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**LOGISTICS STUDIES OFFICE**

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**ANNUAL REPORT**

FOR

**FY 80**

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DRXMC-LSO

23 April 1981

SUBJECT: Logistics Studies Office Annual Report for FY 80

SEE DISTRIBUTION

1. A copy of the Annual Report for FY 80 is inclosed for your information and retention.
2. The basic mission and methods of operation outlined in the annual report are still valid; however, all requests for studies must be submitted to the U. S. Army Materiel Systems Analysis Activity (AMSAA) rather than the Director of Plans and Analysis, HQ DARCOM. The correct addresses and points of contact are:

Director  
U. S. Army Materiel Systems Analysis Activity  
ATTN: DRXSY-DI  
Aberdeen Proving Ground, MD 21005

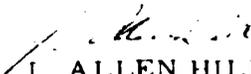
Point of Contact: Mr. Keith Myers  
AV 283-4359  
(301) 278-4359

Commandant  
U. S. Army Logistics Management Center  
ATTN: DRXMC-LSO  
Fort Lee, VA 23801

Point of Contact: Mr. J. Allen Hill  
AV 687-2419/3264  
(804) 734-2419/3264

FOR THE COMMANDANT:

1 Incl  
as

  
J. ALLEN HILL  
Director  
Logistics Studies Office

DRXMC-LSO

23 April 1981

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LOGISTICS STUDIES OFFICE

ANNUAL REPORT

For FY 80

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U.S. Army Logistics Management Center  
Fort Lee, Virginia 23801

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## LOGISTICS STUDIES OFFICE

### OUR MISSION

We perform independent research and consulting in logistics doctrine, management systems, operations, and procedures which may lead to development of new concepts and improvement of the Army and Defense logistics systems.

Our primary expertise lies in the broad areas of supply, maintenance, transportation, and financial management. Functional specialists, system analysts, and computer specialists work in multidisciplinary teams to assure that a diversity of viewpoints are brought to bear on the problem.

### HOW WE DO IT

The course of a normal study includes bibliographic research, preparation of a study plan and a data collection plan, data collection and analysis, evaluation of findings, development of alternative problem solutions, conclusions, and recommendations.

A representative of the sponsor monitors the study progress, provides guidance, and assists in identifying sources of needed information. Study control is exercised through in-process reviews or Study Advisory Group reviews.

The progress of each study is documented through submission and periodic update of the Research and Technology Work Unit Summary (DD Form 1498).

Study results are documented in a formal report submitted to the sponsor. Upon approval, the study is considered complete and the responsibility for implementation rests with the sponsor. Copies of approved reports are then furnished to the Defense Logistics Studies Information Exchange and microfiche copies are made available to qualified requesters. (The Exchange is also located at ALMC.)

Data sources most commonly used in LSO studies include knowledgeable Government, business, or industry personnel whose views are garnered either through interviews or questionnaires, previous studies or analyses of related problems, published reports by DOD, DA, or U.S. Army Materiel Development and Readiness Command (DARCOM), and manual or automated data bases. Visits to DA and DARCOM subordinate commands are required during most studies.

Statistical methods and operations research techniques are used in analyzing study data. Models are developed/modified to simulate or analyze complex systems when required. Computer services available to our analysts include the Hewlett-Packard 3000 minicomputer, the Burroughs 6800, and time-shared systems at various DARCOM subordinate commands.

### WHO CAN USE OUR SERVICES?

Our services can be used by any Department of Defense element with the approval of the Commander of the U.S. Army Materiel Development and Readiness Command. Our primary mission is to provide services to the Headquarters DARCOM and its subordinate commands.

### HOW MUCH WILL IT COST?

Our office is a level-of-effort-funded organization. Only unusual costs are paid by the study sponsor; for example, extensive travel, special computer services, or external contracts.

### HOW TO GET STARTED

Our office is workloaded by the Director of Plans and Analysis (DRCPA-S), DARCOM HQ.

Informal contact with the Director of the Logistics Studies Office prior to initiating a formal tasking directive is encouraged so that the project scope, schedule, and tasking procedures can be discussed.

The Formal Process begins with your submission of a Study Directive and a Research and Technology Work Unit Summary (DD Form 1498) to the Director, Plans and Analysis, DARCOM HQ. Details of the formal procedures are contained in AR 5-5, The Army Study System, and DARCOM Supplement 1 to AR 5-5.

We initiate your study upon receipt of a tasking letter from the Director of Plans and Analysis, who coordinates and evaluates all requests for studies.

### NECESSARY ADDRESSES

Commander  
U.S. Army Materiel Development  
and Readiness Command  
ATTN: DRCPA-S  
5001 Eisenhower Avenue  
Alexandria, VA 22333

Point of Contact:  
Mr. Z. H. Tashjian  
AUTOVON 284-8037  
(202) 274-8037

Director  
Logistics Studies Office  
U.S. Army Logistics  
Management Center  
ATTN: DRXMC-LSO  
Fort Lee, VA 23801

Point of Contact:  
Mr. J. Allen Hill  
AUTOVON 687-2419/3264  
(804) 734-2419/3264

LOGISTICS STUDIES OFFICE

ORGANIZATION AND AUTHORIZED GRADE STRUCTURE

Administrative Control

Operational Control

U.S. Army Logistics  
Management Center

Directorate of Plans  
and Analysis, HQ DARCOM

TITLE	AUTHORIZED	ACTUAL	INCUMBENT
Director	06	-	-
Logistics Officer	04	03	CPT Mentis
Senior OR Analyst	GS14	GS14	Mr. Hill
OR Analyst	GS13	GS13	Mr. Dodge
Log Mgt Spec	GS13	GS13	Mr. Martinko
Log Mgt Spec	GS13	GS13	Mr. Tyler
Log Mgt Spec	GS13	GS12	Mr. Lenassi
OR Analyst	GS13	GS13	Mr. Poskus
OR Analyst	GS12	-	-
Log Mgt Spec	GS12	GS12	Mr. Brisendine
Log Mgt Spec	GS12	GS12	Mr. Higgins
Secy-Steno	GS06	GS06	Mrs. Myers
Clerk-Steno	GS04	-	-

LSO STAFF MEMBERS--FY 80

Position	Grade	Incumbent	Dates
Director	06	Vacant	Entire FY
	GS14	Virginia W. Perry (Acting)	1 Oct 79-29 Feb 80
		J. Allen Hill (Acting)	17 Mar 80-30 Sep 80
Log Off	03	CPT Peter L. Mentis	Entire FY
Sr OR Analyst	GS14	Virginia W. Perry	1 Oct 79-29 Feb 80
		J. Allen Hill	17 Mar 80-30 Sep 80
OR Analyst	GS13	Joseph A. Dodge	Entire FY
	GS13	Uldis R. Poskus	Entire FY
Log Mgt Spec	GS13	Richard Martinko	Entire FY
	GS13	Hunter W. Tyler	Entire FY
	GS13	John R. Lenassi (GS12)	Entire FY
OR Analyst	GS12	Vacant	Entire FY
Log Mgt Spect	GS12	Peter J. Higgins	Entire FY
Secy-Steno	GS06	Constance H. Myers	Entire FY
Clerk-Steno	GS04	Vacant	1 Oct 79-24 Nov 79
		Deanna L. Devier	25 Nov 79-13 Sep 80
		Vacant	14 Sep 80-30 Sep 80

LSO MANAGEMENT STATISTICS FOR FY 80

I. Distribution of Professional Effort, FY 80

	<u>Man-hours</u>	<u>Percent</u>
Non-IL Studies	9,163	48.2
IL Studies	2,950	15.5
New Study Development	848	4.5
Subtotal for Studies	<u>12,961</u>	<u>68.2</u>
Administration	3,323	17.5
Training	793	4.2
Consulting	157	.8
Annual Leave/Admin Lv	1,523	8.0
Sick Leave	<u>252</u>	<u>1.3</u>
	<u>19,009</u>	<u>100.0</u>

II. Number of Studies:

Carryover on 1 Oct 79		
-Ongoing	7	
-Awaiting initiation	2	
Assigned during FY 80	<u>17</u>	
Total	26	
Completed during FY 80	10	
Deleted during FY 80	6	
Ongoing on 30 Sep 80	7	
Interrupted by higher priority studies	2	
Awaiting initiation (pending)	<u>1</u>	
	26	

III. Completed Study Information

Number of Studies Completed during FY 80	10
Average Direct Man-Hours per Completed Study	1,296
Adjusted Man-Hours per Completed Study	1,901

IV. Average Number of Professionals on Board	9
Number of Professionals on Board 1 Oct 79	9
Number of Professionals on Board 30 Sep 80	9

V. Average Number of Clerical on Board	1.8
Number of Clerical on Board 1 Oct 79	1
Number of Clerical on Board 30 Sep 80	1

SUMMARY: STATUS OF STUDIES

Study No.	Title	Sponsor	Analyst(s)	Status at EOY	Total Hours
811	Economic Analysis of SIMS-X	DRCPS-S	Martinko	Completed	280
813	Catalog of IL-Related Data Elements	DRSAC-MS5	Higgins	Completed	1,425
901	Analysis of Costs of Depot Distribution Plans	DRCMM-ST	Perry	Deleted	2
903	Major Item Price Update Procedures	DRCPS-S	Dodge	Completed	313
904	Analysis of Major Item Redistribution/Substitution Policies	DRCPS-S	Poskus	Completed	921
905	Major Item Sustainability	DRCPS-S	Brisendine	Completed	927
906	Analysis of Balanced Acquisition	DRCPS-S	Not Assigned	Deleted	--
907	Army and Customer Total Production Requirements and Distribution Priorities for Major Items, Phase I	DRCPS-S	Tyler	Completed	1,170
909	Army and Customer Total Production Requirements and Distribution for Major Items--Cost Analysis, Phase II	DRCPS-S	Tyler	Deleted	165
910	Security Assistance in Wartime	DRSAC-MS	Mentis	Completed	617
911	Program 7M Funds Usage Policies	DRCCP-BP	Lenassi	Completed	719

Study No.	Title	Sponsor	Analyst(s)	Status at EOY	Total Hours
912	Forecasting Procurement Commitments and Obligations	DRCPP-P	Poskus	Completed	21
004	Single Pricing for Major Items in FMS	DRSAC-MS	Dodge	Interrupted	258
005	Methodologies to Adjust Standard Price to Various Uses	DRCCP-FP	Dodge	Interrupted	501
006	Implementing Guidance for Logistics Supportability Test and Evaluation	DRCRE-IP	Martinko	Completed	1,027
007	POMCUS Uncovered and MTOE Mismatch	DRCPS-S	Not Assigned	Deleted	--
008	Push System for Major Items Vice Requisitions	DRCPS-S	Not Assigned	Deleted	--
009	Procurement Appropriation Funds Usage Policies	None	Lenassi	Deleted	--
010	Suitability of Certain DSS Procedures for IL Customers	DRSAC-MS	Mentis	Ongoing	650
011	Analysis, Validation, and Enhancement of Initial Provisioning Requirements Projections	DRCMM	Poskus	Ongoing	575
012	Impact on DARCOM of Nonstandard MTOE's	DRCPS-S	Lenassi	Ongoing	1,290
013	Feasibility of Serial Number Control of Major Items	DRCPS-S	Brisendine	Ongoing	313

Study No.	Title	Sponsor	Analyst(s)	Status at EOY	Total Hours
014	Expedited Return of Major Item Excesses	DRCPS-S	Higgins	Pending	78
015	Buy or Lease Cost Model--Selected Railway Equipment	DAS	Dodge	Ongoing	663
016	DARCOM Master Plan for Automated Logistics Management Systems	DRCPS-S	Tyler	Ongoing	198
017	Materiel Readiness Command Tasking Authority for Equipment Subsystems	DRSTS-W	Martinko	Ongoing	--

LIST OF REPORTS--FY 80

LSO Study No.	Report Title	Report Date	Author/Analyst	Status of Report EOY
811	Economic Analysis of SIMS-X Automated	Jan 80	Martinko	Accepted by sponsor; not to be distributed.
813	Security Assistance Data Element Catalog (SADEC)	Sep 80	Higgins	Published and distributed.
903	Major Item Price Update Procedures	Dec 79	Dodge	Published and distributed.
904	Analysis of Major Item Redistribution/Substitution Policies, Volumes I and II	Jun 80	Poskus	Published and distributed.
905	Methodology for Real Time Forecasts of the Sustainability of Selected Major Items	Apr 80	Brisendine	Published and distributed.
907	Army and Customer Total Production Requirements and Distribution Priorities for Major Items	Jun 80	Tyler	Published and distributed.
910	Security Assistance Procedures in Wartime	Mar 80	Mentis	Published and distributed within DARCOM only.
911	OMA P7M Funding Policies and Their Application Within the DARCOM Development Community	Dec 79	Lenassi	Published and distributed.
912 (APRO 902)	Forecasting Army Budget Commitments and Obligations	Jan 80	Poskus	Published and distributed.
006	Implementing Guidance for Logistics Supportability Test and Evaluation	Jul 80	Martinko	Being reviewed by sponsor.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Economic Analysis of SIMS-X

IDENTIFICATION NUMBER: LSO Project #811  
DLSIE; LD-41552AX

REPORT: Economic Analysis of SIMS-X dated November 1979 with revision dated 29 January 1980. Telecommunications addendum prepared on 15 April 1980.

SPONSOR: Directorate for Plans, Doctrine, and Systems  
ATTN: DRCPS-S (Mr. Ralph Hoyle)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICERS: Mr. Richard Martinko  
Ms. Virginia Perry

INITIATION/COMPLETION DATES: September 1978-November 1979. This study was delayed several times because of changes in policy guidance for SIMS-X. Study revised 29 January 1980 and addendum prepared on Telecommunications impact on 15 April 1980.

ABSTRACT: This report examines the costs and benefits associated with SIMS-X Automated, a system proposed for enhancing vertical supply management at the Army retail level, versus the SIMS baseline system. Cost data analyzed in the report was gathered from the DARCOM design agencies, materiel readiness commands, Catalog Data Activity, and from the Army Logistics Center for retail activities. The consolidated report thus reflects the total Army (wholesale/retail) costs and benefits of the baseline system (SIMS) and the proposed SIMS-X automated system. Both developmental costs and annual operating and maintenance costs are included in this report and are further categorized as functional and ADP costs. The timeframe for the EA commences with FY 80 and extends for a planned economic life of 8 years. The analysis is designed to assist in making decisions regarding implementation of SIMS-X Automated as a method of standardizing and managing selected secondary items stored at the retail level of the Army.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

Conclusions:

(1) Alternative 1 (SIMS baseline system) does not meet the DA requirement for a system providing centralized asset knowledge and control (vertical materiel management) of selected secondary items.

(2) Alternative 2 (SIMS-X Automated) does meet the DA requirement for a system providing centralized asset knowledge and control of selected secondary items.

(3) The preferred alternative is SIMS-X Automated (Alternative 2) since its estimated cost is less than that of SIMS (Alternative 1) and its estimated benefits exceed those of SIMS.

Recommendation: It is recommended that SIMS-X Automated be implemented.

IMPLEMENTATION STATUS: Army intends to implement SIMS-X Automated in November 1980.

RELATED STUDIES: None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Catalog of IL-Related Data Elements

IDENTIFICATION NUMBER: LSO Project 813  
DLSIE; LD-41595A

REPORT: Security Assistance Data Element Catalog

SPONSOR: U.S. Army Security Assistance Center  
ATTN: DRSAC-MS5 (Mr. Murtomaki)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Mr. Peter J. Higgins

INITIATION/COMPLETION DATES: January 1980-September 1980.

ABSTRACT: This report describes the work to compile a single catalog of security assistance-related data elements from several systems. Regulatory guidance is discussed as well as problems discovered in the abbreviations and definitions of some data elements. The major recommendations are to designate the U.S. Army Security Assistance Center as custodian of security assistance data elements and to require system developers to adhere to the documentation standards in DOD Standard 7935.1-S.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

Conclusion: Duplication of data element names, abbreviations, and definitions exists within and between information systems.

Recommendations:

(1) The U.S. Army Security Assistance Center (USASAC) should be designated the U.S. Army Security Assistance Data Element Custodian.

(2) The Data Element Custodian should maintain, update, and standardize data elements used in the Security Assistance Program.

(3) The Security Assistance Data Element Custodian should broaden the scope of the Security Assistance Data Element Catalog to include all data elements used to manage security assistance.

IMPLEMENTATION STATUS:

1. The USASAC-NCAD mission will be updated to include assignment as the U.S. Army Security Assistance Data Element Custodian.

2. The functions of the Security Assistance Data Element Custodian will include the responsibility to maintain, update, and standardize data elements used in the Security Assistance Program.

3. The Security Assistance Data Element Custodian will have responsibility for including in the catalog all data elements used to manage security assistance.

RELATED STUDIES: None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Major Item Price Update Procedures (MIPUP); LSO 903

IDENTIFICATION NUMBER: LSO Project 903  
DLSIE; LD-44204A

REPORT: Major Item Price Update Procedures, December 1979

SPONSOR: U.S. Army Materiel Development and Readiness Command  
ATTN: DRCPS-S (Mr. Orey Riley)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Mr. Joseph A. Dodge

INITIATION/COMPLETION DATES: March 1979-December 1979.

ABSTRACT: The basic problem is the lack of current pricing for most major items in the Army's inventory. Over time, the original acquisition price becomes less valid for materiel planning in support of force development, conversions, or readiness. This study outlines an indexing procedure which uses historical price indexes, selected producer price indexes, and DOD/DA/DARCOM inflation guidance.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

- a. The methodology be implemented for Total Army Equipment Distribution Program (TAEDP) enhancement.
- b. Further study to develop methodologies to adjust standard price for other uses.

IMPLEMENTATION STATUS:

- a. DESCOM (DRSBS-LMD) is developing detailed procedures for automated annual price updates, entry into AMDF, and publication in SB 710-1-1 and SB 700-20.
- b. Further studies initiated:
  - (1) Single Pricing for Major Items in FMS, LSO 004.
  - (2) Secondary Item Price Update Procedures, LSO 005.

RELATED STUDIES: None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Analysis of Major Item Redistribution/Substitution Policies

IDENTIFICATION NUMBER: LSO Project 904  
DLSIE; LD-44209A

REPORTS:

a. Analysis of Major Item Redistribution/Substitution Policies,  
Volume I, May 1980

b. Analysis of Major Item Redistribution/Substitution Policies,  
Volume II, May 1980

SPONSOR: U.S. Army Materiel Development and Readiness Command  
Directorate of Plans and Systems  
ATTN: DRCPS-S (Mr. Orey Riley)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Uldis R. Poskus.

INITIATION/COMPLETION DATES: November 1979-May 1980.

ABSTRACT: The prevalent utilization of substituted major items for authorized major items requires that the management of these substitutes be improved throughout DARCOM. This study investigated four primary areas of interest to HQ DARCOM: the cost of redistributing existing substitutes, the rationale for substituting nontype classified items for authorized items, deriving a policy for within-LIN substitutions, and the feasibility of loaning rather than issuing substitute items. Various side aspects of substitutions were also investigated. Recommendations were proposed.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

- a. Nontype classified major items should not be considered for use as substitutes.
- b. Only Standard A or Standard B items should be provided the requisitioner unless DA has authorized an individual exception.
- c. Policy for major items be formalized and included in AR 700-120.

IMPLEMENTATION STATUS: The recommendations were concurred in by HQ DARCOM and implementation is ongoing.

RELATED STUDIES: LSO report, Substitution Criteria and Policy for Major Items, January 1979, LSO Project 810, contributed to this study.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Methodologies for Real Time Forecast\* of the Sustainability of Selected Major Items

IDENTIFICATION NUMBER: LSO Project 905  
DLSIE; LD-44210AX

REPORT: April 1980--Methodologies for Real Time Forecasts of the Sustainability of Selected Major Items

SPONSOR: U.S. Army Materiel Development and Readiness Command  
ATTN: DRCPS-S (Mr. Orey Riley)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Wilford H. Brisendine

INITIATION/COMPLETION DATES: March 1979-April 1980.

ABSTRACT: DARCOM is presently unable to forecast in real time those quantities of spares and repair parts needed to support the Army's major items. The study explains a methodology for building a computational file which can be used in a sustainability model to forecast wartime and peacetime consumption of spares and repair parts by major item/weapon system in real time.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

a. Functional specifications, a cost/benefit analysis, and a resource requirements estimate for implementation should be developed.

b. A Systems Change Request should be submitted to the U.S. Army Automated Logistics Management Systems Activity (ALMSA) that requires the incorporation of selection code into Sector 18 of the National Stock Number Master Data Record (NSNMDR).

IMPLEMENTATION STATUS: The study has been approved but no implementation actions have been initiated.

RELATED STUDIES: None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Army and Customer Total Production Requirements and Distribution Priorities for Major Items

IDENTIFICATION NUMBER: LSO Project 907  
DLSIE; LD-44200A

REPORT: Army and Customer Total Production Requirements and Distribution Priorities for Major Items, June 1980

SPONSOR: U.S. Army Materiel Development and Readiness Command  
ATTN: DRCPS-S (Mr. Orey L. Riley)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Hunter W. Tyler

INITIATION/COMPLETION DATES: July 1979-June 1980.

ABSTRACT: There is a need to establish visibility of the total requirements (USA, USN, USAF, USMC, and other governmental agencies) for Army-managed major items, and to distribute such items on an equitable basis. The Army Materiel Plan (AMP) and the DA Master Priority List (DAMPL) accomplish these functions within the Army. However, no such means exist to accomplish the functions for major items in support of "other" customers. The report examined all available documentation relative to planning, programing, and budgeting, requirements determination, and the distribution of major items within the DOD. As a result of this analysis, a conceptual method to achieve visibility of total requirements for Army-managed major items and the means to establish an Army standardized distribution plan for the items is presented in the report.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

Conclusions:

(1) Since all military services observe identical planning, programing, and budgeting system (PPBS) cycles as prescribed in DODI 7045.7, it appears feasible for other customers to submit budgeted requirements for Army-managed major items at an appropriate time for inclusion in the AMP.

(2) Guidance relative to distribution of major items outside Army channels as contained in AR 700-120 is considered inadequate to properly support other customers.

(3) The incompatibility of priority designators used by the Army (DAMPL) and those used by other customers (required delivery date (RDD)) precludes the use of total Army equipment distribution plan (TAEDP) system for the distribution of major items to other customers within its present structure.

(4) To accommodate both Army and other customer priority distribution of major items, the TAEDP system will require modification.

(5) The conceptual procedure contained in Appendix A of the study report fulfills the objectives of the study.

**Recommendations:**

(1) That the conceptual procedure contained in Appendix A of the report be approved.

(2) If approved, the conceptual procedure be referred to a joint logistics commander's panel for coordination and implementation DOD-wide.

**IMPLEMENTATION STATUS:** The report was approved and will be implemented, resources permitting (1st Ind., DRCPA-S, 23 Jul 80, to ltr, DRXMC-LSO, 11 Jun 80).

**RELATED STUDIES:** None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Security Assistance Procedures in Wartime; LSO 910

IDENTIFICATION NUMBER: LSO Project 910  
DLSIE; LD--44208AX

REPORT: (U) Security Assistance Procedures in Wartime

SPONSOR: U.S. Army Security Assistance Center  
ATTN: DRSAC-MS (Mr. Donald Endicott)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: CPT Peter L. Mentis

INITIATION/COMPLETION DATES: August 1979-April 1980.

ABSTRACT: This study examines existing peacetime and wartime support procedures and transition support procedures for foreign forces that would affect the interface between U.S. allies/FMS customers and the U.S. Army.

MAJOR CONCLUSIONS/RECOMMENDATIONS: The study identifies voids in coordination, guidance, implementation capabilities, and DOD transportation that would hamper the execution of the Wartime Standard Support System for Foreign Armed Forces (WSSSFAP). Recommendations address increased DA/DARCOM/USASAC coordination, the peacetime authorization of wartime support, increased SAILS capabilities, the prepositioning of requisitions, and DOD planning.

IMPLEMENTATION STATUS: The Office of the ADCSLOG for Security Assistance is studying the use of prepositioned requisitions for foreign armed forces.

RELATED STUDIES: DA is developing a wartime intermediate supply system to replace SAILS. Although not a result of LSO 910, this effort will address the support of allies.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: OMA P7M Funding Policies and Their Application Within DARCOM During R&D/Procurement

IDENTIFICATION NUMBER: LSO Project 911  
DLSIE; LD-45463A

REPORT: OMA P7M Funding Policies and Their Application Within the DARCOM Development Community, December 1979

SPONSOR: U.S. Army Materiel Development and Readiness Command  
Office of the Comptroller  
ATTN: DRCCP-BP (Mr. Edward Heflin)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICERS: John R. Lenassi  
Peter J. Higgins

INITIATION/COMPLETION DATES: June 1979-December 1979.

ABSTRACT: The purpose of this study was to determine whether the number of directly funded OMA maintenance positions authorized to DARCOM materiel development commands were in consonance with and justified by existing budget policy guidance and regulations. The study effort undertook to answer the question by comparing budget policy guidance and regulations with the use and control of OMA P7M within the DARCOM MDC.

MAJOR CONCLUSIONS/RECOMMENDATIONS: It was concluded that divergent interpretations of OMA P7M budget policy guidance exist within the DARCOM materiel development commands. Major recommendations were:

- a. The definition of cost code 738017.000P3 in AR 37-100-XX be clarified so as to avoid differing interpretations.
- b. That OMA functions performed by DARCOM MDC be on a reimbursable basis, rather than direct funding.
- c. That the DARCOM Supplement 1 to AR 37-100-XX include specific guidance on the use of OMA P7M monies within the MDC.

IMPLEMENTATION STATUS: The DARCOM Comptroller approved LSO Project 911 for implementation without reservation of the major recommendations:

- a. A refined definition of cost code 738017.000P3 was submitted by the DARCOM Comptroller for inclusion in AR 37-100-XX.

b. The DARCOM Supplement 1 to AR 37-100-XX, dated August 1980, has been altered to direct MDC to perform OMA functions on a reimbursable basis.

c. The DARCOM Supplement 1 has been expanded to include more specific guidance on the performance of OMA funded functions by the MDC.

RELATED STUDIES: None.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Forecasting Army Budget Commitments and Obligations

IDENTIFICATION NUMBER: LSO Project 912 (APRO Project 902)  
DLSIE; LD-44045A

REPORT: Forecasting Army Budget Commitments and Obligations, January 1980

SPONSOR: U.S. Army Materiel Development and Readiness Command  
Directorate for Procurement and Production  
ATTN: DRCP (COL L. Wright)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICERS: Mr. R. Brannon  
Mr. U. R. Poskus

INITIATION/COMPLETION DATES: May 1979-January 1980.

ABSTRACT: This study seeks to forecast the amount and timing of procurement obligations for the Army's customer program. Budget execution policies and procedures and various approaches to economic forecasting, including regression based methods and Box-Jenkins forecasting (both univariate and transfer functions) were reviewed. Data were collected and analyzed. A Box-Jenkins analysis showed that the timing of orders did not drive the timing of obligations and that orders could not be used to give time-phased statistical forecasts. However, the amount of year end orders does influence the amount of yearend obligations and the patterns are similar from year to year. These facts allow forecasts to be made. Organizational considerations seem to be influencing the process. Other findings, conclusions, and recommendations are provided in the study.

MAJOR CONCLUSIONS/RECOMMENDATIONS: The Army's present method, in which the total forecast is an aggregation of forecasts for individual customer orders and obligations, seems to be as good as any statistically based forecast. In particular, time series methods (both univariate and transfer function analysis) cannot provide accurate forecasts of customer obligations for the procurement appropriations.

IMPLEMENTATION STATUS: The study findings were implemented following the publication of the report.

RELATED STUDIES:

a. Analysis of the Projected FY 79 Army Procurement Appropriation Customer Financial Plan. Perry, Virginia, LSO Report 812, 1979.

b. The Release and Obligation of Army Procurement Funds. Brannon, Richard C. and Zabel, Wayne V., APRO Report 707, 1978.

LOGISTICS STUDIES OFFICE

COMPLETED STUDY SUMMARY

TITLE: Implementing Guidance for Logistics Supportability Test and Evaluation

IDENTIFICATION NUMBER: LSO Project 006  
DLSIE; LD-44951AX

REPORT: Implementing Guidance for Logistics Supportability Test and Evaluation--June 1980

SPONSOR: U.S. Army Materiel Development and Readiness Command  
Directorate for Readiness  
ATTN: DRCRE-IP (Mr. B. J. Venverloh, Jr.)  
5001 Eisenhower Avenue  
Alexandria, VA 22333

PROJECT OFFICER: Mr. Richard Martinko

INITIATION/COMPLETION DATES: February 1980-June 1980.

ABSTRACT: The testing and evaluation of logistics supportability has not received the same emphasis or attention as that given to the test and evaluation of the hardware subsystem. This study recommends specific changes to regulatory guidance dealing with logistics supportability and the scheduling of a dedicated logistics supportability test and dedicated prototype models for use in logistics supportability testing. A procedure for utilizing trained military personnel as players during the logistics supportability phase of development testing is also presented.

MAJOR CONCLUSIONS/RECOMMENDATIONS:

Conclusions:

(1) There is a need for each DARCOM test activity to maintain a staff of experienced Soldier/Operator/Maintainer Test and Evaluation (SOMTE) personnel representing the full spectrum of user and maintainer skills associated with the kinds of systems tested by that activity.

(2) The Table of Distribution and Allowances (TDA) of each DARCOM test activity should designate spaces as primary SOMTE spaces. Such personnel would be available for full-time assignment to SOMTE and SOMTE-related activities.

(3) Logistics supportability evaluations are not meeting the intent of current acquisition policies which require that weapon systems and their respective logistics systems be evaluated at milestone decision points to assess suitability characteristics and project operational readiness.

(4) The System Support Package (SSP) should be identified early in the life cycle program as a distinct entity and should be clearly stated as such in all contracts for both prototype and production items.

(5) One of the key problems related to logistics supportability is the lack of weapon systems prototype availability during the development phases to prepare required manuals and other essential logistics programs. This problem can be resolved by providing an additional prototype of the weapon system which would be devoted solely to logistics supportability test during the Full-Scale Engineering Development (FSED) phase.

(6) Sufficient hardware, time, and planning are not assigned to Physical Teardown (PT). Sufficiently matured versions of SSP are not provided for test; and thus, logistics supportability testing never seems to end because it is spread out over the developmental time span.

(7) For logistics supportability testing to be given proper attention and emphasis, it would be highly desirable to conduct a one-time nonwaiverable Logistics Support Test (LST) employing typical user troops in an operational environment. This test could be incorporated as a distinct element of Operational Testing (OT) II or conducted as a separate test following OT II using troops of the first unit scheduled to be equipped after test completion.

#### Recommendations:

(1) Each DARCOM test activity designate certain positions on their TDA's as SOMTE spaces. These positions are to be further categorized by their commitment to SOMTE activities such as: primary, auxiliary, or temporary; or by the level of their qualifications as senior, intermediate, or junior.

(2) At least two prototypes should be procured for the FSED phase of the acquisition cycle, the second prototype to be dedicated exclusively for System Support Package/Skill Performance Aid (SSP/SPA) purposes to insure that logistics supportability and training programs proceed at the pace required for testing and implementation of the logistics and training functions.

(3) With the availability of a dedicated prototype for SSP purposes, insure that a satisfactory PT is performed using MOS qualified personnel, the PT to be performed using validated, baseline LSAR output

reports and draft copies of Technical Manuals (TM's), Extension Training Materials (ETM's), Provisioning Lists (PL's), and Maintenance Allocation Charts (MAC's).

(4) A one-time nonwaiverable LST be conducted employing typical user troops in an operational environment, this test to be incorporated as a distinct element of OT II or conducted as a separate test following OT II using troops of the first unit scheduled to be equipped after test completion.

(5) Regulatory guidance related to logistics supportability test and evaluation be changed as presented in appendix A of the study report.

IMPLEMENTATION STATUS: IPR presented on 18 Sep 80 to SAG at HQ, DARCOM. Some changes to draft study suggested. Study sponsor indicated that additional guidance would be provided by letter.

RELATED STUDIES: LSO 805, Logistics Supportability, Demonstration, Test, and Evaluation prepared by Mr. John Lenassi.

## CHRONOLOGY--LOGISTICS STUDIES OFFICE

1957--Organized as Research Division under operational control of Commandant, ALMC, when the logistics research mission was assigned to ALMC.

1958--Renamed Logistics Research and Doctrine Department (LR&D) when doctrine mission was assigned to ALMC. The department's three divisions were CONUS Logistics Research Department (CLRD); Information, Test, and Analysis Department (ITAD); and Theater Logistics Research Department (TLRD). In 1962, TLRD became the nucleus for the Combat Services Support Group (CSSG), evolving into the Personnel and Logistics Support Group (PALS), which by 1973 evolved into the Logistics Center, the three organizations in turn under command of CDC, CONARC, and TRADOC. Beginning in 1958, LR&D (ITAD) produced logistics studies bibliographies for its own internal uses. In 1959, DCSLOG DA established the "Logistics Studies Referencing Service" at ALMC, this function continuing under ITAD within LR&D. In 1960, the referencing service was redesignated the Army Central Information and Coordination Point for Logistics Studies, still under LR&D (ITAD). In 1962, the Information and Coordination Point was redesignated the Defense Logistics Studies and Information Exchange (DLSIE), under OASD (I&L), with operational control under what is now the Directorate of Plans and Analysis, DARCOM. In 1969, DLSIE was removed from LR&D and placed directly under the Commandant, ALMC, for command less operational control.

1962--The CONUS Logistics Research Division was renamed Logistics Concepts and Studies Division (LCSD), and doctrinal publications functions reassigned to resident instructional elements in ALMC.

1969--LCSD renamed Logistics Studies Office (LSO). The Institute of Logistics Research (ILR) was established. It included LSO, the Inventory Research Office (IRO) at Philadelphia, and the Procurement Research Office (PRO) at Fort Lee. IRO had been assigned to ALMC in 1967, and PRO was established in 1969.

1970--LSO assigned to operational control of Director, Plans and Analysis, HQ DARCOM (then AMC).

1974--ILR disestablished; LSO continues to date (1980) under operational control of Directorate for Plans and Analysis (Systems Analysis), DRCPA-S.

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