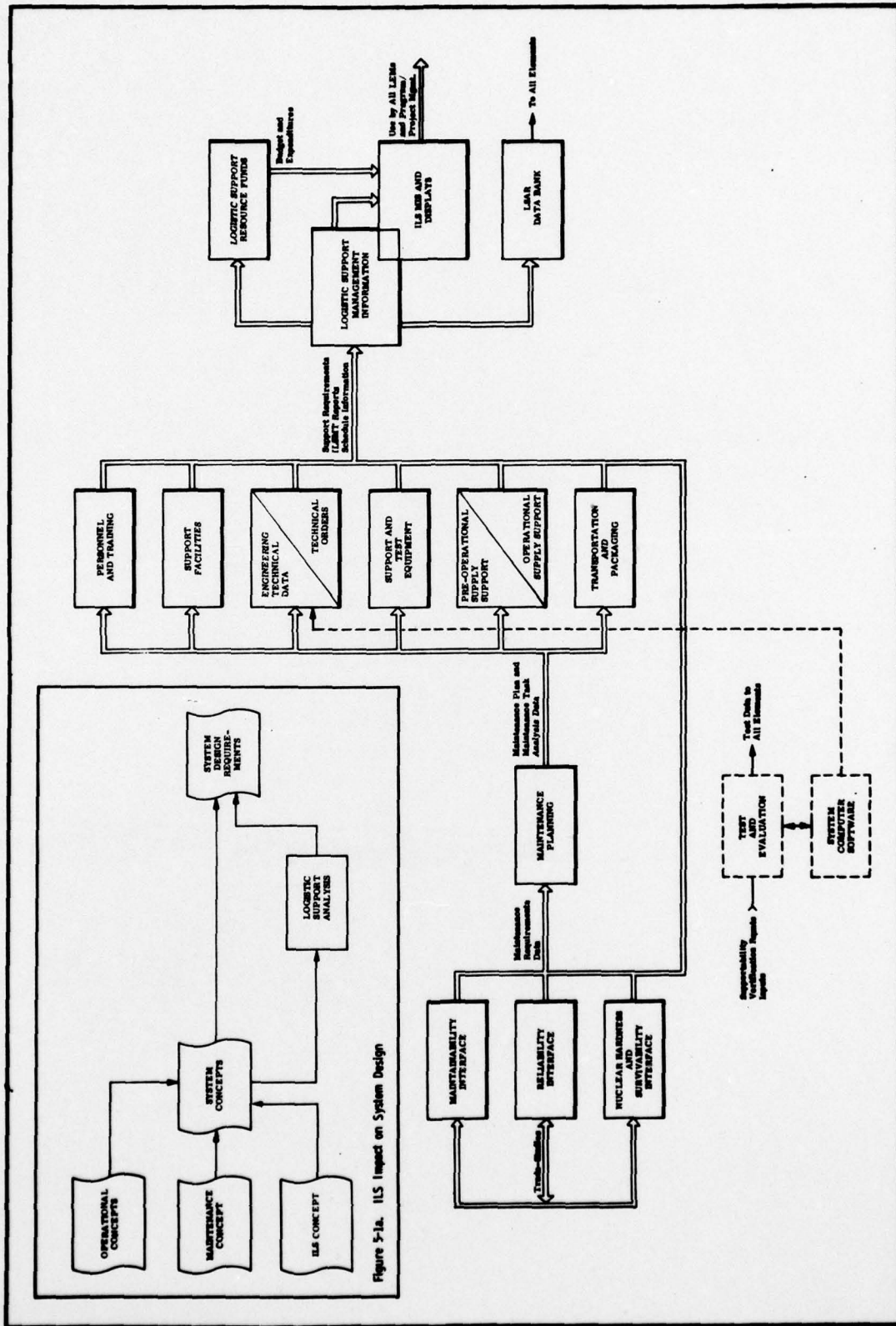


Figure 5-1a. ILS Impact on System Design

Figure 5-1. Primary Interface Relationships of Logistic Elements

5.2 LOGISTIC SUPPORT RESOURCE FUNDS LOGISTIC ELEMENT

The Logistic Support Resource Funds element encompasses those activities implemented to assure the identification of logistic support fund requirements and the tracking of funds allocated and expended for ILS activities. The interface between logistic support requirements and defense budgeting/financing procedures receive continuous attention through the activities of this element. These activities include the identification and forecasting of logistic support funding requirements, and fiscal planning for future support funds. The LSRF-LEM will:

- a. Perform the functions of estimating and tracking expenditures on contracts where MNL/MNLA is the PEO.
- b. Assist in the development of logistic support cost estimates, and maintain an awareness of expenditures on contracts where MNL/MNLA provides direct support to the PEO.
- c. Assist in the development of logistic support cost estimates and maintain an awareness of expenditures on contracts where MNL/MNLA has no direct contact (e.g., other LEMs provide support to the PEOs).

In the performance of his functions the LSRF-LEM will coordinate, as necessary, with PEOs, OPRs, and the LCC/DTC manager. Additionally, in areas such as test and evaluation and software support that do not have LEM representation, coordination may be required with POs. His membership in the ILSMT will require the preparation of status reports, the initiation of problem/impact statements, the development of schedule information for the MIS, and the resolution of assigned action items.

LSRF-LEM MANAGEMENT RESPONSIBILITIES AND TASKS

6.1 RESPONSIBILITIES

The Logistic Support Resource Funds LEM assists the Deputy Program Manager for Logistics in all matters relating to the funding of logistic elements and the programs implemented to determine support requirements. The LSRF-LEM assists in the development of data for:

- a. Establishing fund requirements and budget estimates in support of approved logistic programs
- b. Updating and forecasting logistic element fund requirements for the MX Weapon System
- c. Identifying potential logistic funding impacts caused by program funding changes
- d. Serving as a member of the Life Cycle Cost Working Group
- e. Comparing current funding with estimated fund requirements for logistic elements
- f. Preparing logistic fund estimates as required.

6.2 MANAGEMENT TASKS

The scope of each task identified in this plan must be tailored by the LSRF-LEM for each specific procurement. Consequently, the applicable data items and the degree of coordination activities will vary with the scope of the task.

While the tasks identified below are intended to be comprehensive relative to the scope of the LSRF-LEM's responsibilities, additional tasks may become apparent during the implementation of this plan. The LEM is responsible for assuring that these new tasks are planned and scheduled for each applicable procurement. The new tasks should be documented, this plan updated as applicable, and the appropriate information provided to the LSMI-LEM for updating the MIS and its information displays.

The following paragraphs describe the tasks to be performed. Table 6-1 (see paragraph 6.3) presents a task summary and indicates by the respective columns of the table the applicable data items, expected coordination required for the tasks, and a schedule relating tasks to major program events.

● Task 1

Assure that logistic efforts are adequately identified in cost accounting procedures for the ILS Program. Initiate this task prior to RFP release, and identify logistic-related line items/WBS elements that will require cost and schedule accountability. Review SOWs and CDRLs for inclusion of logistic funding-related requirements.

● Task 2

Assure the timely determination of logistic support funding requirements and the development of support fund forecasts. Initiate this task early in the weapon system's planning stages to assure sufficient lead time for the identification of funds required for contracted studies, analyses, and planning efforts that precede hardware contract awards. During FSD review cost and funding related data items, as specified by the CDRL, for forecasting and updating logistic element fund requirements. Compile these data into system-level funding requirements for budget estimates and fiscal planning for future support funds.

● Task 3

Monitor the cost and schedule performance of contractor integrated logistic support programs and related activities. Use the Program Office C/SCSC cost-accounting procedures to track individual-contractor integrated logistic support programs and for compiling these data into overall program summary status information. Identify actual or potential problem areas having significant cost impact on logistic support.

● Task 4

Support the preparation/update of logistic documentation by reviewing, developing, and/or updating logistic funding information contained in or to be a part of MX program documents. Guidance for the performance of this task will be provided by the DPML. The documents involved will be those developed by the Logistics Directorate, as well as by other organizations, that contain logistic information. The

LSRF-LEM will develop the logistic-related funding information required for each document. This effort will require coordination with the OPR for each document, the LCC/DTC manager, and other LEMs involved in providing logistic inputs to the documentation.

● Task 5

Assist in the determination of logistic O&S cost factors. The LSRF-LEM performs activities that support the efforts of the LCC Working Group. He will coordinate, as appropriate, with the PEOs, other LEMs, MNPC, and the LCC/DTC manager in fulfilling his LCC/DTC duties. Additionally, he will maintain an awareness of associate contractor logistic-related cost projections with respect to their impact on system LCC/DTC analyses and tradeoff studies.

6.3 PREFACE TO TASK TABLE

Table 6-1 lists the tasks discussed in Section 6.2, together with the corresponding data items and coordination required in the performance of the tasks. The schedule shown in the table indicates the availability dates of data items relative to major program milestones. The LSRF-LEM will prepare a schedule for the completion of the tasks applicable to each hardware end item, using contract award dates as the basis for assigning calendar dates to each schedule.

TABLE 6-1. LOGISTIC SUPPORT RESOURCE FUNDS TASK TABLE (Sheet 1 of 2)

| | | Milestone Schedule | | | | | | | | | |
|---|---|---|---|-----|-----|-----|-----|-----|--------------------|--|--|
| | | RFP Release | Contract Award | SDR | PDR | CDR | FCA | T&E | Production Release | | |
| Tasks 1. Identify cost accounting codes for ILS activities: a. Identify line item/WBS elements requiring cost/schedule accounting. b. Review contract CDRL/SOW for logistic funding activities. | Applicable Data Items Standard Work Breakdown Structure and Program Breakdown Codes (WBS/PBC) 1. Contract Funds Status Report (CFSR) 2. Cost Data Summary Report (CDSR) 3. Cost Performance Report (CPR) 4. Functional Cost Hour Report (FCHR) 5. Progress Curve Report (PCR) 6. LCC/DTC Reports as specified by CDRL | Coordination PEO, MNPC, MNPA PEO, LCC/DTC Manager, MNPC | △ | △ | | | | | | | |
| | | | Note: CDSR available CA 365D CFSR CA 30D LCC/DTC Est. Rpt. CA 60D DTC Tgt. & Alloc. Rpt. 30D BDR 30D PDR 30D CDR Cost Dr. Rpt. CA 60D | | | | | | | | |
| 2. Assure timely determination of logistic support funding requirements and development of support fund forecasts. a. Identify fund requirements for studies, analyses, and planning efforts of service type contracts. b. Forecast and update logistic element fund requirements, develop budget estimates and perform fiscal planning for future support funds. | Program management documentation 1. CDSR 2. CFSR 3. LCC/DTC Reports a. LCC Estimate Report b. DTC Target and Allocation Report c. Cost Driver Report | Logistic plans and analysis (MNLA) PEO, MNLA, MNLE, MNLM, LCC/DTC Manager, MNPC | △ | | | | | | | | |
| | | Continuous activity | | | | | | | | | |

TABLE 6-1. LOGISTIC SUPPORT RESOURCE FUNDS TASK TABLE (Sheet 2 of 2)

| | | Milestone Schedule | | | | | | | | | | |
|---|---|--|---|-----|-----|-----|-----|-----|--------------------|--|--|--|
| | | RFP Release | Contract Award | SDR | PDR | CDR | FCA | T&E | Production Release | | | |
| <p>3. Monitor cost-schedule performance of contractors' integrated support programs and related activities:</p> <p>a. Utilize C/SCSC for logistic cost-schedule tracking of each associate contractor</p> <p>b. Compile system level ILS program summary status information relative to funding and expenditures.</p> <p>c. Identify and report to ILSMT) actual or potential problem areas having a significant cost impact on logistic support.</p> <p>4. Support the preparation/update of logistic documentation.</p> <p>5. Assist in the determination of logistic OMS cost factors.</p> | <p>1. CFSR</p> <p>2. In-house developed format</p> | LSMI-LEM PEOs | <p>1st available CFSR CA 30D</p> | | | | | | | | | |
| | <p>1. FCHR</p> <p>2. CDSR</p> <p>3. In-house developed systems summary reporting format</p> | <p>LSMI-LEM, PEOs, LCC/DTC Manager, MNPC</p> | <p>FCHR available CA 30D</p> <p>Note: CDSR available CA 365D</p> | | | | | | | | | |
| | <p>1. CPR</p> <p>2. DTC Target and Allocation Report</p> <p>3. Cost Driver Report</p> | <p>PEOs, LSMI-LEM, LCC/DTC Manager, MNPC</p> | <p>1st availability of CPR CA 60D</p> <p>DTC Tgt. & Alloc. Rpt. 30D CDR</p> <p>Cost Dr. Rpt. CA 60D</p> | | | | | | | | | |
| | <p>4. Problem Impact Statement form</p> | OPR for each document, applicable LEMs | | | | | | | | | | |
| | <p>1. LCC/DTC Reports</p> <p>2. CPR</p> <p>3. Cost Driver Report</p> | PEOs, LCC/DTC Manager, MNPC | | | | | | | | | | |

APPENDIXES

Appendix A: Missile-X Program Logistic Element Manager Directory . . . A-1

Appendix B: Acronyms and Abbreviations B-1

Appendix C: Logistic Element Schedule for Logistic Support Resource
Funds C-1

APPENDIX A

MISSILE-X PROGRAM
 LOGISTIC ELEMENT MANAGER DIRECTORY
 Col. L. E. Eklund, DPML

| Logistic Element | Manager | Code | Ext. | Room |
|--|---------------------------|------|------|------|
| Reliability Interface | Capt. T. M. Palmer | MNBR | 5359 | 421 |
| Maintainability Interface | Capt. A. D. Wadsworth | MNLE | 4523 | 619 |
| Nuclear Hardness and Survivability Interface | Capt. W. R. Jacobs | MNNH | 7843 | 711 |
| Maintenance Planning | Lt. Col. R. W. Ayars | MNLE | 4523 | 619 |
| Support Equipment | Lt. Col. B. W. Woolverton | MNNX | 7005 | 138 |
| Supply Support (Preoperational) | Mr. F. C. O'Connor | MNTD | 6481 | 600 |
| Supply Support (Operational) | Mr. J. A. Davidson | MNLM | 5321 | 621 |
| Transportation and Packaging | Mr. R. W. Riggs | MNTD | 5474 | 600 |
| Technical Data (Engineering) | Mr. L. E. Onstott | MNLM | 5321 | 621 |
| Technical Data (Technical Orders) | Maj. L. W. Cooper | MNTP | 6684 | 609 |
| Support Facilities | Mr. F. E. Longan | MNND | 6891 | 408 |
| Personnel and Training | Maj. L. W. Cooper | MNTP | 6684 | 609 |
| Logistic Support Resource Funds | Capt. H. B. Robbins | MNLA | 5395 | 623 |
| Logistic Support Management Information | Mr. J. L. Peterson | MNLA | 5386 | 623 |

APPENDIX B
ACRONYMS AND ABBREVIATIONS

| | |
|------------------|--|
| A&CO | — Assembly and Checkout |
| ADP | — Automatic Data Processing |
| AFALD | — Air Force Acquisition Logistics Division |
| AFLC | — Air Force Logistics Command |
| AFSC | — Air Force Systems Command |
| AFTEC | — Air Force Test and Evaluation Center |
| BTWS | — Buried Trench Weapon System |
| C/A | — Contract Award |
| CDR | — Critical Design Review |
| CDRL | — Contract Data Requirements List |
| CDRS | — Contract Data Requirements Substantiation |
| CDSR | — Cost Data Summary Report |
| CEI | — Configuration End Item |
| CFSR | — Contract Funds Status Report |
| CPR | — Cost Performance Report |
| C/SCSC | — Cost/Schedule Control System Criteria |
| DPML | — Deputy Program Manager for Logistics |
| DT&E | — Development Test and Evaluation |
| FCA | — Functional Configuration Audit |
| FCHR | — Functional Cost Hour Report |
| FMA | — Failure Mode Analysis |
| FSD | — Full Scale Development |
| ICBM | — Intercontinental Ballistic Missile |
| IOT&E | — Initial Operational Test and Evaluation |
| ILS | — Integrated Logistic Support |
| ILSMT | — Integrated Logistic Support Management Team |
| ILSP | — Integrated Logistic Support Plan |
| ISP | — Integrated Support Plan |
| ITP | — Integrated Test Plan |
| LEM | — Logistic Element Manager |

LSA — Logistic Support Analysis
LSAR — Logistic Support Analysis Record
MDR — Missile Design Review
MIC — Management Information Center
MIS — Management Information System
MPP — Maintainability Program Plan
MTBF — Mean Time Between Failures
MTTR — Mean Time to Repair
MX — Missile-X
OPR — Office of Primary Responsibility
OT&E — Operational Test and Evaluation
PCA — Physical Configuration Audit
PDR — Preliminary Design Review
PEO — Project Element Officer
PMP — Program Management Plan
PO — Project Officer
RPP — Reliability Program Plan
SAMSO — Space and Missile Systems Organization
SBWS — Shelter Based Weapon System
SDR — System Design Review
SOW — Statement of Work
SRA — System Requirements Analysis
T&E — Test and Evaluation
TI — Technical Interchange
TPA — Test Planning Analysis

APPENDIX C
LOGISTIC ELEMENT SCHEDULE FOR LOGISTIC SUPPORT RESOURCE FUNDS

| | Validation/ System Definition | Full Scale Development | Production/Deployment |
|--------------------------------------|------------------------------------|---|----------------------------|
| Major Subsystem Milestones | C/A △ System Definition △ | SDR △ PDR △ CDR △ FCA △ Flight Tests △ | MAP Tests △ IOC △ |
| 1. Develop ILS Funds Estimate | Initial △ | Updates △ | Production △ |
| 2. Develop ILS Financial Plan | Initial △ | Updates △ | Production △ |
| 3. Develop ILS Funding Schedule | Initial △ | Updates △ | Production △ |
| 4. LCC/DTC Program Data | △ | △ | |
| LCC/DTC Plan | △ | △ | |
| LCC Estimate Report and Data Base | △ | △ | |
| LCC/DTC Cost Driver Reports | △ | △ | |
| LCC/DTC Trade Study and Risk Reports | △ | △ | |
| DTC Target and Allocation Reports | △ | △ | |
| 5. Track ILS Funds Expenditures | System Definition △ | Full Scale Development △ | Production △ |

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