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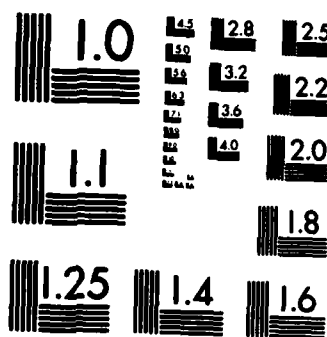
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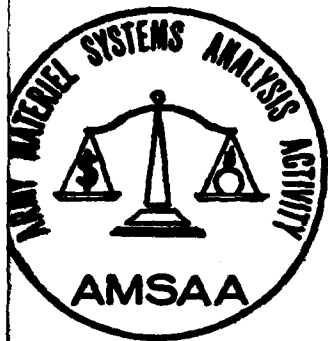
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LOGISTICS STUDIES OFFICE

PROJECT NUMBER 029

FINAL REPORT

CENTRALIZED PREPARATION OF
LETTERS OF OFFER AND ACCEPTANCE

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JANUARY 1984

U. S. ARMY MATERIEL SYSTEMS ANALYSIS ACTIVITY
LOGISTICS STUDIES OFFICE
FORT LEE, VIRGINIA 23801

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**CENTRALIZED PREPARATION OF
LETTERS OF OFFER AND ACCEPTANCE**

**LOGISTICS STUDIES OFFICE
PROJECT NUMBER 029**

**FINAL REPORT
JANUARY 1984**

JOSEPH R. BAINBRIDGE

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**LOGISTICS STUDIES OFFICE
US ARMY MATERIEL SYSTEMS ANALYSIS ACTIVITY
FORT LEE, VIRGINIA 23801-6046**

ABSTRACT

Letters of Offer and Acceptance (LOA) preparation in the Army is neither centralized nor standardized. Only a few segments of the overall process utilize modern computer technology. This report discusses the positive and negative impacts of centrally preparing Foreign Military Sales LOAs. Options are presented that incorporate varying degrees of centralization and/or automation. The author recommends changes to enhance the Army LOA preparation procedures and identifies potential problem areas that must be considered for effective centralization and automation.

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US Army Security Assistance Center
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Peer reviews were conducted by Mr. John R. Lenassi and Mr. Uldis Rex Poskus. This report was edited by Mr. Uldis Rex Poskus and Mr. Wilford H. Brisendine.

The findings in this report are current as of January 1984. In August 1984, DARCOM was renamed the Army Materiel Command (AMC). All references to DARCOM have been replaced by AMC to reflect this change.

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EXECUTIVE SUMMARY

1. Authority for the Study: The United States (US) Army Security Assistance Center (USASAC), the Directorate for Program Management, AMSAC-MP, is the sponsor. Tasking was made by Disposition Form, DRCPA-S, dated 25 August 1980, subject: Logistics Studies Office and Procurement Research Office Studies.

2. Background:

a. Foreign Military Sales (FMS) is the sale of defense articles, services, or training by the US Government (USG) to eligible foreign countries and international organizations. The program results in economic and strategic benefits to the United States and contributes to world stability and peace. The Army manages a greater array of materiel and services in its portion of the FMS program than do the other military departments, and it is responsible for the largest number of transactions.

b. Although customers may have made inquiries earlier, the first formal step in a sale is the receipt of a Letter of Request (LOR), asking for conditions pursuant to the sale of specified materiel or services. Most LORs for Army materiel are forwarded to USASAC, where, in response to an LOR, a Letter of Offer and Acceptance (LOA) is prepared, either directly or through a Major Subordinate Command (MSC) of the US Army Materiel Command (AMC). This document is prepared and forwarded to the customer within 60 days after receipt of the LOR, the time constraint often being the determinant of quality. Price, availability, and advisory comments needed to offer significant combat equipment or complicated materiel can be obtained

only from the MSCs, which also aid in delineating case lines or items on the LOA. When accepted by a customer, the document becomes a comprehensive contract with the USG.

c. If data for LOA preparation were more consistent, accurate, and easily obtained, both the USG and the customer would benefit because the document would require fewer changes during its execution. The preparation of all LOAs at USASAC might further improve the process. Automation of the LOA process looks like a potential panacea. Centralized preparation and automation both require standardization. The LOA itself is a Defense Department standard form (DD 1513), and the information added simply lists quantities, costs, and descriptions of the items or services requested. Thus the LOA lends itself to word processing. The research that precedes its preparation, although difficult, is also relatively routine; the LOA preparers must determine the price and availability (P&A) for every listed item or service (case line).

d. Many LOAs use data obtained from more than one MSC. The interchange is normally done through the mail, but use of electronic transmission can save several days. Since this technology is coming into use now, data formats, specifications, and instructions should be standardized for all potential contributors or users of information and for their automated systems, so that interchange can be performed with minimum human interaction.

e. Between 1976 and 1983, sales increased 500%, and the need to improve procedures became apparent. The FMS program has been faulted in recent audits for inconsistencies and errors. In 1983, the

Congressional House Appropriations Committee criticized the handling of FMS.

f. In response, the Army is designing and testing a new automated system (Security Assistance Automation, Army [SA3]), which has potential for consolidating and managing all information needed for management of FMS agreements from initiation to completion. Several locally developed automated systems for assisting case preparation are evolving at MSCs, but none have been standardized or integrated.

g. This study was performed because the rapid modernization and expansion of data processing capabilities suggested that traditional procedures may represent suboptimal application of resources. It addresses automation, standardization, and centralization of the LOA preparation phase of the Army FMS program.

3. Objectives:

a. To determine the optimal degree to which preparation of LOAs can be automated and centralized.

b. To assess the impact of changes needed to centralize the preparation of LOAs.

c. To investigate the MSC's participation in centralized LOA preparation.

d. To evaluate the impact on personnel specialties of centralizing the LOA preparation.

e. To identify the impact of centralizing LOA preparation on the total package approach (TPA) procedures.

4. Limits and Scope:

a. Functional implications surrounding centralization of LOA preparation are addressed. Although a sophisticated data processing effort may be indicated, it will not be described or designed in this study.

b. Only LOAs are examined. Other security assistance services, such as coordinating commercial buys, munitions cases or export licenses, leases, etc., will not be addressed specifically.

c. Only LOA preparation is considered in detail. The study will neither consider aspects such as follow-on case management, financial management, and case closeout, nor will it evaluate the accuracy inherent in pricing techniques or other factors not directly impacted by a change in LOA processing.

5. Study Approach: Information was obtained through in-depth interviews with recognized experts and functional level employees whose regular duties support the FMS program. Three MSCs were visited; personnel from the others were interviewed by telephone. Although the Missile Command and Communications and Electronics Command information is more prominent, it is considered representative of the MSCs in general.

6. Assumptions:

a. The SA3 System and the Security Assistance Information Network will be implemented as envisaged in their current Detailed Functional System Requirements.

b. The volume of Army FMS will continue at current levels.

c. The number of personnel presently assigned to the International Logistics mission will remain constant.

7. Findings and Conclusions:

a. Electronic data transmission is acceptable to all organizations. For maximum benefit, it must accommodate all types of data and formats.

b. Word processing is highly desirable for LOA preparation and revision.

c. The technology is available to interlink data bases and enable organizations to access and display each other's data.

d. P&A data can become obsolete overnight, thus necessitating stringent controls on its use and update.

e. MSCs are willing to permit access to their data bases but will deny use of the data without their verification.

f. The maximum possible amount of centralization and automation will depend upon the degree of standardization in and the completeness of MSC data bases.

g. The data for complex items and for items seldom purchased should not be entered into data bases because the costs of maintaining currency would exceed the value of the benefits.

h. The centralization of LOA preparation should be implemented in a step-wise manner starting with the existing, mostly manual process and evolving to the point where case lines are prepared at MSCs using their data bases and the LOA assembled at USASAC. Some LOA preparation could be totally automated -- USASAC could access MSC data bases and prepare the LOA directly. The majority of those

that can currently be centralized should simply be assembled centrally with case line data being furnished by the MSCs.

i. Increasing the speed of LOA preparation must be balanced against the quality of the resulting product.

j. Technical expertise is required for complex LOA preparation. Even with such assistance, preparation remains difficult.

k. Overall responsibility for an LOA should be identified with one organizational element.

l. MSC country managers tasked with executing LOAs will require additional time to become familiar with the case if they did not prepare its LOA.

m. Reducing the scope of individual employees' duties may result in loss of talented personnel.

8. Response to Objectives:

a. To determine the optimal degree to which preparation of LOAs can be automated and centralized:

(1) The optimal degree of automation varies both with the specific commodity or the materiel system offered and with the frequency of its sale. Automation is cost effective for repetitive tasks if a high degree of standardization exists. LOAs that are unusually complex should be processed as they are now. Others can be fully automated and centralized. The majority, however, should be prepared by the individual MSCs, using their data bases, and subsequently assembled at USASAC.

(2) Technical knowledge of materiel is the key factor in the preparation of complex LOAs. Centralization is viable only if the

MSC technical experts can be quickly consulted and if their information retains its credibility.

b. To assess the impact of the changes that will be necessary to centralize the preparation of LOAs:

(1) The electronic transmittal of information to an activity for compilation into an LOA is essential for centralization and can be accomplished with minor impact on the MSCs.

(2) Existing nonstandard MSC data bases are not yet capable of supporting automated LOA preparation. Resources will be required to develop usable and standardized data bases.

c. To investigate the MSCs' participation in centralized preparation:

(1) MSC personnel having the required technical knowledge or access to materiel experts should remain responsible for LOA line content.

(2) Data interchanged with a central LOA assembly point should be transmitted electronically.

d. To evaluate the impact on personnel specialties of centralizing LOA preparation:

(1) Job series should remain unchanged. A decrease in scope or variety could cause grade reductions within affected activities.

(2) Transfer of employees to a central USASAC organization may erode specialized materiel knowledge at MSCs.

e. To identify the impact of centralizing LOA preparation on TPA procedures, analyses of TPA LOAs will be needed. TPA requires assessment of each new user's conditions, such as philosophy,

infrastructure, deployment plans, and support bases. Automation can assist in TPA, but the application of competent human judgment will still be necessary.

9. Recommendations:

a. Positive steps should be taken to automate and centralize LOA preparation. This should be done in a step-wise progression ending with central LOA assembly using case lines developed by the MSCs from their data bases.

b. Standardized, credible, and controlled data bases for the storage, management, and retrieval of LOA data should be developed at MSCs.

c. LOA centralization, automation, and standardization should be seen as continually evolving processes with intermediate goals set in consonance with available technology, cost effectiveness, and LOA quality.

d. The use of electronic data transmission should be expanded to all LOA documentation to conserve time currently being used by mail. Multiple hard copies should be reproduced centrally.

e. Word processors should be used to prepare and revise FMS documentation.

f. When the process is centralized, technical experts should be consulted early and frequently.

MAIN REPORT

I. INTRODUCTION.

A. Background:

1. Foreign Military Sales (FMS) is the sale of defense articles, services, or training by the United States (US) Government (USG) to eligible foreign countries and international organizations. The program results in economic and strategic benefits to the United States and contributes to world stability and peace. The Army manages a greater array of materiel and services in its portion of the FMS program than do the other military departments, and it is responsible for the largest number of transactions.

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E. Assumptions:

1. The SA3 System and the Security Assistance Information Network will be implemented as envisaged in their current Detailed Functional System Requirements.

2. The volume of Army FMS will continue at current levels.

3. The number of personnel presently assigned to the International Logistics (IL) mission will remain constant.

II. CURRENT LOA PREPARATION TECHNIQUES IN AMC.

A. Current Procedures at USASAC-O (Operations):

1. Approximately one-third of the Army LOAs are prepared centrally at USASAC-O (New Cumberland, PA). Most are for Blanket Open End (BOE) and Cooperative Logistics Supply Support Arrangement (CLSSA) cases, both of which pertain to follow-on support requirements, i.e., spares and repair parts. A part of the necessary data exists in a base at USASAC-O, and the remainder is obtained from materiel managers at the MSCs. LOAs prepared at USASAC-O seldom concern major items.

2. Case managers at USASAC-O prepare or forward requisitions to the MSC Materiel Management Directorates for execution, the IL Directorates being unconcerned with requisitioning unless assistance is requested. LOAs prepared by USASAC-O usually quote average lead times and standard catalog prices adjusted by appropriate factors.

3. Most LOAs not prepared by USASAC-O are written in the IL Directorates of the MSCs; under unusual circumstances, however, even USASAC-M (Management) may prepare a case. Regardless of preparer, requisitions directing materiel delivery to a customer are initiated by USASAC-O; the exception is that customers prepare their own BOE and CLSSA requisitions.

4. A case manager at USASAC-O monitors the materiel and fiscal events related to case execution. His responsibility is to assure case completion and billing occur in a timely manner. The Centralized Integrated System - International Logistics (CISIL) is a

centralized, integrated data base for requirements, program management, and financial tasking. It follows the progress of each LOA as it is forwarded to the customer and continues to monitor case status until closeout. Therefore, the Army already has, in fact, an active central manager for a case, once the LOA is completed. USASAC-O managers initiate case related actions, but are often dependent upon MSC case managers for the actual performance or response.

B. Current Procedures at USASAC-M (HQ AMC):

1. USASAC-M may receive LORs directly from customers or through State Department channels. Current procedures often cause an LOR to be split into more than one commodity oriented case, so that coordination between MSCs can be reduced. They are then forwarded by electronic mail (Advanced Research Projects Agency Network [ARPANET] or Defense Data Network [DDN]) to the proper case manager. The capability to receive LOA data electronically has been tested since September 1983.

2. Urgent requirements, sometimes initiated by the State Department, periodically confront MSCs. Such emergencies can cause radical changes in materiel P&A. Equipment may even be diverted from the United States Army if properly approved. USASAC-M responds by preparing the LOA centrally, using P&A data received by telephone.

3. FMS customers are often assisted in choosing appropriate items by in-country US military personnel. MSC technical experts advise the teams, being assisted in these contacts by USASAC-M.

C. Current Procedures at MSCs:

1. LOAs for major and related secondary items are prepared by case managers in the IL Directorates of MSCs. The most difficult are for materiel systems consisting of several interrelated major items. (Almost all such complex LOAs are written at MSCs.) USASAC-M forwards the LOR for a complex case to the MSC responsible for the primary item involved, thus assigning primary responsibility for the case. There the LOR is analyzed for logic and completeness. If clarification is unnecessary, a request for P&A data is routed to the organizational elements that must furnish or review the data. Typically, this is the Materiel Management, Engineering, Procurement, and the Comptroller Directorates. Depending upon nature and complexity, obtaining P&A data can be straight forward and simple or controversial and complicated. Each MSC has devised control techniques to monitor progress. At CECOM, routine processing of a P&A data sheet requires 27 working days. LORs are usually for specific items, but occasionally for a described capability. Then MSC IL personnel must work with technical experts to determine the actual item(s) needed. The completed LOA is forwarded to the customer through USASAC, but the preparing case manager at the MSC remains responsible for case execution through closeout.

2. The MSC responsible for the primary item(s) on an LOR prepares the corresponding LOA. To do this may require data (for a "line" on the case) from other MSCs. Most vehicles or helicopters sold contain communications equipment. When this happens, CECOM furnishes P&A data to the MSC managing the primary item. The CECOM

data then becomes a line in that case. A result of such interdependency is a reduction in the response time available to each MSC.

3. The MSC's IL Directorate is organized for LOA preparation and execution. Various sub-elements monitor case activity by National Stock Number (NSN) or by country. Redundancy assures the double checking of all aspects. In some instances, MSC IL personnel develop the base price by adjusting the Army's item cost by several modifiers. For example, price may be inflated to an outyear, dependent upon the LOA's delivery schedule. Surcharges or recoupments may be applied to certain items. When needed, the Procurement Directorate can qualify a price in a narrative statement so that constraints may affect the final price. Regardless of where the price originates, the MSC Comptroller Directorate remains responsible for its validation.

4. MSCs have recognized that manipulation of P&A data lends itself to automation, and they are moving in that direction. A more detailed discussion of MSC procedures is in Appendix C.

D. Other Military Departments: The United States Air Force (USAF) and the Navy were contacted to determine how LOAs were prepared and to what degree the process is centralized or automated. Both prepare LOAs centrally using information provided by decentralized sources, which depend on local data bases. For case monitoring, the USAF uses a system similar to CISIL. The Navy has automated price determination and LOA status tracking systems. Every case has

a manager who retains responsibility from case inception to close out.

A more detailed discussion is presented in Appendix D.

III. CENTRALIZATION.

A. Introduction:

1. The Army Security Assistance Program Study Report of 1977 (TASAPS-77) noted that IL requirements are handled by the same organizations, procedures, and systems used by the Army. A recommendation was that IL business continue to be superimposed on Army systems. A centralized, integrated data base for maintaining requirements, program management, and financial tasking was also recommended; CISIL is capable of meeting most of this requirement. Two conclusions of TASAPS-77 are particularly pertinent to this study. The first is that "It is not feasible to decentralize FMS case management down to the performing commands." The term decentralize in this statement meant the separation of program management, supply management, and financial management. The second conclusion is that the "Responsibility for price and availability determination should continue to be decentralized to the commodity command level."

2. Consideration has recently been given to centralizing the preparation of LOAs for the US Southern Command. The US Army Security Assistance Agency, Latin America (USASAALA) prepares these few LOAs for sale of stocks stored in Panama, valued at less than \$15,000, and owned by the Forces Command. Centralized preparation at USASAC-O has been proposed for these transactions, with USASAALA personnel acting as a Customer Relations Team. Although a final decision has not been made, the situation illustrates a trend toward centralization.

3. Communications techniques permitting a central organization to access data bases elsewhere are available. Constraints are the availability of programmers (resources) and the time needed to perfect the interfaces. The emerging SA3 is funded to pay for part of the undertaking. In short, the data processing aspects of centralization (discussed in Section V) present no major obstacles.

4. USASAC-O now practices centralized case management for CLSSA and BOE cases; they consist mostly of stock funded secondary items, which tend to be stable and predictable. The center deals directly with item managers in the Materiel Management Directorates of MSCs rather than with the IL Directorates. For items controlled by the General Services Administration or the Defense Logistics Agency, prices and standardized lead times from the Army Master Data File (AMDF) are quoted. However, availability of items is not determined, thus compromising accuracy.

5. Case assembly or consolidation could readily be performed at a central location. Rather than having multiple cases associated with an LOR, a single complex, inclusive case could be developed. Each MSC would make a complete line response, including footnotes (listed in AR 12-8) and remarks, for each assigned case line. A central organization could then compile the responses into one case. Responsibility for executing the case would remain with the command that prepared the line on the primary materiel or service. Technical accountability would remain solely with the recognized experts.

6. USASAC-O states that most of the data needed for LOAs originate within the MSCs but outside the IL Directorates. If this

P&A information could be displayed on a data terminal at the center, a draft LOA could be prepared; MSC personnel would then be needed to verify the data. The center is already accessing GSA files in this manner.

7. A data base could be created at each MSC, tailored somewhat to each command's unique requirements. A central organization could then access each data base in a "read only" mode, or the MSC computer could periodically transmit data to the central organization. Because specialists would normally not be available at the preparing point, draft LOAs prepared from this data source would be returned to the affected MSCs for analysis, evaluation, and validation.

8. In 1965, CECOM created a separate branch to prepare LOAs, while assigning case execution to two other branches. The case managers, who no longer prepared LOAs, did not know the origin, intent or rationale for statements included in the case. The LOA writers were remote from execution problems created during LOA preparation. The experience resulted in new formal and informal communication channels. In 1976, the IL organizational element became a directorate and LOA case writing responsibility was returned to the case managers. Morale was improved and the sense of responsibility was enhanced because a case was associated with only one manager from beginning to end.

B. Problem Areas to be Considered in Centralizing: MSC personnel are generally not receptive to the centralization concept. Those interviewed personnel perceived adverse impacts, apparently based on fear of change or transfer, loss of prestige, or a change in

status. The following arguments should be evaluated prior to implementing centralization.

1. Materiel expertise resides at the MSCs and, even under complete centralization, will remain there. The central location must rely on these experts for responses to technical questions concerning materiel configuration, maintenance, interoperability with the customers' equipment, changes in P&A, changes to LOAs, and data accuracy. The Army may be at risk selling even mundane items if the LOAs are prepared by personnel not technically proficient. For example, Redeye missiles, which are obsolescent, were sold from Army stocks to a foreign country. Although the customer did purchase minimum in-country technical training by US teams, MICOM was unable to persuade the country to buy target drones. The country's military establishment later arranged a demonstration firing for high members of their government. It failed because the Redeyes would not lock onto a can of gasoline-soaked cotton being towed by a model airplane, and the military establishment was embarrassed. If knowledgeable MICOM personnel had not attempted to sell targets emitting sufficient infrared radiation, the US Army might have been equally embarrassed. The argument is that under the present system, the materiel experts are in close proximity to the case writers and information can be obtained quickly and informally. Telephone or teletypewriter exchange (TWX) inquiries are less personal and may result in less comprehensive responses.

2. The diminution of responsibilities by personnel preparing LOAs may result in atrophied skills that would diminish LOA quality at some future time.

3. These arguments are not without merit, but presume a change such as total automation, which is far more radical than would be necessary for cost effective centralization. The level of communication and cooperation under centralization must increase because of the separation of functions, but there is no reason to presume that this could not be performed.

4. Automation will be implemented to the degree necessary to improve the LOA quality while decreasing cost and shortening processing time. Blind faith in computer products is an impractical ideal. A carefully designed data system will minimize the risk of obsolete data, and internal edits during data entry will minimize the inaccuracies. Indisputably, automation has the potential for generating the most complex and perfect LOA, but with the existing technology the cost may be prohibitive. At present, complex LOAs will continue to require individual tailoring until software can successfully duplicate the human role.

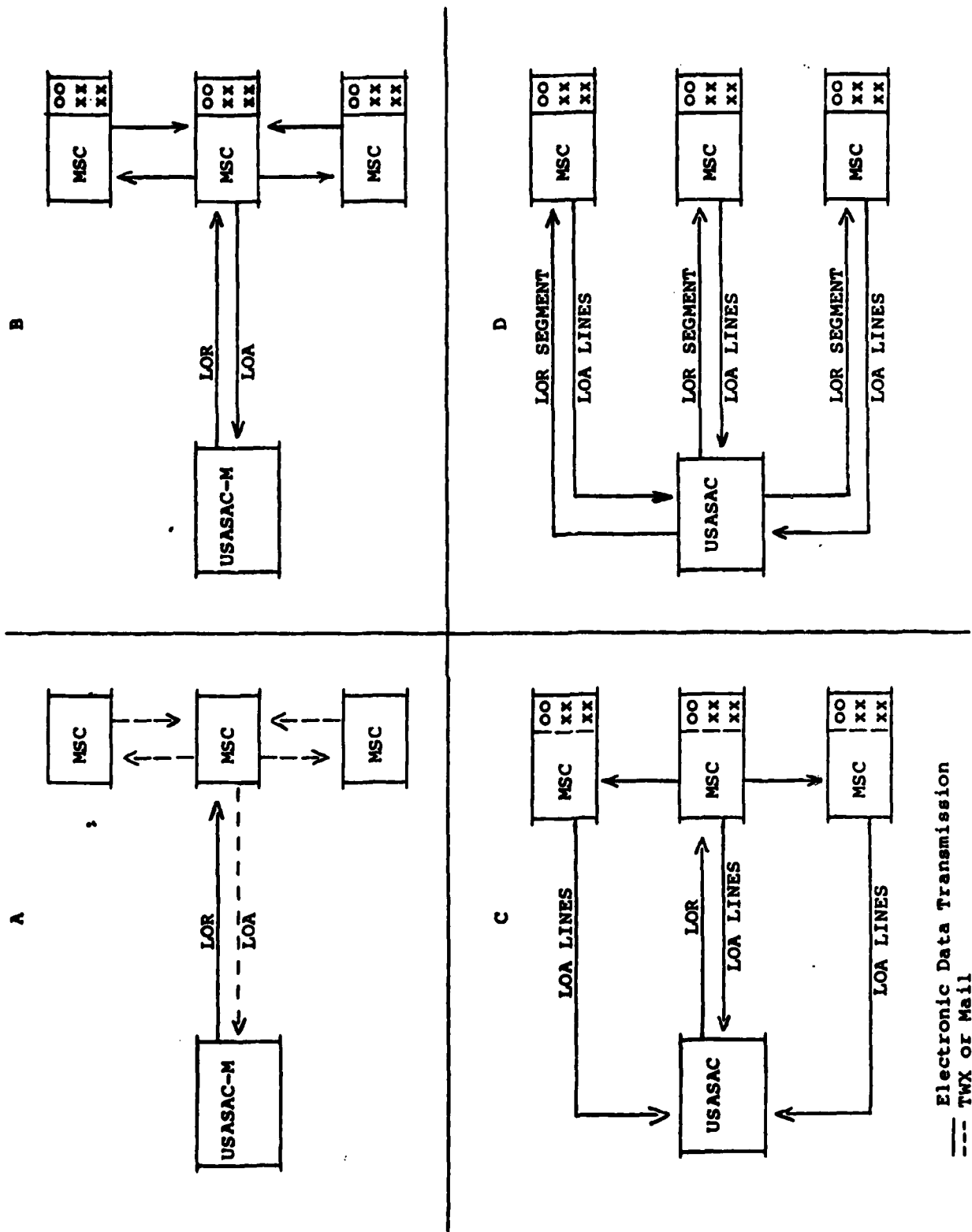
IV. LOA CENTRALIZATION ALTERNATIVES.

A. Degrees of Centralization: Centralized LOA preparation can be achieved in different ways and to varying degrees, depending upon the amount of change in procedures and responsibilities and the level of automation. To clarify discussion, five alternatives are presented in Figure 1, pages 24 and 25.

1. Alternative A - This represents the current system. USASAC-M forwards an LOR to the proper MSC via electronic data transmission or DDN. The MSC must often relay portions to other MSCs to obtain P&A data for some of the case lines. This intercommand communication is accomplished by mail or by TWX. After assembling all of the data necessary, the primary MSC prepares the formal LOA and sends it to USASAC-M. Numerous copies are required and are sent by surface freight carrier.

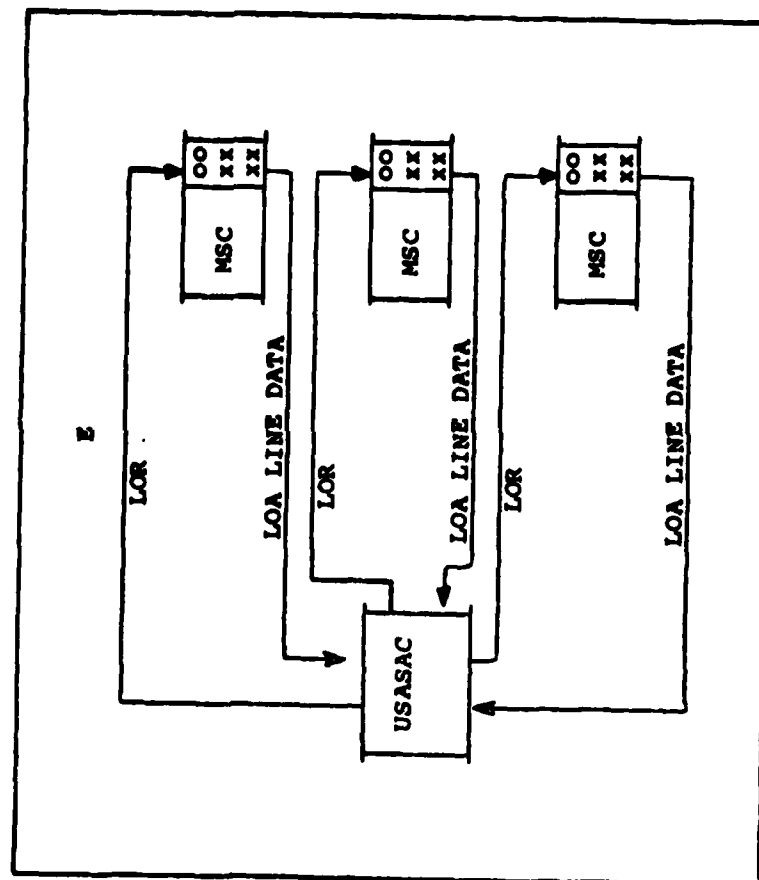
2. Alternative B - This alternative incorporates maximum use of electronic data transmission technology to reduce time lost by using the mail system. Also, each MSC is utilizing a standardized data base to assist in the development of the LOA content. Actions taken to prepare the LOA resemble those of Alternative A, and the final LOA is prepared by the primary MSC.

3. Alternative C - The communication and data processing techniques are the same as that of Alternative B. The primary MSC receives the LOR and distributes line responsibility to other MSCs as necessary. However, each MSC involved prepares their portion of the LOA and transmits it directly to a central organization (USASAC-O) for assembly into the final LOA.



(continued)

FIGURE 1. Automation Alternatives



4. Alternative D - The significant variation here is in procedural structure. USASAC-M separates an LOR into segments based on commodity responsibility and tasks each MSC for specific LOA lines. The MSCs prepare the case lines for their materiel and forward them to a central organization for assembly into the final LOA.

5. Alternative E - The distinguishing characteristic of this alternative is the electronic access to automated records and C&A data. The MSC role is changed to indirect participation in the LOA. The MSC data bases are accessed directly by the central organization for necessary data. MSC personnel may perform a verification of the final LOA as prepared by the central organization.

B. Procedural Areas Impacted by Centralization Alternatives:

1. Areas impacted by changes in procedures are explained and referenced to the alternatives. Figure 2 shows the areas to be discussed.

2. Word processing - Word processing is highly desirable for LOA preparation and is being used to various degrees today. Alternatives B through E plan for its maximum use to assemble and modify the LOA documentation.

3. Electronic data transmission - Currently this technique is in limited use to distribute LOR information to the MSCs. All of the alternatives would benefit from the resulting time conservation.

4. Participation of technical experts - The current procedures encourage a close working relationship between the IL Directorate employees and the materiel managers. As automation is implemented,

PROCEDURAL AREAS	STATUS QUO A	MSC DATA BASE B	MSC LINES DATA BASE C	LOA SEG CENTRALLY PREPARED D	CENTRAL ACCESS TO DATA BASE E
USE OF WORD PROCESSING	M	H	H	H	H
USE OF ELECTRONIC DATA TRANS	L	M	H	H	H
TECHNICAL EXPERT INVOLVEMENT	H	M	M	M	L
ABILITY TO HANDLE CONFIG CHANGES	H	M	M	M	L
LOA QUALITY	M	M	M	H	L
SINGLE POINT OF RESPONSIBILITY	H	M	M	M	L
LOA STANDARDIZATION	L	L	M	H	H
TOTAL PACKAGE APPROACH	H	M	M	L	L
IMPACTS ON PERSONNEL	-	L	M	M	M
COSTS OF CHANGE	-	M	M	M	H
EMERGENCY RESPONSE TIME	M	M	M	H	H
REACTION TO THE UNUSUAL	H	M	M	M	L

H = HIGH M = MEDIUM L = LOW

FIGURE 2. Procedural Areas Impacted by Centralization Alternatives.

the direct participation of the materiel expert will be reduced. The highest level (Alternative E) is heavily dependent upon accurate data bases. Here the materiel expert may not know an LOA is being prepared until the final verification.

5. Materiel configuration changes - Current procedures can readily accommodate requests for changes in the configuration of materiel systems. Manual preparation of the LOA now occurs after conferring with the personnel expert in the materiel system and determining exactly what items or services are wanted. The exclusive use of a data base may make such "tailoring" of cases more difficult for the IL Directorate personnel at an MSC. Preparing the LOA lines at a central location and relying on the data base as the source of P&A data would make sales of uniquely configured equipment complex.

6. LOA quality - The P&A data on an item can change dramatically at any time. Under the current system, the person preparing the LOA must contact the affected materiel managers for this data because they would be first to know about changes. If data bases alone are relied on, the time lag between occurrence of a change and posting to the records may cause difficulty.

7. Single point of responsibility - Under current procedures, the Army now clearly establishes one element as the LOA preparation activity. Segmenting the responsibility will cause a blurring of this responsibility. Although a single USASAC activity can use an integrated data base to prepare an LOA, the actual data will have been transferred from other files, which may have been created by non-FMS personnel who were unaware of all the final uses of the data.

8. LOA standardization - Commodity characteristics and the policies and procedures of a particular MSC causes difference in LOAs. Use of standard data bases will contribute to the desired standardization. However, preparation by one central organization, using standard data bases, would do the most toward assuring standardized format and content.

9. Total Package Approach - The TPA concept (discussed in depth in Section VIII) insures that full benefit is derived when incorporating a new weapon system into a customer's defense forces. Analysis by personnel familiar with the new materiel is the key to its effective application. Alternative E, which reduces MSC actions, might also reduce customer satisfaction with TPA.

10. Impacts on personnel - The greater the procedural change, the higher is the potential for short term disruption of personnel. However, job classifications will remain mostly unaffected, even though specific duties would differ. Greater dependence on automation can reduce the scope or variety of responsibilities given to IL Directorate personnel. Alternative E would require additional personnel at the central organization; logically, these spaces would be transferred from the MSCs.

11. Cost of change - The development of new computer software and necessary reorganization will be costly and the more dramatic the change, the greater that cost. However, the results are expected to produce cost savings for future IL business.

12. Emergency response time - Urgent requests are presently accommodated by circumventing some of the current procedures and

compressing others. The implementation of Alternative B, C or D would produce faster results under all conditions. But, the quickest response would be expected by using Alternative E; P&A data could be displayed at a central organization, telephonically verified, and an LOA prepared in a few hours, if necessary.

13. Reaction to the unusual - Procedures and software can only be written for applications which are foreseen. The present, mostly manual system, can accommodate unforeseen situations with relative ease. Moderate use of automation reduces this ability to respond to these situations within the time limitations. The greater the level of automation, the lower is the capability of an organization to properly handle unique problems.

C. Summary:

1. Experience has demonstrated that new automated systems are inherently deficient during the early years of their use. Because of the government to government relationships of FMS, glitches can have implications reaching far beyond the normal interchange of business. Any changes that could, even temporarily, reduce the level of proficiency with which LOAs are prepared should be scrutinized in depth. An uninterrupted transition from present procedures to new ones is mandated.

2. A change to centralized LOA preparation must either conserve resources or improve the performance. The potential to do one or both of these clearly exists for items that are of low complexity, have stable designs, and are subject to repetitive sales. Complicated weapon systems present difficulties for the managers

handling them under current procedures. Improving or even maintaining present LOA quality for these items will be more difficult.

3. Many items are of intermediate complexity. A decision must be made concerning which, if any, should be left for traditional LOA preparation. Experimentation and phased implementation of changes are the most logical approach. Clearly the development of a data base system, capable of supporting central LOA preparation, is a prerequisite. Once in place, conversion to more automation and centralization should be done gradually, with pilot programs and with reviews by all interested organizations.

4. Before expanding centralized LOA preparation, SA3 should be fully operational at the MSCs.

5. An evolutionary progression from the current system toward Alternative E seems prudent. Analyses of LOAs produced during different phases of the modernization effort should reveal the point of optimization.

V. AUTOMATION.

A. Automation and electronic mail are not absolutely necessary for implementation of centralized LOA preparation; they could be discussed solely on their own merits. However, for centralization to be truly viable, automation and electronic mail must be included. Therefore, no attempt at segregation of the three will be made.

B. Security Assistance Automation, Army System:

1. The SA3 System is an Army-wide automation effort being implemented to support the Army IL mission. It includes communication networks, office automation, teleconferencing, and other information management capabilities. Its most significant feature in terms of centralized LOA preparation is a standardized data base for use by IL personnel. It will be integrated with other existing standard systems such as the Commodity Command Standard System (CCSS), the Army Procurement Appropriation Reporting System, the Army Customer Order Control System, the Defense Integrated Financial System, and the CISIL.

2. Phase I of the implementation is "Case Management." This will assist case managers by storing some 1,300 data elements at the case line level. It will assist in LOA preparation, and in case management and execution. Further, it will hasten responses during emergencies by enabling Army organizations to access data in each other's SA3 data base.

3. When SA3 is operational, benefits can be derived by elements outside the IL area. For example, the materiel manager's preparation of an Army Materiel Plan could be aided through access to FMS

claimants' data in SA3. This interlinking of related bases will afford a synchronization not currently enjoyed; a single source of data accessible to USASAC and MSC users would also avoid the problems which occur when identical data elements must be drawn from several dispersed data banks.

4. System-wide visibility of the IL data currently available only at MSCs will help USASAC country program managers coordinate the overall US FMS program. SA3 will enhance LOA preparation regardless of where it takes place; it will not, in any way, mandate centralized preparation.

C. FMS Areas that could be Automated:

1. Most interviewees conceded that LOAs for stable, straightforward items could be prepared centrally using an automated process. LOAs for secondary items and straightforward major items, if universally standard in configuration, could also be automated and centralized. The NSN Master Data Record of CCSS could be accessed to extract data; however, information in the developing stages is excluded from this file. For example, an item manager may anticipate a radical change in availability due to contractor difficulties; but formal notification has not been received. Under this condition, CCSS would display only the official status. However, if consulted, the item manager would explain the extenuating circumstances and perhaps recommend that a very different delivery schedule be planned for the LOA.

2. The degree of automation and centralization will depend on a lack of uniqueness in the item or service to be offered. Items or

services that are purchased frequently should be automated and can be centralized. The research for these items is routine and the P&A data is frequently monitored.

D. FMS Areas that should not be Automated:

1. Often LOAs include lines for technical data packages or maintenance support arrangements. These requirements must be adapted to specific customer needs. Every maintenance support arrangement is different and must be carefully matched to the customer's unique circumstances. It would be difficult to automate or standardize them.

2. More intricate or complex major items should receive manual attention so that the maximum value possible from subjective non-quantifiable human judgment can be extracted.

3. Commercial items are not good items for data base management systems. Availability is unknown until a purchase attempt is made. It would be wasteful to accumulate such data just in case an LOR for a commercial item might be received.

4. An LOA developed from a country request that specifies a vendor would not usually be producible from a data base unless the USG customarily deals with that vendor.

5. In the future, technology may permit full automation under the preceding conditions; but, at present, it is not cost effective.

E. Data Considerations:

1. Although the MSCs have been developing IL data bases, confidence in their use has lagged behind because of concerns about data currency and volatility. Time, and the retrieval of quality

data products, will alleviate an employee's impulse to manually verify everything. But, confidence oriented problems may, in the long run, be harder to overcome than technical difficulties.

2. A single, centralized, and comprehensive data base would make the production of routine and special reports a much quicker and easier task. However, the central system would also have to be able to produce reports that are unique to individual commands. For example, only the Aviation Systems Command (AVSCOM) needs to maintain flying hour records and associated data. Without careful planning and design, slow processing of system change requests, long run times, and lack of capability to extract concisely tailored reports could result. The problems of maintaining such a large data base, and responding to data calls, could delay responses.

3. Both the variety of the materiel and the management procedures vary tremendously between MSCs. Additionally, some materiel systems are exceedingly complex and can be converted to significantly different capabilities by adding, changing, or deleting components. The configuration changes often cause price variations. A specific example is the HAWK missile system. There is no standard HAWK battery configuration, and foreign countries rarely buy the configuration preferred for US Army use. There exist many options related to the final assortment of component items. In view of these facts, pricing data cannot be used until the prospective customer has defined precisely the desired configuration. A central system sufficiently sophisticated and flexible enough to accommodate the inherent differences among the MSCs will be large. The CCSS

attempted to meet a similar challenge in the late 1960s; its current effectiveness is the result of years of refinement, but, even so, it still lacks most major (complex) item management routines.

4. Since preparing an LOA by machine and then passing it around for verification eliminates most automation advantages, total automation will benefit from software edits which can eliminate or illuminate obvious errors.

5. The MRCs might not expend as much effort to maintain currency in their data bases if the commander of a central organization were to sign the LOAs, thereby removing a small portion of the responsibility.

6. The case pricing procedures have potential for automation. Significant variations in unit prices occur frequently. P&A data are unstable to the degree that they are often invalid by the time an LOA is accepted by the customer. Exactly when a price becomes obsolete is impossible to predict. MICOM began working toward automation of pricing a few years ago, but subsequently decided that prices were too volatile and too interrelated with materiel specifications and delivery schedules to be determined solely by computer models. Other MSCs have automated pricing systems used in conjunction with manual verification. Certainly, if prices are reasonably stable, a data system can be efficiently used for storage and retrieval. Although the Tank Automotive Command's (TACOM) Comptroller Directorate currently is using an automated system to validate prices and to calculate and add surcharges and other IL price modifiers, the prices continue to be obtained from the materiel managers. The

Armament, Munitions, and Chemical Command (AMCCOM) is also designing an automated P&A system to be applied to selected major items under their control. As CCSS increases its content of major item data, it might also be used for needed information if the FMS version of an item is not different from that of the US Army.

7. Prices for stock funded items need not be included in a data base, since they can be retrieved from the AMDF and adjusted by inflation indices. Item availability can be extracted from CCSS. If the IL Directorate could be routinely alerted to price changes or to prices of questionable validity, its data would be of higher quality.

F. Impacts of Automation:

1. Automation of portions of the LOA preparation process is evolving at all the MSCs in a step-by-step fashion. Some items or services (case lines) can be completely automated now; others can be partially automated and still others, not be automated at all. Unfortunately, an automated system that is patched, enhanced, and augmented step-by-step develops inefficiencies that only a next generation system can cure. Yet the only safe way to arrive is through step-wise evolution.

2. Automation that is controlled and standardized within AMC will result in time savings, decreases in the error rate, and reliable audit trails. Mundane and routine work can be relegated to the system, thereby freeing human resources for concentration on work requiring human judgment.

VI. ELECTRONIC MAIL.

A. Use of the DDN or electronic mail will conserve time. With minor purchases of additional hardware and software, the DDN could be used as the only mode of distributing the necessary paperwork. Reproduction of the final LOA, in as many copies as required, should be performed at the central LOA receiving point (USASAC-M); otherwise, the time saved would be lost by the mailing of locally reproduced copies. The verification stage, if used, would require a hard copy of the LOA, which can be transmitted electrically to the MSC(s) and printed there.

B. The Security Assistance Training Field Activity (SATFA) wants a system that will display training LOAs at multiple locations simultaneously, which would streamline coordination, validation, modification and approval. SATFA also desires electronic transmission of the final LOA to USASAC-M. Delays are currently experienced due to the surface mail carriers being used. Transporting the required hard copies (sometimes 30 to 50 copies) is time consuming and expensive.

VII. PERSONNEL CONSIDERATIONS.

A. LOAs currently prepared at USASAC-O are simpler than those prepared at the MSCs. The USASAC-O preparers are generally GS-7s and GS-9s, while those at the MSCs are usually GS-11s and GS-12s. If centralization of the MSC cases, coupled with a greater reliance on automation, is judged by job auditors to reduce the number of job elements, difficulty, or scope, these grades may fall. Changes that result in grade reductions lead to an inevitable shuffling of positions, which are not conducive to employee expertise, productivity, or morale. IL directorates are currently experiencing a loss of talented personnel because other organizations requiring the same skill attributes are offering higher graded positions. If the change to centralized LOA preparation reduces grades, loss of experienced personnel will result.

B. Human skills and expertise will differ, even among employees assigned identical job series. A supply systems analyst at an MSC is commodity oriented. A supply systems analyst at a central headquarters will have a more generalized logistics orientation.

C. Standard methods of evaluating workload and associated personnel levels are applied to the IL mission. The total personnel requirement will remain at least as large as current authorizations, even if responsibility to prepare LOAs were transferred to a central location. If automation causes a workload reduction, position losses would occur at the MSCs or at the central location with equivalent results.

D. The more familiar an individual is with a customer country as well as the equipment or services being requested, the more capable he will be in writing an LOA and managing the case. Information pertinent to a case can change while the LOA is being written or staffed, and a manager responsible for a specific and small number of cases is more likely to be alert to these changes. A centralized LOA preparer will probably have a much greater variety of case responsibilities and will find it difficult to stay abreast of such changes, thereby degrading quality.

E. The cost of centralization cannot be estimated until the role of MSC IL personnel is defined. If the LOA preparation were to be centralized, while relying on the MSC to provide P&A data, one MSC estimated its workload loss would be six manyears. Obviously, if the central location were staffed conservatively, it could do little more than assemble MSC-provided P&A data.

VIII. THE TOTAL PACKAGE APPROACH CONCEPT UNDER LOA CENTRALIZATION.

A. Introduction: The TPA is used when a total system complete with necessary support is offered to a customer. It assures that the customer considers purchase of all useful support items, training, and services. The total package includes: a viable balance between the basic end item or system and its ancillary items; initial and follow-on support; back-up support such as special tools and test equipment; facilities and construction; documentation and publications; operational and maintenance training; and USG or contractor personnel to assist in initial and follow-on installation, operation, maintenance, and training. TPA also includes items that are necessary but which are not purchased from the US; for example, transformers may be necessary to convert local electric power for use, or climatic conditions may dictate the use of special shelters. At MICOM, a foreign government's intent to send an LOR is usually known before receipt of the document. That is because large weapon systems such as missiles usually involve substantial preliminary discussions, contractor team visits, and requests for planning and review data. The MSC, or whoever participates in these early discussions, is best qualified to develop the TPA. The price estimates assist the customer in projecting total costs for investment, maintenance, and operations for the years during which the system will be in use.

B. First Time Customers: TPA is essential when a first time customer is purchasing items, services, or training, and the US Army knows little about the customer's capabilities and intentions. An

established customer purchasing a new item or system is also a strong candidate.

C. Uniqueness of Requirements: Since no two countries are exactly alike, it would be unusual for the same complex FMS case content to be appropriate for more than one specific country. The integration of operational, maintenance and support elements is a prerequisite to the successful fielding. Sometimes a case is so complex that a separate LOA should be established to develop the cost of surveying and preparing a total package. The overall package is prepared by one MSC, the others being consulted as necessary. The draft final version is then staffed through those commands that furnished data. In TASAPS-77, it was observed that one of the features of TPA is that each requirement is unique. The same report recommended that the Army be prepared to divert support items from its own programs to facilitate the TPA. If this is not done, implementation will be paced by the longest lead time item in the overall package. Customers would object if this lead time is significantly longer than the lead time of the primary end item.

D. Evaluation of Customer Capabilities: Consensus at MSCs is that human judgment is necessary for the preparation of an LOA involving TPA, since many of the answers to pertinent questions must be qualified. For example, a customer may possess the required maintenance facility and equipment, but be unable to match US performance standards. Subjective analyses must then be used to decide where maintenance will be performed. Review of prior surveys for similar systems is also helpful. If countries are reluctant to

divulge the information necessary to accurately formulate an LOA because of security considerations, the US must again rely on subjective analyses by materiel experts at the MSC. Lessening the professionalism of this evaluation would increase workload and cost during the execution phase. Project Manager offices, procurement personnel, and contractors must often be consulted to assure that an appropriate offer is prepared. Some frequently encountered problem areas for the development of the TPA case data may be seen in Appendix E.

E. TPA Checklist: The TPA is undertaken with the customer's approval and is paid for by the customer; specific actions taken in support of a future FMS case become lines on a preliminary case. Checklists to be followed for the TPA were presented in a 1977 study entitled, "A Concept for the Total Package Approach to Foreign Military Sales," prepared by the Logistics Studies Office (Project #709). An updated set of checklists and specific procedural guidance is being prepared now by USASAC-M, which is also studying the TPA with the intent of revising the applicable regulation. USASAC-M presumes that the associated support items of equipment which are needed for use with the primary item are relatively stable. Therefore, once a comprehensive list of necessary associated or supporting items, services, and skills is compiled for a system, its reuse in subsequent similar cases conserves resources. Managers in the US and in the customer country would use the list by deleting unneeded items. Such a list could be stored in automated files and updated periodically. The value of such a scheme is dependent upon

the frequency of usage. Editing or modifying the stored standard list of materiel would require equipment experts who also know customer country capabilities and intentions. USASAC-M is considering the establishment of a "Country Assessment Data Base" that would store the logistics characteristics of past customers; such an action would reduce the effort necessary to assess how well a country could support and utilize the items being sold. If the above two suggestions were pursued, a case manager could match the automated equipment list with the automated country assessment data to rapidly produce the initial draft of the TPA case. Technical experts could then review, verify, modify, and produce a system case in much less time.

F. TPA in the Fielding Sequence: Many critical events must occur in a specific sequence in order to successfully field a system. Ultimately, a system to monitor the interrelationship of lines on a case should be designed, because a slippage in delivery of one of the case lines might impact system fielding more significantly than the manager would anticipate.

G. Reference Cases: MSCs will frequently refer to previous cases on which a system was sold as one way to check TPA thoroughness. For major weapon systems with a high likelihood of being requested, AMCCOM prepares model cases. Essentially, they serve as a pattern to insure that a complete, fully usable system is provided. Examples of systems which have model LOAs on file are the Vulcan anti-aircraft system and self-propelled howitzers. A model case is limited to the materiel and services provided by the US.

In-country support facilities, etc., must be assessed each time a country purchases a new system.

H. Continuing Support: Provisions for the continuing support of a weapons system should be established as part of the total package. This can be done by setting up a CLSSA with USASAC-O. The role of USASAC-O in TPA is limited; they may interpret or make recommendations concerning US preferred NSNs. For technical questions, USASAC-O would contact the appropriate MSC and relay the information to the customer.

I. TPA in the Air Force: Other military departments also are challenged by the requirement to provide total packages to foreign customers. The USAF refers to this endeavor as the "Total Program Concept." It requires that the foreign customer submit a commodity-tailored worksheet providing the data elements necessary for total program recommendations with the LOR. USAF Regulation 400-3 (Attachments 4 through 10) guides the customer. These worksheets are in essence a self-analysis performed by the customer. A site survey team or system planning team would be dispatched to the customer country by the country manager if indicated. The team would evaluate the usage environment and support capabilities to insure full operational efficiency upon delivery. Most often teams are sent from the US to customers who have not previously purchased the system or are relatively less sophisticated logistically. The process followed by site survey teams is outline in Attachment 12 to USAF Regulation 400-3. For complex LOAs involving numerous USAF contributors (commands and project management offices), the Head-

quarters, USAF may set up a central workshop to develop LOA content data and to coordinate the Total Program Concept aspects (see Appendix D).

J. TPA in the Navy: In the Navy, country managers consult with equipment experts to analyze a customer's requirements. Specific procedures vary from one weapon system to another. No standard forms are utilized.

K. Summary: The automation of the TPA effort is conceivable and could potentially save funds. For automation to be cost effective, however, TPA oriented FMS cases would have to be processed frequently.

IX. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS.

A. Findings and Conclusions:

1. Electronic data transmission technology is acceptable to all organizations. For maximum benefit, it must accommodate all types of data and formats.

2. Word processing is appropriate and highly desirable for LOA preparation and revision.

3. The technology is available to interlink data bases and enable organizations to access and display each other's data.

4. P&A data can become obsolete overnight, thus necessitating stringent controls on its use and update.

5. MSCs are willing to permit access to their data bases, but will not agree to use of the data without an opportunity to verify or update it.

6. The degree of centralization and automation will depend on the degree of MSC data base standardization and on the completeness of that data.

7. The data for infrequently purchased items and for complex items should not be entered into a data base, since the cost to maintain an all inclusive base may become higher than the cost to manually obtain this data.

8. The centralization of LOA preparation should be implemented in a step-wise manner starting with Alternative A (current process) and evolving to Alternative D. Some LOA preparation could be done at the Alternative E level, but the majority of those that can currently be centralized will be processed at the Alternative D level.

9. Increasing the speed of LOA preparation to meet the time constraints must be balanced against the quality of the resulting LOA.

10. Complex LOAs are difficult to prepare even by personnel working in the functional area of the materiel being offered.

11. It is desirable to have overall responsibility for an LOA identified with one organizational element.

12. MSC country managers tasked with executing LOAs will require additional time to become familiar with the case if they were not involved in its writing.

13. Reducing the scope of individual employees' responsibilities may result in a loss of talented personnel.

14. Technical expertise is required for LOA preparation.

B. Response to Objectives:

1. To determine the optimal degree to which preparation of LOAs can be automated and centralized:

a. The optimal degree of automation varies with the specific commodity or system offered, and with the frequency of its sale. Automation is cost effective for repetitive tasks and in cases where a high degree of standardization is possible. Some LOAs that are unique should continue to be processed as they are now. Other LOAs can be fully automated and centralized (Alternative E). The majority of LOAs, however, should be prepared by the individual MSCs, using their data bases, and subsequently assembled at USASAC (Alternative D).

b. Technical knowledge of materiel is the key factor in the preparation of complex LOAs. Centralization can only be viable if

the MSC technical experts can be accessed quickly and the information they provide retains its credibility.

2. To assess the impact of the changes that will be necessary to centralize the preparation of LOAs:

a. The electronic transmittal of LOA information to a central organization for compilation into an LOA can be accomplished with minor impact on the MSCs and is essential for centralization.

b. Existing MSC data bases are not yet capable of supporting automated LOA preparation and are not standardized. Resources are required to develop usable and standardized data bases.

3. To investigate the MSCs' participation in centralized LOA preparation:

a. MSC personnel who have the required technical knowledge or have access to materiel experts should continue to be held responsible for determining LOA line content.

b. Data flowing into or out of a central LOA assembly point should be transmitted electronically.

4. To evaluate the impact on personnel specialties of centralizing LOA preparation:

a. Official personnel job series requirements should remain unchanged. A reduction in scope or variety of tasks to be performed could impact the assessed level of difficulty within affected activities.

b. Transfer of employees to a central USASAC organization may cause an erosion of specialized materiel knowledge at the MSCs.

5. To identify the impact of centralizing LOA preparation of TPA procedures, analyses of TPA LOAs will be required. TPA requires an assessment of each new user's unique factors, such as philosophy, infrastructure, deployment plans, and support bases. Automation can assist the analyses, but human judgment by the most equipment knowledgeable personnel available will still be required.

C. Recommendations:

1. Positive steps should be taken to automate and centralize LOA preparation. This should be done in a step-wise progression ending with central LOA assembly using case lines developed by the MSCs from their data bases.

2. Standardized, credible, and controlled data bases for the storage, management, and retrieval of LOA data should be developed at MSCs.

3. LOA centralization, automation, and standardization should be seen as continually evolving processes with intermediate goals set in consonance with available technology, cost effectiveness, and LOA quality.

4. The use of electronic data transmission should be expanded to all LOA documentation to conserve time currently being used by mail. Multiple hard copies should be reproduced centrally.

5. Word processors should be used to prepare and revise FMS documentation.

6. When the process is centralized, technical experts should be consulted early and frequently.

APPENDIX A

LIST OF ACRONYMS

ALC	Air Logistics Center
AMC	US Army Materiel Command
AMCCOM	Armament, Munitions, and Chemical Command
AMDF	Army Master Data File
ARPANET	Advanced Research Projects Agency Network
AVSCOM	Aviation Systems Command
BOE	Blanket Open End (FMS Case)
CCSS	Commodity Command Standard System
CECOM	Communications and Electronics Command
CISIL	Centralized Integrated System - International Logistics
CLSSA	Cooperative Logistics Supply Support Arrangement
DARCOM	US Army Materiel Development and Readiness Command (now AMC)
DD	Defense Department
DDN	Defense Data Network
FMS	Foreign Military Sales
HQAF	Headquarters, Air Force
IL	International Logistics
LOA	Letter of Offer and Acceptance
LOR	Letter of Request
MICOM	US Army Missile Command
MSC	Major Subordinate Command
NSN	National Stock Number
P&A	Price and Availability
PADS	Price and Availability Data Sheet
PAS	Price, Availability, Serviceability
PM	Project Manager
SA3	Security Assistance Automation, Army
SAMIS	Security Assistance Management Information System (USAF)
SATFA	Security Assistance Training Field Activity (of TRADOC)

TACOM	Tank Automotive Command
TASAPS-77	The Army Security Assistance Program Study Report of 1977
TPA	Total Package Approach
TROSCOM	Troop Support Command
TWX	Teletypewriter Exchange
US	United States
USAF	United States Air Force
USASAALA	United States Army Security Assistance Agency, Latin America
USASAC	United States Army Security Assistance Center
USASAC-M	United States Army Security Assistance Center- Management (Alexandria, VA)
USASAC-O	United States Army Security Assistance Center- Operations (New Cumberland, PA)
USG	United States Government

APPENDIX B
BIBLIOGRAPHY

AF Regulation 400-3, Logistics, Foreign Military Sales (FMS),
28 May 81.

AF/PRI Case Manager's Handbook, 15 Dec 81, with changes 1
through 25.

AR 10-51, US Army Security Assistance Agency, Latin America,
1 Aug 80.

AR 12-8, Security Assistance, Foreign Military Sales Operations/
Procedures, 1 Feb 83, with Change 1, 1 Jan 83.

AR 37-60, Financial Administration, Pricing for Materiel and
Services, 15 Apr 83.

"Army FMS Case Management" - Employee guidance and sample
documents used for training at USASAC.

Case Management Implementation Plan, prepared by USASAC.

Centralization of Foreign Military Sales, Air University Student
Paper, LD53707A, DLSIE (author MAJ Rodney C. Brennan, USAF).

DOD 5105.38-M, Military Assistance and Sales Manuals - Parts I,
II, and III, 1 Aug 78, with changes 1 through 7, 15 Jul 82.

FM 38-8, International Logistics Management, 7 Jan 71, with
changes 1 through 8, 1 Feb 80.

International Logistics Case Track File (ILCTF), Handbook #3,
International Logistics Directorate, US Army Missile
Command, 31 Aug 83.

International Logistics Case Tracking System, Handbook #6,
Directorate of International Logistics, US Army
Communications and Electronics Command, 1 Aug 82.

International Logistics Processing Letter of Offer and Acceptance,
Amendments and Notices of Modification; Handbook #1,
Directorate of International Logistics, US Army Communica-
tions and Electronics Command, with change 1, 1 Jan 82,
and change 2, 1 Sep 82.

LSO Project 7T2, Determination of Causative Factors and Resultant Cost Growth in Foreign Military Sales Cases, September 1976.

LSO Project 709, A Concept for the Total Package Approach to Foreign Military Sales, September 1977.

NAVSUP Pub 526, Foreign Military Sales Customer Supply System Guide, updated through change 4, 1 Aug 82.

Security Assistance Distributive Data Processing System, Detailed Functional System Requirement, ID 4167A, 16 Dec 80.

The Army Security Assistance Program Study Report (TASAPS-77), Office of the Chief of Staff of the Army, October 1977.

The Management of Security Assistance, 2d Edition, Defense Institute of Security Assistance Management, dated 1981.

TSARCOMR 795-1, International Logistics Program, August 1980.

USASAC Security Assistance Quarterly Review, 4th Qtr FY 82.

USASAC Security Assistance Quarterly Review, 3d Qtr FY 83.

APPENDIX C

CURRENT LOA PREPARATION PROCEDURES BY MSC

1. Current Procedures - CECOM:

a. CECOM uses data processing techniques in the preparation of LOAs. IL managers there recognized that a significant amount of the time required to process multiple requests for an item could be saved by using an automated data base if the requests were received during a short time interval. P&A data become obsolete quickly; however, data used in a recent case can be reused for a similar request.

b. Phase I of the CECOM P&A system stores data for major items. Whenever a major item is requested for an FMS sale, a P&A Data Sheet (PADS) is circulated within the command. The PADS requires 23 to 27 days to complete, after which the information is recorded in the files. At six month intervals, a new PADS is staffed for all frequently sold items, and the file is updated. Items are added to or deleted from the file periodically based on the probability of FMS requests. (Manhours expended to prepare a PADS would be counter-productive if the item were rarely sold.) Item managers in the Materiel Management Directorate are encouraged to advise the IL Directorate personnel whenever an item's availability or price changes since delay in posting the status change could cause LOAs to be in error. Command personnel did not object to USASAC or the other MSCs accessing their P&A data files on a "read only" basis.

c. Phase II will add calculation programs and factors to develop a final price. When completed, a country identifier will

determine the specific surcharges and modifications necessary to make the calculation automatically.

d. Phase III will automate P&A data production for secondary stock funded items. AMDF prices will be used, with applicable inflation indices and surcharges applied. Lead times would be standardized at perhaps 12 to 18 months. This approach is the same as that used by USASAC-O for secondary items.

e. CECOM does not plan to automate repair or overhaul lines on cases because of the necessity to coordinate the data with the appropriate depot.

f. Manual verification and approval of LOAs will continue after full implementation of the P&A data system.

g. CECOM has also developed an IL Case Tracking system. It is a program that monitors the status of every FMS case at CECOM from receipt of the LOR until case completion. It produces routine management reports for CECOM, and special reports can be requested. It updates itself weekly by using an interface to access CCSS data.

h. To summarize, once P&A data are obtained, CECOM will store it in the computer for six months. Thereafter, it is considered too old and is purged. When the P&A data are available, a 27 day process involving 16 people can be reduced to a one day process requiring three people. To be cost effective, an NSN placed in the P&A data system must appear as a line on two or more LOAs per year.

i. Not all secondary items are sold on cases initiated at USASAC-O. When CECOM secondary items are included in a CECOM

managed case, the Secondary Items Branch of the IL Directorate participates in the LOA preparation by determining precisely the availability dates and prices. The Secondary Items Branch also researches and assists in the preparation of system support buy-outs.

j. Prices for major items originate with the materiel managers, but are adjusted or verified in the Financial Management Branch of the CECOM IL Directorate. The planned delivery time or other modifiers will affect the price paid by a customer, sometimes necessitating a narrative explanation. Technical experts instead of IL managers may prepare the final FMS prices for such items. This is the normal procedure for sales of Electronics Research and Development Command (ERADCOM) managed items.

k. The command's Comptroller validates all prices. Other levels of redundancy also verify or correct P&A data.

l. Management philosophy at CECOM is to assure continuity by having the LOA prepared and managed by the same case manager until closeout.

2. Current Procedures - MICOM:

a. The MICOM IL Directorate is organized into two major divisions that are directly involved in LOA processing. One, the Weapon System Management Division, is responsible for preparing the LOAs. It is staffed with knowledgeable personnel, each of whom specialize in a specific weapon system. For example, all LOAs for the TOW missile system are researched and written by one small team of employees. This team prepares any TOW case regardless of the customer country involved. MICOM attributes the high degree of

technical knowledge maintained within the TOW team, and the excellent working relationship maintained with the TOW Project Manager's (PM) office, to constant involvement with the subject weapons system. The Weapon System Management Division maintains a case file until the LOA is accepted or refused.

b. The other IL division is the Regional Management Division. Employees in this division are the case managers, or the case executors, who insure timely fulfillment of obligations from LOA acceptance by the customer country through final case conclusion. Upon acceptance, a case file is transferred to the country oriented case manager. MICOM stresses the advantage of having specialists who are totally familiar with a specific country and constantly interacting with their counterpart country representatives.

c. LOA preparation must be accomplished within 53 days. The timing of a routine LOA preparation at MICOM is as follows. The first five days are consumed in transit time, receipt, and processing into the IL Directorate. The case writer then has three days to distribute requests for data. The information needed to prepare an LOA at MICOM is obtained using a local form, the Price, Availability, Serviceability (PAS) sheet. Typically the PAS sheet is sent to the PM's or system manager's office for the weapon system of interest. The materiel managers there enter the data necessary and return the form to the IL Directorate. Routinely, this takes about 30 days. (Sometimes the request for data is assigned a priority and then must be completed in a shorter period of time.) Comptroller financial validation consumes another three days. The IL Directorate action

officer then has six days to write the LOA and distribute it for concurrence and validation. Three days are provided for these responses. The case writer then has one day to consider comments and prepare a final LOA. Lastly, the IL Director has one day to review it, sign it, and forward it through USASAC.

d. It is important to note that the case writers' performance standards stress conformity and time constraints. The evaluation of quality and accuracy is subjective and much more difficult to appraise. The LOA preparation system works well when dealing with technically competent persons. However, activating one central LOA preparation point could produce a decline in available technical competence. The lack of materiel expertise, combined with the limited time available to prepare the LOA, could result in less accurate responses to customers' LORs.

e. There are numerous potential problems that can frustrate adherence to the prescribed schedule. For example, necessary items may have been inadvertently omitted from the LOR, or the contract for the materiel in question may be undergoing renegotiation with a possible change in contractors. Multiple LOAs, being processed simultaneously, would in essence compete for the materiel resources. Specific case availability data may require high level management decisions before an offer can be released. Any or all of these events will extend the time needed to prepare an LOA. The only MSC initiated event that will stop the clock is a formal inquiry to the customer for clarification.

f. An example of local variations, made to adapt standard procedures to the intent of the FMS program, can be observed in the pricing of transportation at MICOM. The command has received authorization to depart from the accepted practice of charging a flat percentage (12.5%) of the cost of an item to recoup transportation costs. IL personnel use a locally developed look-up table to assign transportation charges to some high value items. This table evolved from the observation that a small, high dollar item often costs far less to ship than the use of the standard percentage would charge. The reasoning that some items are assigned high transportation charges while others are undercharged, resulting in an overall balance, is not well received by customers who are overcharged. Instances of obvious overcharging are undesirable and do not correlate with the objectives of the FMS program.

g. At MICOM, a final LOA is staffed prior to release. It is examined by, and receives concurrence from, the applicable PM's or system manager's office, the Missile Logistics Center, the Product Assurance Directorate, the Planning and Procurement Directorate, the Comptroller, and the Legal Office. Other organizational elements such as Personnel, Training, or the Metrology Center would also be involved if a line on the LOA concerned their areas of expertise.

h. In July of 1983, MICOM began receiving some tasking messages via the DDN; the network is often referred to as the electronic mailbox. A letter with the formal LOR attached is received later. The process of receiving a tasking message electronically was successfully demonstrated; however, as of September 1983, most of them were still

being received by teletype. A key concern is that the document distribution system, when fully implemented, may not be able to accommodate the surges in activity characteristic of the crises that inevitably impact the FMS program.

i. MICOM has developed and implemented a computer program called the IL Case Track File. It records case status and progress on an almost real-time basis. The program also interfaces with CCSS to match or extract data and will produce reports in response to inquiries. For instance, a listing of due-outs associated with a case can be obtained easily and quickly. The program automatically challenges accepted cases that have not had an action such as a requisition or placement of a contracts against them in the period of time programmed for that action.

j. P&A data is loaded into the IL Case Track File soon after it is placed on a draft LOA. Historic LOA data is also accessible in the file. USASAC can access and read the MICOM Case Track File now. However, although the data might be usable for processing and reviewing customer requests, MICOM personnel do not feel that it is acceptable for LOA or P&A preparation without validation.

k. MICOM has automated some other FMS management documents. For instance, liability worksheets are being produced by automated programs, and, through an interface with CCSS, Concurrent Spare Parts lists are also produced by machine.

l. A key issue in the preparation of LOAs, using the automated files of P&A data, is the verification of those data by a qualified person. Getting the recognized experts to stand behind the data that

have been in the file for some months may prove to be difficult. Due to potential criticism from higher authority, or even the Congress, the tendency might be to increase prices, or delay the planned availability date, to protect against making commitments that cannot be honored. However, to do this would violate the intent of the LOA guidance which directs personnel to strive for accuracy.

3. Current Procedures - Other MSCs:

a. The Troop Support Command (TROSCOM), AVSCOM, AMCCOM, and TACOM also use word processing equipment to prepare LOAs. Almost identical capabilities exist at these MSCs but not all of them place classified information in their word processors. TACOM and TROSCOM use automated systems to track the status of LOA preparation and case management. Additionally, electronic transmission of LORs and LOAs is being tested at TROSCOM (as at MICOM). The remaining MSCs plan to use this procedure soon.

b. At TROSCOM, AVSCOM, AMCCOM, and TACOM, one manager is responsible for writing the LOA and subsequently managing it through case completion. However, the organization that manages the FMS cases is different at each MSC. Generally, the FMS case managers are organized into country or regional activities. The weapon system or technical experts are often assigned to the same IL Directorate division as the case or country managers. Sometimes, specific tasks are handled by specialized teams. For example, TROSCOM uses special groups to maintain the IL Supply Delivery Plan and to process Reports of Discrepancies.

c. All six MSCs use manually completed local forms to obtain P&A data within their commands. Most use three different forms in the process: one for major items, one for Army Procurement Appropriation funded secondary items, and one for stock funded items. TROSCOM uses 12 or 13 different forms, depending upon the commodity requested.

4. Current Procedures - Security Assistance Training Field

Activity:

a. All LOAs for training, including interservice training, are prepared by SATFA, HQ Training and Doctrine Command (TRADOC), Fort Monroe, Virginia. Action officers at SATFA obtain P&A data from the military schools or from associated budget officers. Prices for ongoing training programs are relatively stable and are formatted into a computer produced training document, entitled "Military Articles and Services List." Availability and lead time problems are minimized by forecasting requirements and reserving blocks of training spaces one to two years in advance. The specific foreign students who will use those spaces are identified once each year during a meeting with representatives from major commands located outside the continental United States.

b. Training cases are simpler than complex weapon system cases; however, the variations necessary to accommodate combinations of training experiences and associated support services cause almost every LOA to be unique. Consequently, SATFA is seldom, if ever, able to reuse LOAs stored in their word processor. However, portions of an LOA are often extracted for use on a new LOA. Training conducted

outside the continental United States, by teams dispatched by the Security Assistance Training Management Office, Fort Bragg, North Carolina, requires an extensive and detailed LOA to specify responsibilities and procedures. The LOAs for overseas training teams are prepared by SATFA. The mission to prepare training LOAs was transferred to HQ TRADOC from USASAC-O in 1978.

APPENDIX D

LOA PREPARATION PROCESSES USED BY THE AIR FORCE AND THE NAVY

1. LOA Preparation in the Air Force:

a. LOAs for weapons systems and for training cases are written by the Air Staff at Headquarters, Air Force (HQAF). Until six years ago, all LOAs were prepared there, but manpower ceiling caused a portion of the workload to be shifted to the International Logistics Center at the Air Force Logistics Center, Wright-Patterson Air Force Base, Ohio. Follow-on support cases for equipment, facilities, services, and spares are now written there.

b. LOA preparers request and receive P&A data by mail or TWX; electronic data transmission is not being used. Although the Air Logistics Centers (ALC) and PMs have sophisticated data bases which are used for materiel management, HQAF is unable to directly access them. The USAF prefers use of human judgment in case development, since so many influencing variables are present. Personnel who possess weapons system knowledge meet with non-technical managers to "fine tune" the LOA.

c. P&A data are obtained from technical experts or materiel managers at the ALCs or from the PM offices. The centrally prepared LOAs are actually a compilation of information received from decentralized sources. After case acceptance, the organization that provided the P&A data is given implementation authority for their applicable lines. This continuity of responsibility is maintained throughout the life of the case.

d. The USAF requires a formal document review. The LOA is examined for operational or materiel comprehensiveness and for legality; the comptroller does a fiscal validation. Specialists in transportation, manpower, logistics, and tactics participate. The formal review process has produced a high degree of standardization and quality since its implementation two years ago.

e. Complex cases requiring extra management effort are called systems sales. They receive a high degree of central management attention, but it is still the field experts that must provide the technical and the P&A data. For these cases, an LOA drafting conference is held at HQAF. Interested commands send representatives who act as technical experts for their commodities or weapon systems. Attendees normally communicate with their commands to obtain any supporting data needed to refine the LOA or to insure its comprehensiveness. After case acceptance, these same representatives will later become the line managers who will execute their portions of the LOA. This technique reduces inconsistencies in case contents and motivates timely performance by the commands.

f. A systems case requires a definitization conference within 45 days of case acceptance. The country or systems manager definitizes the contractual provisions of the LOA, and the Air Training Command's representative schedules the needed training. The usual attendees include contractor personnel, users from the customer country, and technical specialists familiar with the materiel being sold. Any recommendations made on the LOA are refined and made final at this conference, and, as soon as the funds are deposited, case

execution can begin. Customers are said to react positively to this approach.

g. Although the USAF has experimented with a lead command procedure, by which the primary equipment manager gathered case data from other ALCs for inclusion in the LOA, it has been abandoned in favor of the LOA draft-writing conference.

h. Under the Total Program Concept, customer countries are asked to perform a site survey or self-analysis, recording their capabilities and restrictions on a worksheet which accompanies or precedes the LOR. Samples can be found in attachments 5-12 of USAF Regulation 400-3. If appropriate, the USAF will send a team of experts to analyze the customer's needs and his intended usage rate and environment.

i. FMS data processing is being modernized. The Security Assistance Management Information System (SAMIS) Phase 1, implemented in October 1983, tracks requisitions and performs other case monitoring chores; it is similar to the Army's CISIL. SAMIS Phase 2 will use remote terminals to immediately display inventory management status. SAMIS data is stored by case line, and customer requisitions are encoded so a correct match to LOA line can be made.

j. A Management Plan is the tool used to control system case execution. It must be tailored to each specific case and explains what should take place and when it should occur. Key individuals are designated by name.

k. Documents pertaining to the FMS mission are carefully

controlled. When an LOR is received by HQAF, it is scrutinized by the designated case manager and by a designated second individual who formally attests to the appropriateness and thoroughness of its contents. If the case concerns a system or major defense equipment sale, the case manager must also schedule a formal review with the appropriate technical branch in HQAF. When P&A data are provided to HQAF by the line managers at the ALCs, it is received by the same individuals who previously certified case correctness and who now verify the P&A data for completeness. The routine time allocated to the P&A stage is 30 days.

l. Identical weapon systems sold to different countries will often vary widely in case content. Divergence from the standard US version can be substantial. Therefore, the USAF maintains that a round-table workshop, attended by command representatives and backed up by their respective staffs and data systems, is the most effective way to prepare a quality LOR.

m. A standard export package was designed, but it was found to be useful only as a point of departure in LOA refinement. Case content, even for identical weapons systems, vary too much for the standard package to be useful. For example, the A-37 aircraft has recently been sold to two Central American countries. One had no field maintenance capability, and it therefore required greater levels of spares to remain operational while components were being sent to the US for maintenance. The other country planned to perform their own maintenance, thereby requiring fewer spares. Customers are often unable to anticipate usage rates for repair parts, in which case

US experts must evaluate the circumstances and construct an LOA that will support the desired readiness level.

n. Aircraft often are requested with non-standard avionics or substituted foreign components. Obviously, the "identify, friend or foe" communication systems are unique.

o. Personal accountability encourages case accuracy. An adjustment to a case is signed by the line manager responsible for the modification and by the financial manager who computed the costs. Although prices may frequently appear inaccurate, investigations often reveal an availability problem actually caused price changes to occur. Whenever practical, one manager will remain assigned to a case from inception to conclusion.

p. The USAF organization for IL is such that IL policy and associated procedures are developed in the same office. This is done to insure that inconsistencies will not inadvertently be introduced into FMS guidance.

2. LOA Preparation in the Navy:

a. All US Navy LOAs are prepared centrally at the Security Assistance Division (OP-63), Deputy Chief of Naval Operations (Plans, Policy and Operations). Country managers with OP-63 prepare the LOA manually using information supplied by the Navy systems commands, or the PMs who manage that material. If multiple commands, or PMs, share management of material listed on the LOR, a prime command or PM is designated. This designee is responsible to gather and

consolidate the data needed for LOA preparation and to forward it to OP-63.

b. The Plans, Programs, and Analysis Branch (OP-631) of OP-63 reviews all LOAs for completeness, conformity to Department of Defense policy, and financial accuracy. The Navy does use automation to track the status of LOAs and to determine prices. The systems commands and the PM offices often utilize locally developed data bases to originate LOA content.

APPENDIX E

PROBLEM AREAS IN DEVELOPING TOTAL PACKAGE APPROACH CASE DATA

The following list presents some of the problems which TPA can be expected to produce in the development and maintenance of case data:

a. LOA Configuration: The TPA does not require that the entire span of materiel and services associated with a system be on a single LOA. To facilitate the execution of a case, MSCs often will prepare separate cases for materiel, technical assistance (or contractor assistance), calibration, logistics engineering, program management, and maintenance support arrangements. Sometimes, however, foreign governments prefer one all inclusive case; for internal processing reasons, or merely for psychological impact, a single document covering the entire transaction is desired.

b. Materiel Changes: Impending materiel changes would not be formally recorded in data bases but would influence materiel recommendations.

c. Commercial Items: Commercial items are often requested, but do not lend themselves to entry into a data base.

d. Requirements Determination: The TPA is best developed with an in-country visit by a Requirements Determination Team. The customer country must pay for this and therefore often declines.

e. Follow On Support: Foreign country utilization of equipment should be monitored, insofar as is feasible, so that systems sold can be tailored to the operating environment. The intended use, strategy, and maintenance philosophy of a country directly affects

demand for follow-on support. This information is sometimes difficult to obtain.

f. Readiness: The foreign customer may accept a lower readiness rate than that for which US units strive. Therefore, US mandated standby components may be declined by the customer.

g. Joint Contracts: Joint contracts often get a better price for the customer, but may involve expenses the customer could have avoided. For instance, Saudi Arabia would neither desire arctic testing nor capabilities on the equipment it purchases, but it is included in the technical performance parameters of some US Army items sold to the country.

h. Training: Training is often a necessary part of the TPA. It is offered on a separate LOA prepared by the SATFA. Failure to plan for the necessary training early enough to permit its timely accomplishment will adversely affect the program. Incomplete or poorly scheduled training can severely hamper the fielding of a weapon system. Conversely, a properly coordinated and comprehensive training LOA can insure the successful employment of the primary materiel. Training cases are prepared centrally.

i. Classified Data: Some of the data necessary to design total packages is classified; this complicates the handling of a data base in the preparation of an LOA.

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