LMI

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SECOND DESTINATION TRANSPORTATION

PHASE 2

LMI TASK 75-4

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PREFACE

This is the final report on LMI Task 75-4, "Second Destination Transportation." The review of the DoD second destination transportation program was initiated to identify opportunities for more effective and efficient utilization of transportation resources.

Extensive information and advice were furnished during the study by Mr. P. J. Hyman and Mr. A. R. Loyd, Directorate of Transportation and Warehousing Policy, OASD(I&L), and by representatives of OASD(C), OASD(PA&E), the Military Departments, the U. S. Marine Corps, and the Defense Supply Agency. Their assistance is gratefully acknowledged.

EXECUTIVE SUMMARY

The Logistics Management Institute has completed a review of the management of second destination transportation (SDT) within the DoD. The review included (1) evaluation of Service controls over SDT funds, (2) evaluation of the cost-effectiveness of Service use of funds, and (3) identification of areas requiring increased participation by the ASD(I&L).

The SDT program budget for FY 1976 is almost $1.1 billion. The funds are used to pay for second destination movement of military cargo worldwide, the transportation of military mail overseas, and the overseas permanent change of station moves of civilian personnel.

The review was initiated in the OSD. Discussions were held with various individuals in the office of the ASD(I&L), transportation budget analysts in the office of the ASD(C), and representatives from ASD(PA&E) and the Office of the Joint Chiefs of Staff. The DoD Directives and Instructions which provide transportation policy and responsibility assignments were examined.

Attention was next focused on the SDT programs of the Military Services. The budget formulation processes and the financial and traffic management practices of the Services were contrasted and evaluated. Specific transportation practices/systems requiring more intensive review were identified.

An evaluative study identifies many problem areas but does not necessarily recommend solutions. Nevertheless, where solutions seemed possible, we pursued them; they are included in this report.

PROGRAM REVIEW

The ASD(C) provides guidance to the Services in the submission of SDT program requirements. The Services have deviated from that guidance to satisfy the general

requirements of the analysts within ASD(C). Budget formats are the principal source of visibility of the Service SDT programs to ASD(I&L) and ASD(C). However, the formats have several significant deficiencies: (1) they do not adequately explain changes, or the causes of changes, in program requirements from the current to the budget year; (2) they are not oriented to a review of the total DoD requirements at the OSD level (i.e., it is difficult to assess the total impact of Service actions and policy decisions on the defense transportation system); (3) they do not identify major users of SDT funds within the Services; and (4) they do not facilitate a comparison of Service programs.

To overcome the above deficiencies, LMI recommends two supplemental budget exhibits--one highlights the effect of rate/workload/policy changes by Service and major command, while the second highlights the same changes by transportation mode. Each exhibit facilitates the preparation of a DoD summary (which should be accomplished within the OASD(I&L)) displaying the significant aspects of the total program by Service.

The exhibits, when coupled with a more active role in the budget review process, will provide the ASD(I&L) with improved visibility, permitting more effective execution of his transportation responsibilities.

We also recommend that the ASD(I&L) maintain an increased level of surveillance of the program during budget execution. Review, on a quarterly basis, of a few key indicators of program status is suggested.

FINANCIAL MANAGEMENT

With minor exceptions, the SDT financial management practices of the Army, Marine Corps, and Air Force are sufficient to assure adequate control of SDT funds. The practices of the Navy are not as strong: (1) they have limited capability to detect, in a timely manner, a potential short-fall of SDT funds; (2) even if a potential short-fall has been identified, ability to discern the cause and thus to select appropriate corrective action is restricted; and (3) there is an absence of accountability and incentives throughout the program.

When the study team briefed the Navy on these findings, they were informed that systems are being developed to overcome many of the deficiencies. It is recommended that ASD(I&L) evaluate the Navy's systems development efforts in light of the weaknesses perceived.

TRAFFIC MANAGEMENT

Even though most of the SDT dollars are in support of overocean movements, much of the associated decision making for this traffic is the responsibility of the Single Manager Operating Agencies and not the shipping service. Our review of traffic management practices was restricted to decision making at CONUS shipping activities. In FY 1975, these activities committed approximately $200 million in SDT funds. Specific findings pertaining to these activities are as follows:

Shipment Planning. Improving the effective use of SDT funds must begin with shipment planning (i.e., the early visibility of cargo generation so as to permit the local transportation officer to maximize shipment consolidation, arrange for special handling, and select the appropriate mode/carrier). The shipment planning systems at the Air Logistics Centers appear to be the most advanced of the Services, while those in large depots of the other Services are subject to improvement.

As an initial step toward improving shipment planning in the DoD, we recommend that the ASD(I&L) sponsor a shipment planning seminar. The purpose of the seminar should be to disseminate information on the more advanced shipment planning systems in the DoD and GSA, with the expectation that the attendees would recognize the benefits to be derived from use of the ideas presented and hence would take action to improve their systems.

Duplicate Shipments. In many CONUS activities, the U. S. Postal Service is the predominant carrier for small packages. Many field activities consider the USPS free transportation in that neither the activity nor the SDT program pays for the service. Only a few have taken the initiative to avoid or reduce the use of the USPS to destinations being served regularly by other carriers.

To correct this situation, it is recommended that the ASD(I&L) request from each of the Military Departments and DSA a time-phased plan for increasing the cost effectiveness of small package movements to destinations which are also regularly served by both the USPS and other carriers.

Commercial Paper. There are two issues related to the use of commercial paper which require direction from the ASD(I&L). The first is which fund (SDT or indicia) is to be cited on the forms; the second is the commercial paper dollar limitation on each Government Bill of Lading (GBL).

Each Service has the authority to determine which funds to cite on commercial paper. As a result, both SDT and the indicia funds are cited. While this variation in practice is not detrimental to the SDT programs of the Services, it may impede effective policy-making by the ASD(I&L). This problem will be especially serious when portions of separate funds are supporting similar programs. Therefore, it is recommended that OASD(I&L) further evaluate the use of commercial paper and issue appropriate guidance to the Services.

The Comptroller General recently has raised the limit on the use of commercial paper from $25 to $100 per GBL. The Military Traffic Management Command (MTMC) issued implementing guidance to DoD activities and then withdrew the guidance because it felt it had exceeded its authority. There are several benefits associated with the increased dollar limitations--e.g., reducing shipment processing costs and making additional carriers, who do not accept the GBL, accessible to local transportation officers. In order to make these benefits available to the Services, it is suggested that the ASD(I&L) and MTMC resolve the ambiguity with respect to the fund limitation authority.

QUICKTRANS and LOGAIR. The principal observation concerning QUICKTRANS is that the dedicated trucks, which are an integral part of the system, are poorly utilized (considerably less than 50 percent). Inspection revealed that this situation is symptomatic of a larger problem within the Navy SDT program; viz., while the Navy

operates an extensive transportation system, many Navy activities do not know how to maximize the effectiveness of their use of it. It is recommended that ASD(I&L) request the Navy to provide specific guidance to its field activities which will result in increased utilization of the system, especially the dedicated truck portion.

It appears that LOGAIR can readily be modified into an effective integrated air/surface transportation system which will reduce operating costs by a minimum of $6.7 million (almost 14 percent) without measurable effect on service or pipeline investment. The use of smaller aircraft and a limited system reduction may yield additional savings of $5.3 million. It is recommended that the ASD(I&L) request the Air Force to develop plans for an integrated LOGAIR system.

COROLLARY ISSUES REQUIRING ATTENTION

Three SDT-related issues, which have a strong influence on some of the specific areas we examined, were encountered frequently throughout the study. Two of these issues should be subjected to a close examination in order to assure that their adverse impact upon DoD transportation is minimized.

UMMIPS Abuse. The DoD transportation system responds to the requirements of the requisitioner. The issue priority assigned by the requisitioner dictates not only the supply priority but also the shipping and transportation priority. There is considerable evidence that issue priority privileges are being abused. (Air-to-surface diversion rates often are in excess of 80 percent and some CONUS installations do not accept shipments on weekends, even though the assigned priorities would dictate that receiving activities operate seven days a week.)

The UMMIPS needs to be reevaluated. Two alternatives to the present system appear to have significant potential: (1) a system in which the issue and transportation priorities were individually specified and (2) a variation of the above, with transportation priorities being different for intra-CONUS and overseas shipments. Both alternatives

would allow the requisitioner to identify separately his supply requirement (which, if not met, could deadline equipment for an extended period) and his transportation requirement (which, in CONUS, would have an effect of no more than a few days).

We recommend that the ASD(I&L) initiate a study of the UMMIPS system to determine if the overall structure of shipment priorities can be made more consistent with current supply and transportation requirements.

Airlift Policy. Discussions with Service representatives on what actions they would take given a potential SDT fund shortage revealed that most would institute more aggressive challenge criteria for MAC eligible cargo. This action, however, could trigger another round of MAC tariff increases which could lead to additional airlift curtailments, etc. This cycle is of considerable interest to DoD and has been the focus of many proposals. Most of these proposals are directed specifically to the ASIF problem and have not been formulated within the context of the total defense transportation system.

The problem is extremely complex. Therefore, we recommend that the ASD(I&L) initiate an intensive study of airlift policy. The study should be structured so that it provides the ASD(I&L) with a comprehensive analysis of the numerous proposals now extant within the DoD.

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I. INTRODUCTION

At the request of the Assistant Secretary of Defense (Installations and Logistics), ASD(I&L), the Logistics Management Institute has reviewed the second destination transportation (SDT) program of the Department of Defense.[1] The objectives of the review were the (1) evaluation of Service controls over SDT funds, (2) evaluation of Service capabilities to use the funds in a cost effective manner, and (3) identification of areas requiring increased participation by the ASD(I&L) in order for him to more effectively carry out his assigned responsibilities.

The review was made in two phases. The objectives, scope, and methodology were defined during Phase 1. During Phase 2, while the detail review was being conducted, three interim reports were submitted (April, June, and October 1975). Interim Report 1 addressed the role of the Office of the Assistant Secretary of Defense (Installations and Logistics), OASD(I&L), in SDT; Interim Report 2 focused on SDT budgeting; while Interim Report 3 reviewed the SDT financial and traffic management practices of the Military Services.

Much of the material presented in the interim reports is included in this final report on Task 75-4. In the following section, the characteristics of SDT within the DoD and the role of the ASD(I&L) in SDT are discussed. Section III summarizes the SDT programs of the Military Services: the Service programs are evaluated in Section IV. Section V addresses several major SDT-related issues which impact upon effective use of SDT funds but were outside the scope of the Task. Recommendations for improving SDT within the DoD are provided in Section VI.

[1] A copy of the Task Order is included as Appendix A.

II. BACKGROUND

A. CHARACTERIZATION OF SDT

Second destination transportation is frequently referred to as all transportation which is not first destination. Department of Defense Instruction 5000.8 defines first destination transportation as:[2]

> "(1) The movement of property from f.o.b. point of origin to the point at which the materiel, in the form required for use, is first received for use or storage for subsequent distribution in the military supply system. (2) The costs of such movement,"

and second destination transportation as:

> "(1) The subsequent movement of property for intradepartment or interdepartment distribution from the point of storage at which originally received from f.o.b. point of origin. (2) The costs of such movement."

Second destination transportation funds cover the cost of shipping cargo from CONUS depots to field activities world-wide, including the over-ocean segment whether performed by the Military Sealift Command (MSC), the Military Airlift Command (MAC), or by commercial carrier. They also cover the movement of retrograde cargo, some inter- and intra-theatre movements of cargo overseas, and the over-ocean segment of Army Post Office (APO) mail. In addition, SDT supports the movement of some civilians on permanent change of station (PCS) overseas, CONUS port handling charges, and, in the case of Army, the cost of operating overseas ports. Finally, SDT supports the movement of military cargo being shipped between CONUS installations, and the movement of excess materiel from these installations back to major stock points.

The Military Services are directly responsible for planning, programming, and expending SDT funds. SDT is a separate line item under Force Program VII: Central

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[2]Department of Defense Instruction 5000.8, "Glossary of Terms Used in the Areas of Financial, Supply, and Installation Management," 15 July 1961.

Supply and Maintenance, in the Operations and Maintenance budget of each Service. In Fiscal Year 1975, the Services requested second destination transportation funding of almost $1.1 billion (see Table 1).[3]

TABLE 1

SECOND DESTINATION TRANSPORTATION
BY SERVICE FOR FY 1975

MILITARY SERVICE	FY 1975 ($ Millions)
Army	488
Navy	201
Marine Corps	17
Air Force	380
TOTAL	1,086

The Defense Supply Agency (DSA) did not request SDT funds for FY 1975, nor were any second destination transportation charges highlighted in Military Department stock funds. (DSA and all stock funds include transportation expenses in the cost of the item.)

Even though the Military Services have direct responsibility for SDT funds, the Single Manager Operating Agencies--MAC, MSC, and the Military Traffic Management Command (MTMC)--also play significant roles in SDT. Once a Service makes the shipping decision to move items overseas, the actual movement of the item from the point of embarkation is the responsibility of these transportation agencies.[4, 5, 6] While much of

[3]Source: October 1974 budget submission to the Office of the Assistant Secretary of Defense (Comptroller), OASD(C).

[4]DoD Directive 5160.2, "Single Manager Assignment for Airlift Service," 17 October 1973.

[5]DoD Directive 5160.10, "Single Manager Assignment for Ocean Transportation," 24 March 1967.

[6]DoD Directive 5160.53, "Single Manager Assignment for Military Traffic, Land Transportation, and Common-User Ocean Terminals," 24 March 1967.

the cargo moved or routed by these agencies are SDT movements, the agencies also support other movements such as household goods, stock fund and DSA items, POL (petroleum, oil, and lubricants), and some first destination traffic.

B. ROLE OF ASD(I&L)

1. Assigned Responsibilities

The ASD(I&L) has been designated the principal staff assistant to the Secretary of Defense in matters of transportation.[7] In this role, he has issued or participated in the issuance of, several DoD Directives and Instructions concerning various DoD transportation functions. While many of these Directives and Instructions are not directly pertinent to LMI Task 75-4, several have significant implications because of the assignment of responsibilities contained therein.

The ASD(I&L) has overall responsibility for "establishing policies and providing guidance to DoD components concerning (1) the efficient and effective use of DoD and commercial transportation resources and (2) the establishment and operation of Transportation Single Manager Agencies."[8] More explicit ASD(I&L) assignments concerning postal operations, military standard logistics data systems, movement of personal property, the Uniform Materiel Movement and Issue Priority System (UMMIPS), and the Single Manager Operating Agencies are contained in other Directives.[9]

The ASD(I&L) has not been assigned specific responsibility for second destination transportation. That responsibility is implied in his overall responsibility for transportation. However, the ASD(I&L) has been assigned specific responsibilities for

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[7] DoD Directive 5126.22, "Assistant Secretary of Defense (Installations and Logistics)," 30 January 1961.

[8] DoD Directive 4500.9, "Transportation and Traffic Management," 29 November 1971.

[9] See Appendix B for a list of Directives and Instructions covering DoD transportation and closely related functions.

various segments of second destination transportation, including postal operations and the LOGAIR and QUICKTRANS systems (i.e., the contract CONUS airlift systems of the Air Force and Navy respectively).[10]

2. Execution of Responsibilities

In carrying out assigned transportation responsibilities, the ASD(I&L) (1) issues formal policy and instructions, (2) participates in the budget/program review process, (3) reviews the performance of the Single Manager Operating Agencies, and (4) participates and provides guidance in resolving current DoD transportation problems.

The transportation policy and/or implementing instructions issued by the ASD(I&L) include (1) reporting requirements for the Single Manager Operating Agencies,[11] (2) tasking the Single Manager Operating Agencies to represent the DoD in transportation regulatory proceedings, and (3) DoD policy relative to use of containers in surface transportation.

The principal ASD(I&L) involvement in the second destination transportation programs of the Services occurs during budget review. In this capacity, he assists the ASD(C) who conducts the review, although advance data is not routinely received for review and analysis. The ASD(I&L) does not explicitly monitor the performance of the Military Services during execution of the SDT budget.

The ASD(I&L) attempts to keep abreast of the performance of the Single Manager Operating Agencies through one-time inquiries, personal contact, and evaluation and analysis of information contained in several recurring reports including:

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[10] The ASD(I&L) was recently assigned an FY 1976 Management by Objective for SDT: Objective 9, Action 3, Improve effectiveness of management of second destination transportation.

[11] The reporting requirements for MSC and MTMC are included in DoDI 4100.31, "Reports on Single Manager Operations," 2 September 1960, while the reporting requirements for MAC are contained in DODD 5160.2, "Single Manager Assignment for Airlift Service," 17 October 1973.

1) Quarterly Progress Report, MTMC

2) Quarterly Report, MAC

3) Annual Command Report, MSC

4) Monthly Financial Statement, MSC

5) Airlift Service Industrial Fund Report, MAC

6) Quarterly Group Movements, MTMC

The ASD(I&L) also is involved in the resolution of current SDT or SDT-related problem areas including:

1) incorporating the C-130 tactical fleet into MAC operations;

2) developing policy and guidance for monitoring and controlling administrative support aircraft;

3) revising of the MTMC Charter to incorporate world-wide traffic responsibility;

4) evaluating the CONUS transportation system including passenger movement on military aircraft and reassessment of the effectiveness of LOGAIR/QUICKTRANS;

5) determining the requirement, use, and relationship to MAC, of the civil reserve air fleet;

6) identifying/assessing the advantages and disadvantages of the industrial funding of MAC;

7) determining the requirements, type of ships, timing, etc. of the MSC fleet and;

8) examining the increased use of air transportation to shorten delivery times and thereby reduce stock level requirements.[12]

3. Relationship to Other DoD Components

The ASD(I&L) responsibility for DoD transportation is shared with other DoD components. The ASD(C) is responsible for reviewing the SDT budgets of the Services and the budgets of Single Manager Operating Agencies. In this capacity, he relies upon the

[12] FY 1976 DoD Management by Objective; Objective 9, Action 4.

ASD(I&L) for comments during the review process. The ASD(C) and ASD(I&L) also coordinate all policy and guidance which have an impact on transportation dollars.

The ASD(I&L) has limited contact with the Military Services concerning transportation except during budget reviews, or when discrete problems arise (such as those listed above).

Other DoD components, including the Assistant Secretary of Defense (Program Analysis and Evaluation), the Joint Chiefs of Staff, and DSA, also play strong roles in transportation. However, their relationship with ASD(I&L) on transportation matters has not been found to be critical to this task.

III. SDT WITHIN THE SERVICES

A. THE ARMY SDT PROGRAM

1. Budget Development

As previously shown in Table 1, Army's FY 1975 SDT program was approximately $488 million. Table 2 illustrates the total Army program by mode of transportation.

TABLE 2

ARMY SDT PROGRAM BY MODE

Mode[a]	Dollars (000s)
Land Transportation	$ 54,856
Air Transportation - MAC	59,175
Air Transportation - Commercial	29,286
CONUS Port Transshipment - MTMC	45,456
Sea Transportation - MSC	262,638
Overseas Water Ports	25,943
Other Transportation Facilities	10,490
TOTAL	$488,444 [b]

[a] The specific costs embedded in these modes are described in Appendix C.

[b] Includes reimbursements of $42,192.

Fifteen Army commands actually plan, program, and budget for SDT. These commands and their associated total SDT programs (as of October 1974) are displayed in Table 3.[13]

[13] Throughout the report, the Army Finance and Accounting Center is treated as a command, even though it is actually a fund management agency.

TABLE 3

ARMY SDT PROGRAM BY COMMAND

Command	Dollars (000s)
1. U. S. Finance and Accounting Center	$363,387
2. U. S. Army Materiel Command	36,036
3. U. S. Military Academy	170
4. Health Services Command	59
5. U. S. Army Communications Command	150
6. Training and Doctrine Command	1,472
7. The Adjutant General	33,487
8. The Surgeon General	206
9. Army Corps of Engineers	5
10. U. S. Army Recruiting Command	70
11. Military District of Washington	10
12. U. S. Forces Command	6,786
13. U. S. Army - Korea	4,843
14. U. S. Army - Japan	13,457
15. U. S. Army - Europe	28,306
TOTAL	$488,444

Each of the fifteen commands has a separate, yet integrated, role in the Army SDT program. To illustrate:

- funds for overocean transportation costs, such as MAC, MSC, and MTMC port handling charges, are held by the Army Finance and Accounting Center;
- the Army Materiel Command (AMC) supports the movement of cargo between CONUS depots and aerial ports, ocean terminals, and posts/camps/stations within CONUS;
- the overseas commands support the overseas port handling and inland drayage costs, regardless where the cargo originates; and
- Military Official Mail, the Courier Service, and the APO carried by MAC are the responsibility of The Adjutant General.

The development of the Army SDT budget is an iterative process involving the Comptroller of the Army (COA), the Deputy Chief of Staff for Logistics (DCSLOG), and the fifteen commands identified in Table 3. The COA is primarily involved in providing program guidance and reviewing the total Army SDT program.

The Program and Budget Division of the Supply and Maintenance Directorate, DCSLOG, is responsible for the development of the SDT program. The Division responsibilities include:

- compiling the command SDT budget submissions into an Army-wide format during each budget cycle;
- reviewing the command submissions to insure that appropriate transportation rates have been used;
- tracking changes from one budget iteration to the next; and
- monitoring the performance of Army SDT throughout the fiscal year.

The transportation requirements are developed at the command level, then reviewed and approved by DCSLOG.

In the review of Army SDT budgeting, time did not permit examining the budget development process of each command listed in Table 3. However, four of the larger CONUS commands (i.e., the Army Finance and Accounting Center (FAC), AMC, The Adjutant General, and the U. S. Forces Command) were reviewed with emphasis on AMC. In FY 1975, the SDT budgets of these four commands totaled almost $440 million, 90 percent of the total Army SDT program.

Even though the Finance and Accounting Center pays for all port handling and overocean movement costs, the Center does not develop any forecasts of SDT requirements. The overocean and port handling requirements are developed by the Commodity Commands within AMC and forwarded to the Performance Management Divison, Transportation and Services Directorate, DCSLOG, via the Logistics Control Agency, AMC Headquarters, and the DCSLOG Data Processing Center in Radford, Virginia.[14] The Performance Management Division reviews the total Army requirements prior to a final compilation being produced by the DCSLOG Data Processing Center for the Finance Center to use as its official SDT submission.

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[14]See Army Regulation 55-30, "Space Requirements and Performance Reports for Transportation Movements," 5 July 1973.

The AMC FY 1975 program is approximately $36 million, as shown in Table 3. These dollars are allotted by AMC to 27 installations and National Inventory Control Points (NICPs). Table 4 shows the FY 1976 allotments among the 27 installations and NICPs, as included in the Command Operating Budget.[15]

It was previously noted that AMC supports the movement of cargo between CONUS depots and aerial ports/ocean terminals/posts/camps/stations within CONUS. A further delineation of these movement responsibilities is as follows:

- the seventeen depots, which fall under the Major Item Data Agency (MIDA) umbrella, pay for the movement of material from CONUS depots to posts/camps/stations and aerial ports/ocean terminals within CONUS (except for containerized cargo moving under MSC container agreements);
- the Commodity Commands pay for the movement of excess material (including reparables) from CONUS posts/camps/stations to the depots for return to storage or rebuild; and
- the Tobyhanna/MTMC fund covers the cost of CONUS movement of retrograde material from the aerial ports/ocean terminals to Army depots.[16]

The AMC SDT budget is compiled at AMC Headquarters, with limited input from the Commodity Commands. Historical movements are used to develop a command forecast for the budget year. When the Army SDT program is approved, the AMC dollars are then allotted (via Command Operating Budgets) among the installations and NICPs listed in Table 4, with MIDA acting as the funding authority for the seventeen depots.

The MIDA SDT budget is developed prior to the AMC budget and at a lower level of detail. The Commodity Commands forward to MIDA their SDT CONUS requirements for the budget year. These requirements are summarized by originating depot to form the basis for allocating MIDA SDT dollars among the depots. If a significant shortfall exists, MIDA then negotiates with AMC for additional funding.

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[15]The FY 1975 allotments were not available. The FY 1976 data were received from AMC personnel on 24 April 1975.

[16]The MTMC performs a service for Army in that they arrange for the transportation of retrograde material and cite this fund source.

TABLE 4

FY 1976 AMC SDT BUDGET

Installation/NICP	Dollars (000s)	Short Tons
MIDA	$23,142	351,401
1. Anniston Army Depot	2,800	75,249
2. Ft. Wingate Depot Activity	200	1,960
3. Letterkenny Army Depot	2,100	28,762
4. Lexington Army Depot	1,900	41,853
5. Navejo Depot Activity	200	1,351
6. New Cumberland Army Depot	2,950	30,860
7. Pueblo Army Depot	2,400	27,613
8. Red River Army Depot	2,600	32,248
9. Sacramento Army Depot	850	2,934
10. Savannah Army Depot	542	9,841
11. Seneca Army Depot	800	13,705
12. Sharpe Army Depot	500	16,528
13. Sierra Army Depot	500[a]	15,140
14. Tobyhanna Army Depot	1,600	10,639
15. Tooele Army Depot	2,600	32,922
16. Umatilla Army Depot	300	6,998
17. Corpus Christi Army Depot	300	2,798
COMMODITY COMMANDS	8,460	88,733
18. AVSCOM	1,900[b]	5,277
19. ECOM	325	3,308
20. MICOM	800	9,103
21. TACOM	3,000	31,000
22. TECOM	160	2,545
23. TROSCOM	1,075[c]	8,900
24. ARMCOM	1,200	28,000
OTHER	5,450	137,651
25. Tobyhanna/MTMC	4,848	87,937
26. Taiwan	600	49,714
27. International Logistics Command	2	-
TOTAL - AMC	$37,052	577,785

[a] Includes $315 of SDT funds which are not associated with short tons.

[b] $1,581 not associated with short tons.

[c] $200 not associated with short tons.

The SDT program of The Adjutant General (TAG) supports all overocean mail traffic along with all inter- and intra-theatre movements using foreign mail services. TAG develops its SDT budget requirements by the following major categories:

- Air Mail--partitioned into commercial air and MAC;
- Military Official Mail; and
- Space Available Mail.

Historical data are used to project future requirements by the above categories. The requirements are then costed out at the latest rates.

Development of the U. S. Forces Command (FORSCOM) SDT budget is initiated upon receipt of a dollar guidance figure from the Department of the Army (DA). FORSCOM then provides fiscal guidance to each of twenty-two subordinate field installations. The field installations develop their requirements based upon historical data, supplemented by knowledge of unusual future movements. (The requirements are stated in terms of dollars only, with no tonnages displayed). FORSCOM Headquarters then contrasts the installation requirements with DA guidance to yield an overall estimate of whether the command can satisfy its transportation requirements.

2. Financial Management Practices

Not only is the Program and Budget Division within the Directorate of Supply and Maintenance, DCSLOG, responsible for SDT budget formulation, it also monitors the use of the funds during budget execution. SDT funds are not held at the DCSLOG level; they are passed directly from the Comptroller of the Army to the fifteen commands responsible for SDT (see Table 3).

The principal focus of DCSLOG during budget execution is the status of FAC's program, even though it receives cost and movement reports from the Single Manager Operating Agencies and fund status reports from other Army commands. Information on the workload of these other commands; however, has not been routinely available to DCSLOG personnel. DCSLOG currently is developing a procedure by which it will receive

periodic financial and workload status reports from all commands holding SDT allotments.[17] The purpose of this effort is to keep DCSLOG more fully abreast of the status of SDT within the Army. A monthly SDT status report is also made available to the Assistant Secretary of the Army (Installations and Logistics).

The Finance and Accounting Center role is to pay for the cost of all Army overocean transportation. As noted previously, FAC does not develop any transportation requirements nor does it monitor workload performance. FAC also serves as the central billing and payment center for Army and Air Force Government Bills of Lading (GBLs). The Army Management Fund (AMF) is used to pay carriers of Army cargo while the appropriate transportation account code is cited for payment of Air Force GBLs. The Commodity Commands, depots, etc. fund the AMF based upon the estimated transportation cost appearing on the Army GBL. The AMF bills the shipping activity for deviations in excess of $100 between the GBL estimate and actual charges.

The SDT funds of AMC are distributed directly to eleven major commands/activities.[18] AMC receives a series of monthly and quarterly reports on the performance of these eleven commands including:

1) fund status;

2) the accuracy of forecasted performance (with explanations required for significant variances);

3) anticipated program changes; and

4) unfinanced requirements.

In addition, during the fourth quarter, abbreviated budget reports and phone calls are used to monitor the SDT program and identify potential problems or funds available for reprogramming.

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[17] These financial and workload status reports are to be copies of existing command reports. DESLOG plans no additional investment in personnel or systems support to obtain this information.

[18] See Table 4 for a listing of these commands and activities (all the dollars distributed to the seventeen depots are alloted to MIDA).

The Major Item Data Agency coordinates and monitors that portion of AMC's SDT program which is administered by CONUS depots. Work Authorizations are used by MIDA to pass administrative responsibility for its SDT funds to the depots. The MIDA accounting and reporting system does not permit issuing Work Authorizations for more than the total SDT funds received from AMC. Furthermore, the system rejects any bills received from the AMF that will cause the Work Authorization at a depot to be exceeded. In such cases the transportation costs must be absorbed by the depot's industrial fund.

MIDA receives a series of semi-monthly reports on the status of SDT at the seventeen depots to which it issues Work Authorizations. These reports provide information on:

1) status of funds;

2) forecasted and actual shipments by mode and associated costs; and

3) unfinanced requirements.

In order to maintain close control over the SDT program near the end of the fiscal year, fund status data are requested daily from the depots.

Even though the responsibility for SDT funds is assigned to the depot, the local transportation officer (TO) is not given administrative responsibility for the funds nor is he always aware of their status. The Production Planning and Control Office (PPC), Directorate of Supply, monitors the status of these funds. If additional funds are required, then the PPC contacts MIDA directly, with the TO only becoming involved when additional funds are not made available.

While the depot Work Authorizations represent the bulk of AMC's SDT program, the Commodity Commands[19] have a significant, yet greatly different role. Commodity Command SDT funds support the return of excess material to depots, and for the leveling of stocks among depots. In such situations, the local transportation officer

[19]Only the Tank/Automotive Command (TACOM) was reviewed during this task.

cites the appropriate Commodity Command transportation account code on the GBL. A copy of the GBL is then sent to the Commodity Command which uses the estimated transportation cost as an obligation. Each month, the commands issue advances to the AMF for the total amount of all obligations incurred during the month.

The SDT funds allotted to The Adjutant General support all overocean and all inter- and intra-theatre transportation costs of air mail, military official mail, space available mail, and surface mail. Each field postal activity submits a monthly report on the amount of mail moving by category (i.e., by air, surface, etc.) and channel. Approved rates are then applied to these volumes to generate obligation estimates. These data permit TAG to anticipate shortfalls or excess funds and are the basis for the allotment to the Military District of Washington, which is responsible for controlling TAG SDT bills.

FORSCOM allots SDT dollars to twenty-two field activities at the beginning of each fiscal year; Headquarters, FORSCOM, retains a small percentage for meeting unforecasted requirements.

The principal means by which FORSCOM monitors its SDT program are through two quarterly reports which provide obligations, workload status, and cost by field activity, and the latest fiscal year program for each activity.

A persistent problem in much of the above monitoring effort is the timeliness of the movement data contained in the various reports. The Army Blue Book report as of 31 December 1974 was generated on 4 April 1975. Receipt of MAC, MSC, and MTMC reports by DCSLOG varied from seventy-five days to over 120 days from the closeout date, depending on the specific report and data source. The AMC quarterly reports are received four to five weeks after the close of a quarter. Only at the MIDA level did we observe the capability to closely monitor the SDT program. MIDA can produce some depot monitoring reports on a daily basis, and does so near the end of each fiscal year.

This flexibility, coupled with the SDT funds actually being allocated to the depots, permits MIDA to effectively monitor its SDT program. However, MIDA's portion of the Army SDT program is less than ten percent.

3. Traffic Management Practices

While the distribution patterns of Army SDT have undergone considerable modification since the introduction of the Direct Supply Support (DSS) concept, the CONUS traffic management practices, as executed by local transportation officers, have remained unchanged. The Military Traffic Management Regulation[20] provides the overall direction for Army transportation, with AMCR 55-8, "Control of Premium Transportation," governing the use of air transportation.[21]

AMCR 55-8 states that all air eligible cargo weighing over 500 pounds must be confirmed with the requisitioner prior to release of the shipment for airlift. For cargo moving overseas, the Logistics Control Agency (LCA), located at the Presidio of San Francisco, is charged with this responsibility, while the individual transportation officers have the responsibility for confirming CONUS shipments.

During the course of this study, the traffic management practices of three Army depots--Letterkenny, New Cumberland,[22] and Tobyhanna--were reviewed. These practices are summarized below:

a. Shipment Planning. Even though there is a shipment planning capability in the Systemwide Project for Electronic Equipment at Depots-Extended (SPEEDEX), the TO is not aware of what cargo will be generating until it is received in the distribution

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[20]AR 55-355, NAVSUP PUB 444(Rev), AFM 75-2, MCO P4600.14A, DSAR 4500.3, "Military Traffic Management Regulation, March 1969.

[21]AMCR 55-8, "Control of Premium Transportation," 24 April 1974.

[22]Our review of the traffic management practices at New Cumberland did not include the DSS. Thus, the placement, scheduling, and loading of containers was outside our review.

terminal to be labeled, sorted, etc. in preparation for shipment. As a result, shipment consolidations are based on anticipated cargo generation from previous experience rather than firm knowledge. Material requiring special handling/delivery are attended to after receipt in the distribution terminal.

b. Use of Parcel Post. The identification of cargo to be shipped by parcel post is made by computer prior to receipt of the cargo by the TO. All parcel post eligible cargo moves by that mode. One depot has developed a manual intervention procedure to avoid duplicate shipments (i.e., by private carrier and the Postal Service) to major customers served on a regular basis.

c. Use of United Parcel Service (UPS). The three depots do not use UPS because the TOs believe UPS has several deficiencies including (1) they cannot trace shipments and (2) they provide poor service.

d. Use of Federal Express Corporation (FEC). The TOs have varied attitudes toward the service and cost of FEC. One depot uses FEC extensively--the TO has found that it is cheaper than air freight forwarders, frequently cheaper than air mail, and provides excellent service for high priority shipments. Another TO has found that FEC is not cost effective.

e. Use of Commercial Forms. The use of commercial forms is inconsistent. One TO has found that commercial forms provide increased flexibility in carrier selection. While he is limited to a $25 maximum for any one shipment, he anticipates extensive use of commercial forms when the limit is raised to $100. Other TOs stated that they use commercial forms only when there appears to be no reasonable alternative.

f. Carrier Performance. Each depot uses the MILSTEP 1B Reports for monitoring carrier performance--the reports have even been used as the basis for suspending carriers. This use has made the reports more effective since the carriers are aware that the service they provide is continuously being contrasted with that being provided by their competitors. The MILSTEP 1B Reports are also used by AMC to rank

the relative performance of the transportation divisons in the depots. This depot ranking has proved to be an incentive to the TOs to provide as high a level of service as possible.

g. Shipment Challenging. Each depot follows AMCR 55-8 in challenging most airlift eligible shipments over 500 pounds. However, all Transportation Priority (TP) 2 shipments are automatically moved by surface (this is current Army policy), so only TP 1 shipments over 500 pounds are being challenged. There are exceptions to this TP 1 challenge criteria which are geared to the specific location of each depot and the commercial transportation resources at its disposal. These include, for example, not flying any shipments, regardless of priority, to posts/camps/stations within 400 miles of the depot--within this range surface movement has been found to be as responsive as air. The only time surface requisitions are challenged is when there is an obvious error, which has been overlooked by supply personnel.

LOGAIR and QUICKTRANS are seldom used by Letterkenny, New Cumberland and Tobyhanna Army Depots since they are not located near regular LOGAIR or QUICKTRANS stations. The TOs also stated that their cargo does not receive the same priority treatment as that of the host Service. (This allegation was subsequently denied by both LOGAIR and QUICKTRANS representatives.)

h. TO Performance. Army TOs are being rated almost entirely on service, with little attention being given to whether they have used transportation dollars effectively. Dollars saved through shipment consolidation or airlift challenges are not taken into consideration in TO evaluation.

i. Organization. In each of the three depots, the transportation function is a responsibility of the Directorate of Supply.

B. THE NAVY SDT PROGRAM

1. Budget Development

In its October 1974 budget submission to OASD(C), the Navy FY 1975 SDT program totaled approximately $200 million, as shown in Table 5. The Naval Material

Command (NAVMAT) funding responsibility for this program was assigned to the Naval Supply Systems Command (NAVSUP) beginning with FY 1975.[23] Beginning with FY 1976, NAVSUP has assumed total Navy SDT funding responsibility with the following exceptions:[24]

- organic material incident to relocation and/or rotational deployment;
- civilian personnel household goods;
- mine countermeasures equipment and material; and
- MSC/commercial ship replenishment programs.

These exceptions will continue to be budgeted for and funded by major claimants. In FY 1976, the exceptions total approximately $3 million.

TABLE 5

NAVY SDT PROGRAM BY MODE

Mode[a/]	Dollars (000)
Land Transportation	$ 36,113
Air Transportation - MAC	45,054
Air Transportation - Commercial	42,343
CONUS Port Transshipment - MTMC	13,431
Sea Transportation - MSC	63,889
TOTAL	$200,835

[a/] The specific costs embedded in these modes are described in Appendix D.

Development of the Navy SDT budget is the responsibility of the Transportation and Warehousing Directorate, NAVSUP. The SDT budget is then included in the total NAVSUP budget which in turn is included in NAVMAT's and eventually in the Department of the Navy budget.

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[23] OPNAVINST 4600.24, "Management of Navy Transportation; responsibilities for," 7 November 1973.

[24] Ibid.

The entire Navy SDT budget is developed within the Transportation and Warehousing Directorate. Historical movement statistics together with known changes are used to project budget year requirements. The forecasted requirements are then costed out at the unit cost experience of the previous year or the latest rates. The role of other commands in the budget cycle is restricted to informing the Transportation and Warehousing Directorate of unusual situations, such as base closures, that directly impact upon SDT.

The Navy Material Transportation Office (NAVMTO), Norfolk, Virginia, a field activity of NAVSUP, develops the short- and long-range Navy tonnage estimates for airlift and sealift. The estimates include first destination material, household goods moving under permanent change of station, and stock fund items, in addition to second destination cargo. These overocean workload estimates, however, are developed independently from the SDT forecasts developed by NAVSUP for SDT.

2. Financial Management Practices

Three systems commands were assigned SDT Operating Targets (OPTARs) for FY 1975,[25] as shown in Table 6. The OPTARs fund the movement of material managed or assigned to the OPTAR holder. For example, if the Naval Air Systems Command (NAVAIR) initiates the movement of an aircraft engine from Alameda to Oklahoma City, NAVAIR's Transportation Account Code would be cited as the fund source.

TABLE 6

NAVY SDT OPERATING TARGETS
FOR FY 1975

Command	OPTAR ($000s)
NAVAIR	$22,528
NAVFAC	6,600
NAVSEA	24,664
TOTAL	$53,792

[25] NAVSUP letter 0513N/SN of 14 January 1975.

In addition to the commands issued OPTARs for FY 1975, NAVSUP had planned to issue OPTARs to six more commands in FY 1976, as follows:

1) Strategic Systems Project Office

2) Bureau of Naval Personnel

3) Bureau of Medicine and Surgery

4) Naval Intelligence Command

5) Naval Security Group Command

6) Chief of Naval Education and Training

Even with the issuance of OPTARs, NAVSUP adheres to a centralized management approach for SDT primarily because it believes the funds can be managed more effectively at the headquarters level. In addition, there is a prevailing attitude that financial responsibility cannot be a practical incentive for a transportation officer since his primary responsibility is to perform a service for his customers. As such, his options are limited within the guidelines set forth in various traffic regulations and the required delivery dates of his customers. As a result, NAVSUP has apparently decided not to issue any OPTARs for FY 1976.

The principal users of Navy SDT funds are:

- Naval Supply Centers;
- Naval Shipyards and Ammunition Depots; and
- Naval Air Stations.

With the exception of NAVSUP as Program Manager, none of the parent commands of the above installations, nor any of the other OPTAR holders, play a significant role in the management of Navy SDT funds. NAVSUP does not routinely provide the commands with information concerning the status of their OPTARs, nor have the commands any incentive to establish reporting systems whereby they could monitor their own SDT program.

All GBLs generated by Navy field activities are forwarded to NAVMTO which enters estimated costs on the document. These estimates are the basis for an advance payment to the Navy Management Fund (NMF) by NAVSUP. The NMF bills NAVSUP monthly for any differences between actual charges and NAVMTO estimates.

The NAVMTO is developing an SDT management information system (MIS) for NAVSUP. The driving force behind the MIS was the extensive delay (often months) between the time of actual movement of material to overseas locations and receipt of cost data from the Single Manager Operating Agencies at which time the Navy is first aware of the actual amount of funds expended.[26]

The heart of the NAVSUP MIS is the capture and cost extension of preliminary movement data obtained from MAC lift cards, MSC manifest summaries, and copies of GBLs. NAVSUP SDT account balances are then reduced in accordance with the estimated costs. Upon payment of the final bill, the estimated costs are replaced by the actual costs. The bulk of the cost extension is being accomplished manually; however NAVMTO has been striving to computerize much of this function. When fully implemented in September 1977, the MIS should provide NAVSUP with considerably more timely information on its SDT program.

NAVSUP has expressed interest in also using the MIS to review the performance of Navy requisitioners and determine if they are making excessive or unreasonable demands on transportation resources. However, before much progress can be made in that direction, additional computer capability is required. (The present MIS and supportive functions have exhausted the capabilities of the present hardware.)

NAVMTO receives extensive reports on the QUICKTRANS system which are also made available to NAVSUP on a routine basis. These reports are outside the MIS operation.

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[26]This problem is not unique to the Navy SDT program, late billings from the Single Manager Operating Agencies are prevalent throughout the DoD.

3. Traffic Management Practices

Among the many functions assigned to NAVMTO are:[27]

- administering the Navy contract cargo airlift system (QUICKTRANS);
- challenging the validity of shipper service determined airlift requisitions; and
- providing technical direction, guidance, and assistance to Navy shipping activities worldwide on transportation matters.

Administering the QUICKTRANS system involves (1) developing total system requirements, (2) performing the air clearance function, (3) specifying the cargo to be loaded on each aircraft, and 4) monitoring system performance. (For a description of the QUICKTRANS system, see Appendix F.) The air clearance function, however, appears to be a cursory review as Navy considers QUICKTRANS to be a free flow system. The only shipments requiring clearance by NAVMTO are:[28]

- shipments requiring specific flights or to destinations not serviced by QUICKTRANS;
- shipments requiring special handling, such as secret/sensitive cargo, certain types of explosives, and cargo requiring an escort;
- shipments exceeding 5,000 pounds; and
- outsize cargo.

Shipper service requirements for MAC airlift are challenged by NAVMTO if the shipments:[29]

- weigh over 500 pounds;
- require expediting action; or
- require special handling.

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[27] NAVSUPINST 5450.90A, "Functional Mission Statement of the Navy Material Transportation Office, Norfolk, Virginia," 29 June 1971.

[28] NAVSUPINST 4630.21, "Use of Air Transportation by Navy Shippers," 31 August 1973, including revision data 28 February 1975.

[29] Ibid.

NAVMTO also challenges all requisitions that contain inconsistent or inaccurate data. NAVMTO challenged 2,182 shipments during March 1975, with 736 shipments being diverted to surface movement. Total savings for the month were estimated to be $1,536,147.

During the study, the CONUS traffic management functions at two Navy Supply Centers (NSC), Norfolk and Oakland, and two Naval Air Stations (NAS), Norfolk and Alameda, were reviewed. While there was some consistency in traffic management functions between the two NSCs and between the two NASs, it appeared to stem from similarity of mission rather than from a clearly defined approach to traffic management. A summary of traffic management practices at those four installations follows.

a. Shipment Planning. None of the supply functions at these activities provide advance notice to the transportation function on the classification and destination of cargo being generated for shipment. All decisions pertaining to cargo hold time (for consolidation purposes) are based on experience rather than actual knowledge of the traffic.

b. Use of Parcel Post. The identification of cargo to be shipped by parcel post at the supply centers is made by a computer prior to receipt of the cargo by the TO. All parcel post eligible cargo moves by that mode.

Parcel post is the responsibility of the TO at the air stations, and thus he decides which cargo will be shipped by parcel post. He routinely strives to avoid duplicate shipments (i.e., by USPS and commercial carrier) to a given destination.

c. Use of UPS. Navy installations do not use UPS because of a Navy policy restricting the use of commercial paper (UPS does not accept GBLs). A test and evaluation of the relative cost and service of UPS and USPS is underway at NSC, Charleston. Preliminary results indicate that UPS is an efficient and effective alternative to the USPS. The final results of this test, together with a top level re-evaluation of commercial paper usage, will determine future Navy policy towards UPS.

d. Use of FEC. Three of the installations use Federal Express, on a limited basis. It is principally used for expedited shipments to destinations not served by QUICKTRANS or to destinations for which QUICKTRANS cannot provide the desired service.

e. Use of Commercial Forms. Navy TOs are not permitted to use commercial forms.

f. Carrier Performance. The NSCs have limited visibility of carrier performance. One Center does not receive a copy of the MILSTEP 1B Report, while the other considered the Intransit Data Card (IDC) response rate from the receiving activities too low for the reports to have any credibility.

NAS, Norfolk also considers their IDC response rate too low for the MILSTEP 1B Reports to be useful in evaluating carrier performance. Consequently, a separate system was initiated to obtain such information. It has proved to be useful as the return rate for a card similar to the IDC is approximately ninety-five percent. NAS, Alameda, however, is receiving (and using) the MILSTEP 1B Report on a regular basis since their IDC response rate is much higher than at the other Naval facilities visited (i.e., 60-65 percent versus 15-20 percent).

g. Shipment Challenging. Each installation follows NAVSUP policy[30] in submitting all overseas shipments over 500 pounds and all QUICKTRANS and commercial air shipments over 5,000 and 500 pounds, respectively, to NAVMTO for clearance. Shipments not subject to NAVMTO clearance can be moved by air at the discretion of the TO.

h. TO Performance. The TO performance at these Navy installations is evaluated solely upon service. At the NSCs, two criteria are employed: (1) adherence to

[30] Ibid.

hold time standards established by NAVSUP and (2) customer complaints. At the NASs, the principal measure of satisfactory performance is the number of customer complaints.

All TOs felt there could be advantages to the Navy if they were evaluated on cost savings as well as on-time performance, if only to make their superiors more cognizant of transportation costs. Thus, if funds were allocated directly to an activity, equal weight might be given to service and cost in the evaluation of TO performance. It was also implied that an allotment would not create an additional incentive for the TOs to use transportation funds more effectively--this is already being accomplished as much as possible.

i. Organization. In the NSCs, the transportation officer reports directly to the Commanding Officer, while in the NASs, transportation is the responsibility of the Director of Supply.

C. THE MARINE CORPS SDT PROGRAM

1. Budget Development

The October 1974 Marine Corps budget submission to OASD(C) for FY 1975 totaled almost $17 million, as shown in Table 7. The Transportation Section, Facilities and Services Division, Office of the Deputy Chief of Staff for Installations and Logistics, is the focal point for SDT within the Marine Corps.

The Transportation Section has overall responsibility for the Marine Corps SDT budget. The SDT requirements are initially developed by major Marine Corps program (such as Pre-Positioned War Reserves, Initial Issue, and Training) based upon historical data. The requirements are then adjusted to correspond with changes in annual training programs, deployed forces, and equipment. The final requirements are summarized by transportation mode and costed out at the most recent approved rates.

TABLE 7

MARINE CORPS SDT PROGRAM BY MODE

Mode[a/]	Dollars (000)
Commercial Transportation	$7,006
Air Transportation - MAC	1,962
CONUS Port Transshipment - MTMC	2,266
Sea Transportation - MSC	5,566
TOTAL	$16,800

a/ Commercial Transportation includes all inland movements plus stevedoring other than MTMC; Air Transportation - MAC includes all MAC shipments; CONUS Port Transshipment - MTMC includes all MTMC stevedoring costs; and Sea Transportation - MSC includes all overocean cargo.

2. Financial Management Practices

The Transportation Section controls all SDT dollars, with twenty-six organizations and installations receiving Cost Guidelines. The Cost Guidelines serve the same purpose as the OPTARs issued by the Navy except:

1) they are issued quarterly, broken out by mode, and unused funds are returned to Marine Corps Headquarters at the end of each quarter; and

2) they are purposely lean so as to provide incentive for intensive management of SDT funds by the receiving activity.

The Cost Guideline holders do not participate in preparation of the SDT budget because the transportation requirements of the organizations/installations holding Cost Guidelines have already been embedded in the budget through the major programs.

Approximately 30 percent of the total Marine Corps SDT program is retained by the Transportation Section at the beginning of each fiscal year. These funds are used

to pay the transportation costs of activities which do not receive Cost Guidelines, as well as for services provided by other shipper services.

The Marine Corps SDT program is managed through:

a. Timely availability of data. TOs submit to the data processing center at Albany, Georgia a daily listing of GBLs issued. The other shipper services submit billings either monthly or quarterly; however, in most cases, the Transportation Section is aware of the charges prior to receipt of the actual bills.

b. Established control procedures. Controls in the form of Cost Guidelines, performance and status reports, and airlift and transcontinental challenge procedures allow the Transportation Section to maintain a constant awareness of the status of the program.

c. Extensive monitoring and analysis. The performance of the Cost Guideline holders is monitored each month: planned and actual costs are compared; airlift and transcontinental challenge statistics are reviewed; and special surveys are initiated when problems arise or when they are discerned to be developing.

d. Distribution panel. A distribution panel, which consists of headquarters personnel such as item managers, industrial fund managers, etc., meets quarterly to provide (1) a forum for the regular consideration of the impact Marine Corps policy decisions have on transportation and (2) an opportunity for discussing distribution problems.

3. Traffic Management Practices

Control of SDT within the Marine Corps is exercised primarily by the local transportation officer. Marine Corps policy requires that TP 2 cargo move by surface. All TP 1 cargo routed via MAC and weighing over 75 pounds, and transcontinental shipments weighing over 5,000 pounds, whether moved by air or surface are challenged. The local transportation officer makes all challenges; his performance is closely monitored by the Transportation Section.

The impact of the challenges has been significant, as evidenced by the following statistics:

- During March 1975, 74 percent of the air shipments challenged (which accounted for 89 percent of the tonnage) were diverted to surface.[31]
- During the first four months of calendar year 1975, 30 transcontinental shipments were challenged, with five being cancelled.

The Marine Corps does not have a requirement for a computer based traffic management function. Nevertheless, Marine Corps Headquarters has established a set of traffic management guidelines to help the TO achieve maximum use of SDT funds. The TO is also encouraged to be aware of local conditions and to take full advantage of opportunities for savings.

The TO at the Marine Corps Supply Center, Barstow, receives a copy of each Material Release Order prior to the item being pulled from the shelf. Therefore, he has some visibility of shipments prior to receipt. He is not responsible for the use of parcel post, however, so the possibility of duplicate shipments to the same destination by different modes exists.

The Marine Corps recently has given its field activities the authority to use commercial paper in lieu of GBLs.[32] This action increases the flexibility of the TO as he can now use UPS (or other commercial carriers that do not accept the GBL) when advantageous.

D. THE AIR FORCE SDT PROGRAM

1. Budget Development

The October 1974 Air Force budget submission to OASD(C) for FY 1975 totaled almost $380 million as shown in Table 8. Almost 71 percent of this total was

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[31] All services require the challenging of airlift eligible shipments; however, the Marine Corps exercises tighter control over compliance with the instructions.

[32] Marine Corps Order 4610.30, "Use of United Parcel Service," 28 July 1975.

allotted to the Air Force Logistics Command (AFLC) and 15 percent to the Directorate of Administration (DALB) within the Office of the Chief of Staff, with the remainder distrit uted among 22 other commands (see Table 9).

AFLC pays for the cost of moving cargo between Air Logistic Centers (ALCs) and Air Force activities worldwide as well as for shipments between ALCs. The DALB pays for the movement of cargo in support of personnel, such as APO Mail and base exchange. The commands receiving the balance of the SDT allotments cover the transportation costs they incur which do not come directly under the responsibility of either AFLC or DALB.

The Plans and Programs Division, Directorate of Transportation, Office of the Deputy Chief of Staff, Systems and Logistics, is the focal point for the Air Force SDT program. The Plans and Programs Division has primary responsibility for SDT, but considers management of the program to be a joint effort including the Budget Office of the Air Force Comptroller and DALB. The Divison does not receive any SDT funds; they are passed from the Comptroller directly to the commands responsible for SDT on an Obligating Budget Authority (OBA) document. Each of the commands receiving SDT funds plans, programs, and budgets for its own requirements. The Plans and Programs Division compiles all the command budgets for the total Air Force program.

Because AFLC is the largest user of the Air Force SDT program, LMI concentrated on AFLC during its review of the budget development process, with some attention also given to the SDT programs of DALB and of the Tactical Air Command (TAC).

The AFLC segregates SDT into six major categories, which are identified by Air Force Element of Expense/Investment Account Codes (EEIC). These modes and their corresponding EEIC numbers are given below:

TABLE 8

AIR FORCE SDT PROGRAM BY MODE

Mode[a/]	Dollars (000)
Land Transportation	$ 49,834
Air Transportation - MAC	157,083
Air Transportation - Commercial	82,131
CONUS Port Transshipment - MTMC	13,085
Sea Transportation - MSC	68,162
Other	9,227
TOTAL	$ 379,522

[a/] The costs embedded in each mode are provided in Appendix F.

TABLE 9

AIR FORCE SDT PROGRAM BY COMMAND *

Command	Amount (000's)
AFLC	$268,009
DALB	54,795
Pacific Air Command	19,956
Air Defense Command	9,529
Strategic Air Command	6,035
Air Force - Europe	5,689
Military Airlift Command	3,147
Tactical Air Command	3,052
Communication Service	1,750
Air Training Command	1,539
Alaska Air Command	1,529
Systems Command	1,275
Headquarters Command	1,266
Others (11)	2,300
Total	$379,871

* The discrepancy in program totals between Tables 8 and 9 results from using data developed in different phases of the budget cycle.

EEIC	MODE
454	MAC
461	MSC
462	Commercial Air
463	Commercial Surface
464	LOGAIR
465	Port Handling

With the exception of LOGAIR, the development of requirements is primarily based upon Air Force flying hour programs by overseas area. Ratios of tonnage transported per flying hour are computed for preceding years. These ratios are then applied to the flying hour programs of the budget year to yield an estimate of the tonnage required to support the planned flying hours. The latest approved rates or most recent unit costs are then used to estimate the SDT funds required to move the cargo.

Some notable exceptions to projecting tonnage requirements based upon flying hours (in addition to LOGAIR as previously noted) include MAC Special Assigned Airlift Missions, and MSC ammunition and reefer requirements.

In developing the requirements for LOGAIR, each Air Logistics Center and CONUS Command submits its forecasted requirements to AFLC. These requirements are initially consolidated into current on-line LOGAIR stations and a proposed route structure is developed to satisfy the requirements. The proposed route structure is then reviewed throughout the Air Force. Upon approval of the route structure and its projected costs, the package is forwarded to MAC, which is responsible for placement of the LOGAIR contract.

The principal SDT responsibilities of the Directorate of Administration include the movement of APO mail, base exchange, and motion picture material. Estimates of DALB SDT personal support requirements are based upon historical data and then factored by planned force level changes. The combined Army and Air Force base exchange forecasts are developed by Army and then prorated between the two.

The Tactical Air Command receives its SDT funds under Major Force Program (MFP) 2. These funds cover the movement of all excess items and reparables among TAC

installations and between TAC installations and the ALCs (unless the movement is directed by AFLC). No STD funds are retained at TAC Headquarters, they are distributed directly to fifteen TAC bases.

Development of the SDT budget within TAC is initiated at the base level. Each TAC base develops its SDT requirements (based on historical data coupled with known changes) which are then consolidated by TAC Headquarters to form the Command's Program.

Even though SDT is not separately identified in MFP 2, it is individually reviewed by an Air Force program review committee. SDT fiscal guidance is then provided TAC, which is expected to adhere to such guidance. TAC in turn, provides similar guidance to each of its fifteen subordinate bases.

2. Financial Management Practices

The Plans and Programs Division concentrates its review of the SDT program to that portion of AFLC's program which is either obligated by overseas commands or obligated overseas by CONUS located commands. These funds primarily support the inter- and intra-theatre movement of centrally managed items. The principal reason for this limited review is that AFLC has marginal control over the commands making such obligations and thus their performance is not closely monitored. The Air Force has found that funds held by one command which affect the mission of another command are more easily monitored at the Air Staff level; this circumvents potential conflicts between commands. In FY 1975, $75 million of AFLC's $268 million program were monitored in this manner.

The means for monitoring and controlling the overseas portion of AFLC funds is the Expense Target System, which was implemented in July 1974. Each of the ten commands monitored by the system is given an expense target on its OBA. Even though the target is not a legal limitation it is not to be exceeded without the approval of the

Plans and Programs Division. Expenditures appearing on the monthly Expense Target System reports are estimates based on the number of requisitions issued and a cost factor per requisition by mode. These expense estimates are then matched to AFLC summary reports of expenditures and tonnage by command.

The OBAs received by AFLC and DALB specifically earmark the funds to be used for SDT--the funds cannot be applied elsewhere without the approval of the Air Force Comptroller. AFLC and DALB can reprogram additional funds into SDT without Comptroller approval, but cannot reprogram out of SDT. The other Air Force commands do not have such floors; in fact, their SDT funds are not specifically identified on the OBAs (except for the expense targets already discussed).

All AFLC SDT funds are centrally held; they are not distributed to the ALCs or other users of these funds. AFLC monitors the use of its funds by mode and geographical area. For each mode of transportation except LOGAIR, actual obligations and workload are compared monthly with the plan. AFLC normally does not monitor the performance of any of the users of its funds.

Each month a Miscellaneous Obligations Document (MOD) is used by AFLC to establish obligations by EEIC number for the month. The basis for the level of the obligations by EEIC is the anticipated average monthly expenditures augmented by the actual bills that have been processed. This monitoring is not only carried out by EEIC number, but also within each EEIC by element.

The movement data received from MAC and MSC are used as input into two monthly reporting systems: the MAC Tons and Cost System and the Sealift Tons and Cost System. Reports from these systems depict the year-to-date movements and costs for the current and preceding year, by month.

Even though LOGAIR funds are obligated on an annual basis, extensive monitoring of the system's performance is routine.

The DALB receives a series of monthly reports which include the following information by cost center (i.e., commercial airlift, ordinary mail, space available mail, etc.):

- estimated obligations based on tonnage reports and current tariff rates;
- actual costs (most of which are received more than sixty days after the close of the reporting period); and
- unobligated balances.

DALB operates with the understanding that this material "must" be moved and, therefore, the monthly performance reports are primarily used to identify potential shortfalls (or excess funds).

There is no routine monitoring of TAC's performance during budget execution by the Plans and Programs Division. However, TAC Headquarters receives a monthly report on the performance of each of its bases relative to obligations, status of funds, and GBLs issued.

3. Traffic Management Practices

Air Force policy requires that all TP 1 and TP 2 cargo are air eligible. The criteria for determining if challenge action is required includes:[33]

- shipments in excess of 500 pounds;
- shipments exceeding six feet in any one dimension;
- shipments containing an apparently excessive number of one item; and
- shipments with a requisition date or required delivery date (RDD) which is ninety days past and weighing over 500 pounds per line item (both conditions must be present).

However, not all cargo are subject to each of the above. For example, aircraft engines are only subject to the last criterion while NORS shipments are subject to the last two. A recent test by the Distribution Control Center, Wright-Patterson Air Force Base, which

[33]Air Force Manual 75-1,"Transportation and Traffic Management," 15 June 1973.

performs the air clearance function for MAC shipments, revealed that approximately 33 percent of the requisitions challenged during a one-day period were diverted from air to surface.

The Distribution Control Center allocates pallets among LOGAIR terminals.[34] The Center does not perform the air clearance function for LOGAIR; this is the responsibility of the local transportation officer. The general rule followed by Air Force TOs is that LOGAIR is a free service and should be used to the maximum extent possible. If an alternative mode is used, the parent command of the base may be required to pay for the movement.

TAC Headquarters has established three traffic management policies which TOs at TAC bases are expected to follow:

- All NORS items must be shipped within twenty-four hours.
- All Not Reparable This Station (NRTS) items must be shipped within forty hours.
- The use of LOGAIR should be maximized. It is considered free transportation since TAC SDT funds are not used to pay for LOGAIR services.

The performance of each TO relative to the above criteria is monitored monthly.

The traffic management function at two Air Logistics Centers (Warner Robins and Sacramento) and Langley AFB (a TAC installation) were reviewed. The comments which follow pertain to the CONUS transportation procedures at the two ALCs--the TAC base does not have a comprehensive traffic management function.[35]

a. Shipment Planning. Each of the ALCs, under the guidance and coordination of AFLC, has a comprehensive shipment planning system--the Shipment Document Release and Control System (SDRCS-D009). Among its more attractive

[34] See Appendix G for a detailed description of the LOGAIR system.

[35] While Langley AFB has a limited traffic management function, we found it to be consistent with the transportation mission of the base.

features are: 1) facilitating quick response to NORS, 999, and TP-1 requisitions and 2) holding to a minimum the number of duplicate shipments (by different modes) to the same destination.[36]

To supplement the D009 system, AFLC has designed the Transportation Automated Routing System (TARS) to provide mode selection guidance to routers at each ALC. A computer printed report presents, for each destination to which that particular ALC has made shipments, such information as MILSTEP performance data by carrier, tariff rates by mode, USPS zone, LOGAIR flights serving that destination, etc. It also specifies the cheapest mode of transportation which is to be used under normal circumstances.[37]

b. Use of Parcel Post. Parcel post is considered another mode of transportation at the ALCs and its use is governed by economics and service. For example, Warner Robins ALC has found that UPS is generally cheaper and provides better service than USPS. Consequently, the Postal Service is not used for shipments under fifty pounds to destinations served by UPS. Postal meters are used at all ALCs. They provide an awareness of the extent of USPS services being purchased and aid DALB in paying the indicia bills.[38] (The Air Force use of the USPS contrasts sharply with Army and Navy practices.)

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[36]See Appendix H for a more detailed description of the D009 system along with several other shipment planning systems being used within the Federal Government.

[37]TARS is also described more fully in Appendix H.

[38]The use of postal meters was found to reduce local mail costs at Air Force bases. When the base managers became aware of the casual and extensive use of the USPS and the costs involved, they found more cost effective alternatives that provided the same level of service.

c. Use of UPS. As noted above, UPS is used extensively at the ALCs. GBLs are not created for UPS shipments, they are moved on commercial paper. The indicia fund is used to pay for UPS shipments (except for hazardous material moving by UPS) as UPS is considered an alternative to parcel post.

d. Use of FEC. The ALCs use FEC for high priority shipments that cannot be routinely satisfied by the LOGAIR system or other commercial air. Again, commercial forms are used for payment, with the indicia funds supporting such movements except for high-priority and hazardous material.

e. Use of Commercial Forms. As noted above, commercial forms are used in payment of all UPS and Federal Express charges.

f. Carrier Performance. The ALCs have extensive service visibility through the TARS guide. The Air Force monitors all Air Force receiving activities with respect to return of intransit data cards.

g. Shipment Challenging. There is a limited effort applied to the challenging of CONUS air eligible shipments by the ALCs--these shipments, when not diverted by the supply system parameters, are almost always considered valid, especially for LOGAIR. Overseas shipments are challenged in accordance with the criteria described previously.

h. TO Performance. TO performance at the Air Logistics Centers is continuously monitored by AFLC. The MILSTEP 1B Reports are regularly used to rank the ALCs. Effective use of SDT funds, however, are not taken into consideration in determining the ALC rankings.

i. Organization. The ALCs have recognized the close relationship between transportation and distribution, viz., that transportation is a function of distribution. Consequently, both the Supply and Transportation Divisions are within the Directorate of Distribution. The recognition of the role of transportation in the distribution function has resulted in an extensive computer capability and considerable materials handling

equipment to assure that shipment planning, routing, packaging, sorting, and labeling are accomplished with a minimum amount of delay, error, and damage.

IV. EVALUATION OF SERVICE SDT PROGRAMS

A. BUDGET DEVELOPMENT

There are essentially two different approaches to development of the SDT budget by the Military Services. The Navy and the Marine Corps develop their SDT budgets entirely at the Program Manager levels, while the Army and Air Force receive substantial input from subordinate commands.

While there are advantages and disadvantages to each of the above approaches, there does not appear to be an "optimum" approach to developing the SDT program of a Service. The Services view the budget cycle as being a requirement to provide appropriate data for program justification. From the Office of the Secretary of Defense (OSD) viewpoint however, the budget cycle offers the opportunity to insure that national priorities are being given proper attention by the Services. In the case of SDT, the OSD viewpoint is critical--SDT is not a program which is totally internal to a given Service--the Services rely heavily upon the Single Manager Operating Agencies for satisfying much of their transportation requirements. Even outside the Single Manager Agencies, the SDT programs offer many opportunities for trade-offs among various modes of transportation and commercial carriers.

Since the ASD(I&L) is the principal staff assistant to the Secretary of Defense in matters of transportation and the Service SDT budget submissions are his principal source of program visibility, the budget cycle is critical to an effective execution of ASD(I&L) transportation responsibilities. An examination of the Service SDT budget submissions from the ASD(I&L) viewpoint revealed several weaknesses in the budget formats. Guidance for submission of SDT program requirements during the budget formulation cycle is contained in DoD Budget Guidance Manual, DoD 7110-1-M. The manual specifies that the SDT programs of each Service be submitted on Exhibit OP-16.[39] Only the Marine

[39] The Exhibit is included in Appendix I.

Corps adheres to the full format of the OP-16, with the other Services submitting only selected sections. The principal reason for the Services deviating from the OP-16 format is that individual budget analysts, within the Program/Budget Office of the ASD(C), are assigned to each Service. Consequently, each Service prepares its SDT budget submittals to satisfy the general requirements of its OASD(C) analyst.

Even though several variations of the budget formats are being used by the Services, this does not, as such, constitute a weakness in the SDT budgeting process. The weaknesses stem directly from the formats themselves:

- budget data are not arrayed in a manner that adequately explains changes in program requirements from the current to the budget year;
- they do not facilitate a comparison of Service SDT programs;
- they are not oriented to a review of the total requirements for SDT at the OSD level (i.e., it is difficult to assess the total impact of Service actions/policy decisions on the defense transportation system); and
- major users of SDT within the Services are not identified.

B. FINANCIAL MANAGEMENT PRACTICES

1. Army

The Army has in place the basic systems and procedures necessary for effective control and use of SDT funds. However, there are some minor weaknesses and inconsistencies in control which are discussed below.

a. TACOM. Two areas of concern were identified at TACOM: (1) treatment of Foreign Military Sales (FMS) transportation, and (2) handling of GBLs.[40]

TACOM representatives said that they have difficulty in determining whether a given GBL should be charged to FMS or SDT, unless it is specifically so identified. Because of this situation, TACOM pays for some FMS transportation out of its

[40] A third area of concern is discussed in Appendix J. It was not included in the body of the report because it is outside the scope of the specific areas being considered.

SDT budget. The FMS costs then become part of TACOM's historical data base and are included in its budget requirements.

A check with AMC headquarters resulted in the statement that "while TACOM assists in developing estimates for FMS transportation costs, they do not incur the costs. These costs are reimbursible expenditures and are incurred by the depots, not TACOM."

This type of confusion can have an adverse effect on both programs (SDT and FMS). It is our understanding that AMC is trying to clarify the situation.

In the movement of major end items, which are directed by the Inventory Manager (IM), the TO at the field activity preparing the GBL forwards a copy to the Comptroller at TACOM. The Comptroller then advances that amount shown on the GBL to the Army Management Fund. The Comptroller, however, does not know a GBL citing his SDT funds has been issued until he receives a copy. (In a small number of cases, a copy is never received.) This situation has potential for lack of control and historically has been troublesome to TACOM.

We were informed that TACOM is the only Commodity Command that does not know a GBL has been authorized before actual receipt of a copy. The other commands use a system whereby estimates of transportation costs are set aside when the IM orders the move. This minimizes the potential for a violation or a sudden deficiency of funds.

b. FORSCOM. Since SDT is a small portion of FORSCOM's total Operation and Maintenance Program, the review and analysis performed during budget formulation is not as extensive as observed elsewhere within Army. While limited resources together with existing priorities may dictate this situation, it tends to weaken the control of FORSCOM's SDT program.

2. Navy

While the responsibility for virtually all Navy SDT funds is new to NAVSUP, that command is making an extensive effort to assume control of the program. The other

Services are distributing SDT funds and/or attendant responsibility for committing the dollars. NAVSUP is distributing neither the funds nor delegating responsibility for the effective use of the funds to other Navy commands and/or specific installations. These NAVSUP practices and procedures appear to affect Navy's ability to effectively manage the CONUS portion of its SDT program. Some of the specific reasons for making this judgment include:

a. Because of its highly centralized approach to fund control, coupled with a limited data processing capability, the Navy has a marginal capability to detect, in a timely manner, a potential short-fall in SDT funds.

b. Even if a potential short-fall has been identified, Navy does not have in place the management structure (and the necessary systems support) by which curtailments or restrictions on selective shipments (in order to stay within available funds) can be effectively executed. Since major shipping commands and subordinate field activities are not provided any fiscal guidance by the Program Manager,[41] Navy's ability to accomplish these curtailments/restrictions in an effective manner is questionable.[42]

c. An absence of accountability and incentives was observed throughout the Navy SDT program. NAVSUP has apparently decided not to issue OPTARs in FY 1976. (In FY 1975, the OPTARS were not issued until January.) Even if OPTARS were issued, current policy requires little accountability on the part of the receiving commands. These commands do not routinely receive OPTAR status reports, nor have they any incentive to

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[41] In most situations, the issuing of OPTARs would be synonymous with providing fiscal guidance; however, in the SDT program, the OPTARs require no accountability on the part of the receiving command (this point is amplified in reason c. above).

[42] When these findings were briefed to Navy personnel in November 1975, we were informed that NAVSUP has plans to expand their MIS to correct this deficiency. However, the focus of the expanded MIS will be on the requisitioner rather than shipping activity. It would appear that Navy may find this approach extremely unwieldy and will not achieve the anticipated benefit because of the numerous requisitioners scattered throughout the world.

establish internal reporting systems whereby they could monitor their own SDT program. Furthermore, by removing responsibility for budget preparation and funds management from these commands, and their subordinate field activities, there is little inducement for the comands to assure that their field activities are optimizing their funds in terms of service and transportation costs. In addition, in the mind of the TO, since financial management is not part of the measure of his performance, the use of sound traffic management practices, under certain circumstances, may place him in jeopardy with his superiors.

Closely associated with the absence of accountability and incentives in the Navy SDT program is the failure of NAVSUP to provide appropriate direction to Navy activities to promote the effective use of SDT funds. Illustrative of the lack of guidance is the following example. On any week day it is possible for at least three surface shipments, all moving at Less Than Truckload (LTL) rates, to be made from Norfolk to Cherry Point: one shipment as part of the QUICKTRANS system,[43] one from the Supply Center, and another from the Air Station. In addition, a partial truckload could also be moving between these two installations through the Postal Service. Little attempt is made to capitalize upon the service which has already been paid for (i.e., QUICKTRANS), nor does there appear to be an interest in evaluating the possibility of consolidating shipments. (Reasons given by the field activities for a lack of interest in the potential consolidation of this traffic include too much handling of cargo, accounting problems, and inadequate visibility of cargo generation).

The activities involved in this situation have little incentive to effect cargo consolidation. Furthermore, they do not have the overall system visibility to achieve minimal service duplication.

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[43]This 158 mile trip is made, by dedicated truck, five days per week, fifty-two weeks each year as part of the QUICKTRANS system. The total annual one-way cost for this truck is almost $50,000. During June 1975, this truck had an average utilization factor of approximately 30 percent.

3. Marine Corps

The Marine Corps has a limited SDT program but sufficient attention is being provided at the headquarters level to assure effective use of the funds. The guidance provided by Marine Corps Headquarters along with the controls established in the form of Cost Guidelines and reporting requirements provide the necessary incentives for the TOs to monitor their programs and make all practical efforts to obtain the most from their transportation dollars.

4. Air Force

The Air Force has established the financial management capability necessary to assure effective and efficient use of SDT funds, especially when considered in conjunction with the traffic mnagement function (which will be addressed later in this report). The Plans and Programs Division as principal member of the SDT program management team, concentrates primarily on reports generated by the Expense Target System. The Expense Target system is limited to AFLC funds spent overseas by CONUS and overseas commands. It was established as a result of Congressional criticism of the open allotment system used by AFLC to provide fund citations to the operating commands.

C. TRAFFIC MANAGEMENT PRACTICES

Even though approximately two-thirds of all SDT dollars (which totaled almost $1.1 billion in FY 1975) are in support of overocean movements, much of the associated decision making for this overocean traffic comes under the responsibility of the Single Manager Operating Agencies. The review of traffic management practices in the Services was restricted to decision making at CONUS shipping activities. In FY 1975, these activities committed approximately $200 million in SDT funds.

The traffic management practices employed by the Services when committing these $200 million vary widely as evidenced in the descriptions in the preceding section. Since many problems/deficiencies are applicable to more than one Service, the observations which follow are summarized by traffic management function rather than Military Service.

1. Shipment Planning

Shipment planning appears to be the single most important factor in traffic management. Only the Air Force ALCs have comprehensive shipment planning systems to assist in the complex decisions involving consolidation, packing, routing, and the like. The TOs at other activities do not receive necessary information in a timely manner to expedite their traffic at minimal cost.

2. Routing Systems[44]

Only the Air Force has developed an automated routing and carrier selection system. The TARS Guide assists routers in mode and carrier selection based on past performance (as per input from MILSTEP), advantageous tariff structures, schedules, etc. Furthermore, it provides an opportunity for additional control of the mode and carrier selection process. The TARS Guide also assists in spurring competition among carriers as they know that each route is continuously under scrutiny by local managers.[45]

3. Use of Parcel Post

Among the activities reviewed, only the Air Force ALCs and the Navy NASs seem to have recognized the advantages to be gained from consolidating the responsibility for parcel post and regular traffic. The segregation of these responsibilities invariably results in a routine duplication of shipments to the same destination on the same day by different modes. (The only exception observed was at an Army depot which used manual intervention into the computerized parcel post decision process.)[46]

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[44]We have previously treated routing as an integral part of shipment planning; however, because of the significance of this function, it is treated separately here.

[45]An inquiry at MTMC revealed that they have formulated a concept position along the TARS line and are working toward a system of this nature. See Appendix H for additional information.

[46]DSA also uses manual intervention to prevent parcel post shipments to Army Direct Supply Support depots.

4. Use of Commercial Forms

The Military Traffic Management Regulation (MTMR) specifies the conditions under which commercial paper, i.e., carrier documentation, may be used in lieu of a GBL. The principal conditions are that the total estimated transportation charges do not exceed $100,[47] use of the commercial form is more efficient and economical, and both the origin and destination of the shipment are within CONUS.

The Air Force is the only extensive user of commercial paper. The Army and Marine Corps use commercial forms on a limited basis--the Navy is in the process of formulating a position on their use.

The reasons given for the limited or non-use of commercial paper have not been clearly stated. However, two continue to surface indirectly: (1) the procedures for handling commercial paper may not be clear and (closely aligned with the preceding) (2) there is indecision (on the part of Navy) as to which fund is to be charged (SDT or indicia).

The use of commercial paper permits the shipper services to use carriers which do not accept the GBL. Some of these carriers have been found to be attractive alternatives to carriers already being used (e.g., the U S. Postal Service). But, because of administrative and procedural problems, some TOs cannot take advantage of such carriers. Furthermore, with the new dollar limitation on commercial paper, a whole new spectrum of commercial carriers is now potentially available to the shipper services. (The Services have not yet received official clearance to exceed $25 as there is considerable ambiguity surrounding this new limitation: MTMC issued appropriate guidance to DoD activities and then, because it believed it may have exceeded its authority, withdrew the guidance.) According to the GAO, the new dollar limitation also provides an additional opportunity for cost savings because they have found that the cost of preparing and processing a GBL is considerably more than for commercial paper. (Some activities were observed preparing both a GBL and a commercial form when using Federal Express.)

[47] This limitation has recently been raised from $25.00.

5. Carrier Performance

The Navy has not capitalized upon the carrier performance information made available in the MILSTEP 1B Reports. Of the four Navy installations visited, two had little or no visibility of the service they are providing customers; one had to initiate its own system in order to obtain such information, while one other was able to use the MILSTEP 1B Report as received to evaluate carrier performance. Since Navy installations have no SDT dollar responsibility, limited service visibility becomes even more critical (especially as TO performance is measured almost solely on the number of consignee complaints).

6. Evaluating TO Performance

Throughout the Military Services, service to the requisitioner appears to be the principal criterion for evaluating TO performance--measured by either the MILSTEP Reports or by customer complaints. Service is an incomplete measure because it fails to take into consideration another critical factor--economy of a traffic management decision.

To emphasize one factor to the exclusion of the other is inconsistent with the objectives of sound traffic management. If the TOs are to consider both service and economy in carrying out their responsibilities, then they should be evaluated on how effectively they perform relative to both factors.

7. Organization and Resources

The Air Force appears to have given a higher priority to the role of transportation than have the Army and Navy. It has recognized that transportation is an integral part of the distribution function. As a result, there appears to be a better understanding of the needs of the transportation function in meeting mission objectives. In addition, the Air Force has committed extensive resources, both in software and hardware systems support and in materials handling equipment, to the transportation function. We did not observe this degree of priority or commitment in the other Services.

D. DEFENSE SUPPLY AGENCY

During the SDT review, discussions were held with various representatives of DSA, including TOs at four DSA Defense Depots (three depots were visited--Ogden, Richmond, and Tracy).

Three points stand out as a result of these discussions:

1) The direct assignment of transportation funds to an installation is not necessary to provide incentives for sound traffic management. Defense Depot TOs do not have dollar responsibility, yet they perform their function effectively. If we were to rank the installations visited on their traffic management function, the Defense Depots would rank behind the ALCs but ahead of the Army and Navy installations.

2) TO performance is monitored by review of the MILSTEP 1B Reports (for service), cost savings resulting from successful airlift challenges (for economy), and the number of lines per GBL (for consolidation). The last criterion reflects the reasoning that the more lines per GBL, the greater the shipment weight, and consequently the lower the unit shipping cost.

3) The Mechanization of Freight Packing and Shipping Terminal (MOFAST) materials handling system at the Ogden Defense Depot is the most extensive and automated observed during the study.[48] Introduction of this system at the depot resulted in the General Acccunting Office verifying a work force reduction of 105 people.

Prevailing throughout each of the above points is extensive interest by DSA management in the transportation programs.

E. LOGAIR

LOGAIR is an Air Force contract commercial carrier serving CONUS installations. The mission of the system is to (1) reduce inventory levels (especially for high value items) through a shortened airlift pipeline, (2) provide rapid transportation of high priority cargo to maintain readiness capabilities, and (3) assure sufficient quantities of reparable items

[48] See Appendix H for a description of MOFAST.

at maintenance and repair facilities. The system is completely airlift dedicated and serves 59 Air Force and Navy installations.

LOGAIR contracts are awarded annually and once the space is procured, use of the system for eligible cargo is encouraged. Each base treats its allocated space as free and attempts to airlift as much traffic as is permitted within existing priority and space guidelines. It is also presumed throughout the Service that the supply system and regulations concerning qualified cargo for airlift have already screened out ineligible cargo. As a result, the historical base for airlift requirements tends to be as large as the previous year and LOGAIR requirements have not diminished at the same rate as other DoD transportation requirements.

As shown in Appendix G, an evaluation of the system yielded the finding that if LOGAIR were an integrated airlift/surface transportation system, savings of at least $6.7 million (or 13.8 percent of the base system cost) would result. Additional savings may also be available by replacing the L-100 aircraft with the smaller, less expensive DC-9s or L-188s, as well as through selective system reductions.

While these alternatives to the base LOGAIR system were not evaluated as comprehensively as desired, nevertheless, they do provide an indication of the potential associated with such system modifications.

F. QUICKTRANS

QUICKTRANS is an integrated Navy contract transportation system serving 32 CONUS installations including both Navy activities and MAC aerial ports. The system is comprised of dedicated trucks and aircraft whose mission is similar to that of LOGAIR (i.e., provide rapid transportation of high priority cargo, etc.).

Both airlift and truck contracts are awarded annually (the airlift by MAC and the dedicated truck by MTMC). Since users are not responsible for transportation funds, the amount charged for the service has no impact in a TO's deciding whether or not to use QUICKTRANS. QUICKTRANS has essentially no airlift chailenge procedure since the

space is available and diversion to non-QUICKTRANS equipment would increase the net cost of transportation.

An evaluation of the QUICKTRANS system, its objectives, and the means of obtaining its objectives resulted in the observation that the system is operated and managed in a satisfactory manner, but that guidance from the Program Manager is lacking in encouraging greater use of dedicated trucks (see Appendix G). During June 1975, the utilization of QUICKTRANS trucks averaged approximately 25 percent. This is too low especially when one considers the amount of traffic moving in parallel, particularly TP 3 cargo. There is considerable potential for using TP 3 shipments as filler cargo on these dedicated trucks. All such filler cargo would then automatically be transported free, as the higher priority regular QUICKTRANS cargo has already economically justified the entire truck. However, documenting the savings available to the Navy by increasing the utilization of QUICKTRANS trucks was not accomplished due to time limitations and incomplete data.

V. COROLLARY ISSUES REQUIRING ATTENTION

Several SDT-related issues, not directly within the scope of our assignment, were encountered during the study. These issues have a potentially high impact on SDT within the DoD, and any study of SDT without reference to them would constitute an oversight.

A. UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)[49]

The SDT function within the DoD, in effect, responds to the requirements of the requisitioner. The issue priority assigned each requisition determines the priority it receives in being filled and the priority it receives in being shipped.

Requisitions assigned issue priorities 1 through 3 have transportation priority (TP) 1, those assigned issue priorities 4 - 8 are transportation priority 2; and those assigned issue priorities 9 - 15 are transportation priority 3. Shipments with either TP 1 or 2 are eligible for movement by air, but at the discretion of the requistioning Service.[50]

It became apparent early in the task that the transportation portion of the UMMIPS system is being widely abused. The prevailing belief as to the underlying cause of the abuse is that the supply system is often not responsive to the requisitioner and therefore, an exaggerated issue priority is assigned to assure expedited consideration. To illustrate, a designation of issue priority 9 (i.e., TP 3) on a requisition may result in a back ordering of the item (rather than pulling the item from the shelf), and an extended delay until the item is received. However, by assigning an issue priority 8 (i.e., TP 2) or an issue priority 3 (i.e., TP 1), it could result in an immediate availability of the item. By increasing the priority of the requisition, the shipment may become airlift eligible. But that was not the

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[49] Department of Defense Directive 4410.6, "Uniform Materiel Movement and Issue Priority System (UMMIPS), 18 February 1971.

[50] As noted previously, both the Army and Marine Corps move TP 2 shipments exclusively by surface mode, while in the Air Force and Navy these shipments are air eligible.

intent of the requisitioner--he wanted to make sure that his requisition was filled. Thus, when challenged by the transportation function whether rapid and costly airlift delivery is truly necessary, the user often accepts a diversion to a surface transportation mode.

Tables 10 and 11 illustrate that, under the existing priority system, a Service may not be applying its transportation dollars effectively unless it has adopted an aggressive airlift challenge procedure. This may result in either (1) an excessive use of commercial airlift transportation or (2) excessive sizing of dedicated systems such as LOGAIR and QUICKTRANS.

TABLE 10

GENERAL OBSERVATIONS CONCERNING AIRLIFT CHALLENGES

ACTIVITY	CONUS/EXPORT	DIVERSION * EXPERIENCE
NAVAL AIR STATION, NORFOLK	CONUS	1%
NAVAL SUPPLY CENTER, OAKLAND	EXPORT	80%
NAVAL AIR STATION, ALAMEDA	BOTH	1%
DEFENSE DEPOT TRACY	CONUS	89%
Savings were $1,216,000 in FY 75	EXPORT	58%
DEFENSE DEPOT OGDEN	CONUS	85%
WARNER ROBINS AIR LOGISTICS CENTER	EXPORT	83%

*No data available

Airlift service is a vital mode of transportation, but there is a prevalent opinion among transportation people, as a result of their airlift challenge experience, that the UMMIPS system is not serving the transportation function as had been intended.

B. OVERSEAS AIRLIFT POLICY

When reviewing the Service SDT programs, some of the Services were found to be using their diversion rates for cargo destined overseas via MAC as an illustration of sound

TABLE 11

AIRLIFT CHALLENGE DATA

ACTIVITY	CONUS/ EXPORT	SHIPMENTS			TONNAGE			AMOUNT OF SAVINGS	PERIOD COVERED BY DATA
		NUMBER CHALLENGED	NUMBER DIVERTED	PERCENT DIVERTED	AMOUNT CHALLENGED	AMOUNT DIVERTED	PERCENT DIVERTED		
LETTERKENNY ARMY DEPOT[a,b]	CONUS	591	508	86	462	457	99	N/A	MAY, JUNE 1975
	EXPORT	402	162	40	177	146	82	N/A	" " "
TOBYHANNA ARMY DEPOT[a,b]	CONUS	411	383	93	N/A	N/A	N/A	143,000	FY 75
NEW CUMBERLAND ARMY DEPOT[a,b]	CONUS	339	309	91	2,455	2,436	99	859,000	FY 75
	CONUS PORTION OF EXPORT	N/A	567	N/A	N/A	1,097	N/A	1,100,657	FY 75
DEFENSE DEPOT MEMPHIS	CONUS	65	54	83	N/A	N/A	N/A	N/A	25 JAN-7 FEB 74[c]
	CONUS	83	52	63	N/A	N/A	N/A	N/A	11-15 FEB 74[d]
LOGISTICS CONTROL AGENCY[a,b]	EXPORT	10,000	5,400	54	21,600	16,400	76	21,100,000	FY 75
NAVAL SUPPLY CENTER, NORFOLK[e]	BOTH	85	52	61	N/A	N/A	N/A	N/A	JUN, JUL 1975
DEFENSE DEPOT RICHMOND[a,b]	CONUS	76	73	96	N/A	N/A	N/A	94,000	1-19 FEB 1975
NAVY MATERIAL TRANSPORTATION OFFICE[f]	EXPORT	13,927	4,199	30	18,890	8,913	48	10,991,687	JAN JUNE 1975
MARINE CORPS TOTALS[g]	BOTH	148	115	78	174.5	157.4	90	220,000	JAN-APR 1975
BARSTOW MARINE CORPS SUPPLY CENTER[g,h]	BOTH	266	188	71	N/A	N/A	N/A	215,245	FY 75

[a] Challenges are limited to airlift eligible shipments over 500 pounds.

[b] Challenges are primarily by telephone. The consignee is made aware of the relative costs and delivery dates.

[c] The results of an audit by the Auditor General, DSA, for shipments over 100 pounds.

[d] The results of an audit by the Auditor General, DSA, for shipments under 100 pounds.

[e] Challenges include export airlift eligible cargo over 500 pounds and CONUS airlift eligible cargo over 5,000 pounds. Challenges are by message which does not include relative costs or delivery dates.

[f] Challenges are by message and telephone and do not include relative cost and delivery date information.

[g] Challenges include all airlift eligible cargo over 100 pounds.

[h] Challenges are by message which includes relative costs and delivery dates.

N/A - Not Available

traffic management practices. It also appears to be customary practice that when a Service SDT program is trending toward overspending, curtailing MAC shipments is frequently a first step in reducing transportation costs.

From the Service perspective, the above practices are justified. The Services are aware that abuses exist in the UMMIPS priorities. In addition, there are some significant, highly visable, and readily obtainable savings by diverting shipments from MAC to MSC (at least to the current year transportation program of the Services).

These actions, however, may not be in the best interest of the DoD. MAC's tariffs are geared to a certain level of cargo generating from each Service. With a significant portion of this cargo now being diverted to another mode, the Airlift Service Industrial Fund (ASIF) cannot operate at a break-even position. Hence, supplemental funds are required to cover MAC's cost, given that the flying hour program is held constant. The supplemental funds should theoretically equal the "savings" which the Services obtained by reducing their MAC requirements.

In the next budget cycle, the Services, which reduced their MAC requirements to stay within SDT funding, may now submit requirements consistent with this new level. For the ASIF to meet operating costs at this reduced level, an increase in tariffs is required. The tariff increase could, in turn, contribute to additional diversions by the Services, etc. The overall result is an endless cycle of cargo curtailments and tariff increases. We have not seen a proposed solution to this cycle which takes into consideration the total requirements of the DoD. Most of the proffered solutions have simply focused on resolving the ASIF problem through a direct allotment. However, there are many closely related issues that must be resolved prior to implementation of this solution. The dominating issue appears to be the approach to use in allocating MAC capacity and its associated effect on LOGAIR QUICKTRANS, UMMIPS, aerial port

capacity, and the Service SDT programs. This deficiency requires attention.[51]

C. SINGLE MANAGER OPERATING AGENCY PERFORMANCE

Approximately two-thirds of all SDT dollars are in support of overocean movements. Most of the associated decision making for this traffic is the responsibility of the Single Manager Operating Agencies. In addition, all CONUS truck load movements (i.e., unit shipments weighing over 10,000 pounds) are routed by MTMC. Consequently, these Single Manager Operating Agencies dominate SDT movements, and impact greatly upon the effectiveness of the Service SDT programs.

Throughout the study, there was considerable concern expressed by the Services that the performance and role of these agencies are not being adequately monitored. In many cases, the Services stated that they are not being provided services commensurate with the charges or the agencies are not being responsive to their requirements.

The concern expressed by the Services on Single Manager Operating Agency performance and their roles in DoD transportation enhances the requirement for the ASD(I&L) to (1) monitor the performance of these agencies and (2) continuously review the respective roles of these agencies to insure that the necessary services are being made available.

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[51] This issue is closely associated with Objection 9, Action 4 in the DoD Management By Objectives Program for FY 1976.

VI. RECOMMENDATIONS

A. SERVICE SDT PROGRAMS

1. Budget Development

There are three principal causes for changes in SDT funding requirements from the current to the budget year.

1) Rate Changes: Changes in rates occur because of numerous economic pressures upon commercial carriers and Single Manager Operating Agencies;

2) Workload Changes: Changes in workload occur because distribution patterns are modified through force level changes, repositioning of stocks, and the like; and

3) Policy Decisions: Service and OSD policy decisions can have a direct effect upon the total Service SDT program. These decisions may result in changes in transportation modes or workload.

As a means of more closely associating the causes of program changes with SDT funding requirements, LMI proposes several supplemental budget exhibits. The exhibits recognize the responsibility of the ASD(I&L) in matters of transportation and provide the detailed data necessary for him and other users, particularly ASD(C), to review, analyze and approve an SDT program that will more totally reflect the best interests of DoD.

The budget exhibits have been designed to assist the user in:

1) gaining a better understanding of the Services' SDT programs;

2) monitoring the impact of previous actions and policy decisions;

3) maintaining a knowledge of the status and changes in the Services' programs; and

4) promulgating guidance and policy from a broader more complete base of knowledge.

The exhibits proposed by LMI appear in Appendix K.[52] They are neither complete nor standard. It is intended that each Service submit a narrative explanation/justification of the actions, conditions, and policies quantified in the exhibits. It is also intended that the descriptions under Rate and Workload Changes be consistent among the Services although the descriptive items may change from year to year; and that the specific entries under Policy Change be completely within the prerogative of the individual Services.

Exhibit 1: Analysis of Changes in Funding Requirements by Service and Major Command

The exhibit displays the effect of rate/workload/policy changes on the SDT program of each Service and within each Service by major command. The exhibit is intended to highlight the causes of changes in the SDT programs, and where they have the greatest impact.

Examples showing the derivation of data appearing in Exhibit 1 are included in Appendix K, page K-12. One example is directed toward a rate change, another toward a change in workload, while the third provides a description of a policy decision which might appear in the narrative accompanying the exhibit.

Exhibit 2: Summary Analysis of Changes in Funding Requirements by Service

This exhibit is a summary of the Service data appearing on Exhibit 1. It would be prepared within the Transportation and Warehousing Policy Directorate, OASD(I&L). The exhibit is an aid in evaluating SDT at the DoD level and assessing the impact of Service or OSD policy on the total DoD program.

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[52] The specific entries in the exhibits should be considered illustrative only.

Exhibit 3: Analysis of Changes in Funding Requirements by Mode

This exhibit is to assist the ASD(I&L) in identifying and assessing the impact of changes in transportation modes in the SDT program of each Service and in being cognizant of the factors responsible for the changes. The derivation of data for this exhibit is similar to the examples provided for Exhibit 1.

Exhibit 4: Summary Analysis of Changes in Funding Requirements by Mode

This exhibit is a summary of the Service data appearing on Exhibit 3. It would be prepared by the Transportation and Warehousing Policy Directorate, OASD(I&L). The exhibit would permit the ASD(I&L) to identify trade-offs among transportation modes resulting from Service or OSD decisions.

Exhibit 5: Track of Budget Changes

This exhibit would be maintained within the Transportation and Warehousing Policy Directorate, OASD(I&L), with assistance from ASD(C). The exhibit would permit OASD(I&L) personnel to monitor the evolution of the Service SDT programs and thus be aware of conditions, guidance, and policy decisions during budget formulation.

RECOMMENDATION 1: It is recommended that the ASD(I&L), working with the ASD(C), implement the proposed SDT supplemental budget exhibits during the FY 1977 budget cycle.

Instilling greater control on SDT within the DoD begins with budget development. LMI believes that implementation of the supplemental budget exhibits will be a significant first step toward improving the effectiveness of SDT. However, the benefits that can be garnered from the exhibits will not accrue unless OASD(I&L) personnel participate fully in the SDT budget process. While OASD(C) has an interest in and would be a principal user of the exhibits, full value of the exhibits will not be obtained from Comptroller use only--transportation is only one of many responsibilities of the budget analysts within OASD(C).

2. SDT Program Management Indicators

It appears to be the practice of the ASD(I&L) to focus on the Service SDT programs only during budget development. The same factors, however, that cause changes in the program from year to year also cause changes during the current year.

There are only a few data elements that need serve as indicators of the status of an SDT program during budget execution. These include (1) planned and actual workload in tons and dollars (2) a forecast of requirements for the remainder of the current year, and (3) an assessment of anticipated rate, or policy changes during on the balance of the current year program. Workload should be identified by mode of transportation because the Single Manager Operating Agencies are a basic and substantial part of the SDT program. Separate identification by mode is also necessary because some modes measure workload in short tons and others do so in measurement tons and any summation of these elements would obscure any meaningful evaluation. All of the above data are readily available within the Services.

Appendix L gives a sample format of the data LMI believes the ASD(I&L) requires to keep abreast of the Service SDT programs during budget execution. Such data are relatively easy to compile and provide a quick and comprehensive assessment of the DoD SDT program.

RECOMMENDATION 2: It is recommended that the ASD(I&L) request the Military Services to submit each quarter the proposed SDT program management indicators.

3. Financial Management

The SDT financial management practices of the Army, Marine Corps, and Air Force were found to be adequate to assure control of SDT funds. The Navy should strengthen its practices.

As noted previously, the principal weaknesses in the CONUS portion of the Navy SDT program include (1) difficulty of early detection of a potential shortfall in SDT funds, (2) when a shortfall is detected, a limited ability to take appropriate corrective action, and (3) absence of accountability and incentives throughout the SDT program.

The following actions would be solid moves toward correcting the deficiencies in the CONUS portion of the Navy SDT program:

a. The Navy should issue OPTARs to major commands. The receiving commands, however, should be held accountable and an OPTAR should not be exceeded without the approval of the Program Manager in accordance with the actual intent of an OPTAR.

b. The commands receiving OPTARs should provide SDT cost guidelines (similar to those issued by the Marine Corps) to their major field activities. The Program Manager should be informed of such actions for reporting and control purposes.

c. The Program Manager should provide monthly status reports to each OPTAR holder in accordance with the objectives of the MIS. Those reports should reflect command and, if applicable, field activity status relative to the OPTARs and cost guidelines.

d. The Program Manager should review the total SDT program and make such revisions or issue new policy so as to minimize ineffective traffic management practices (this could involve e.g., consolidating the traffic management functions at major field activities or reemphasizing the reporting requirements of the MILSTEP System).

e. The Program Manager should provide the direction for improvement of shipment planning in all Navy activities.

RECOMMENDATION 3: It is recommended that the ASD(I&L) request responsive action from the Navy on the SDT program deficiencies noted in this report.

4. Traffic Management

The review of Service traffic management practices identified several weaknesses in traffic management throughout the DoD. Some of the weaknesses stem from the specific practices of the Services while others emanate directly from DoD policy.

a. Shipment Planning

Improving the shipment planning function in CONUS installations offers considerable potential for reducing transportation costs. Two Air Force systems, the Shipment Document Release and Control System (D009) and the Transportation Automated Routing System (TARS), have many attractive features that could be capitalized upon by the other Services.

We are not advocating the total adoption of these systems by the other Services. However, some features of these systems could be incorporated into existing systems and would yield an overall improvement. The characteristics of these systems should be made available to traffic managers thoughout the DoD.

RECOMMENDATION 4: It is recommended that the ASD(I&L) sponsor a seminar on shipment planning.

It is envisaged that the Air Force would play a prominent role in the seminar; however, it need not be restricted to discussion of the D009 and TARS systems. We found DSA, MTMC, and the Federal Supply Service efforts of interest and propose that a description of their systems be included on the agenda.

The seminar should be attended by the SDT Program and Transportation Policy Managers of the respective Services, and as many TOs from major distribution

centers as possible. The presentations should focus upon the application of the systems and the associated benefits, with interchanges between the speakers and the audience encouraged.

The seminar should be considered the first of a series focusing on various aspects of transportation in the DoD. Topics of follow-on seminars could include--evaluating TO performance, use of specialty carriers such as UPS and Federal Express, and effectiveness of the MILSTEP 1B reports.

b. Avoidance of Duplicate Shipments

Lesser use of the U. S. Postal Service also offers potential for reducing transportation costs. In most of the activities visited, the USPS is the predominant carrier of small packages. Only a few activities, however, have taken the initiative to avoid or reduce the use of USPS to destinations being regularly served by other carriers. We have found little incentive on the part of the Services to take such action--different funds are involved and, in many field activities, the USPS is considered free transportation in that neither the activity nor the SDT program pays for the service.

> RECOMMENDATION 5: It is recommended that the ASD(I&L) request from each of the Military Departments and DSA a time phased plan for increasing the cost effectiveness of small package movements to destinations which are being regularly served by both the USPS and other carriers.

c. Commercial Paper

There are two issues related to the use of commercial paper which require direction from the ASD(I&L). The first is which fund (SDT or indicia) should be cited on the forms. This decision is now left to the individual Services. As a result, practices vary throughout the DoD (including SDT funds being cited on all commercial forms, both SDT and indicia funds being cited, and only indicia funds being cited).

While these varied practices are not detrimental to the SDT programs of the Services, they may eventually have a negative impact on the ability of the ASD(I&L) to implement effective future policy. This is especially critical if portions of separate funds are supporting similar programs. In addition, since SDT funds are to support all secondary movements of military cargo, then the indicia fund should not be cited on commercial forms used in such movements.

This inconsistency between the Services can weaken the structure of both the SDT and indicia programs and create unnecessary complexities for the ASD(I&L) in carrying out assigned transportation responsibilities.

RECOMMENDATION 6: It is recommended that the ASD(I&L), in conjunction with the ASD(C), determine the advisability of promulating guidance to the Services for the citing of SDT funds on all commercial transportation forms.

The second commercial forms issue is the ambiquity surrounding the new dollar limitation. The maximum limit on commercial forms recently has been raised from $25 to $100 per GBL by the Comptroller General. Shortly thereafter, MTMC issued guidance to the Services, and then withdrew the guidance because it felt it may have exceeded its authority. There are many benefits which can be available to the DoD from the new dollar limitation (including reduced processing costs and additional flexibility to the local transportation officers in carrier selection). In order to take advantage of these benefits, it is suggested that the ASD(I&L) pursue this fund limitation issue to determine its exact status and to work toward an early implementation within the DoD.

d. LOGAIR

LOGAIR is airlift dedicated. The Air Force position is that only airlift can provide the shortest possible transportation pipeline and thereby reduce stock levels

while still maintaining the required level of readiness. Our review of the LOGAIR system, the general traffic management characteristics of transportation requirements in CONUS, and UMMIPS indicates that the Air Force position on a CONUS dedicated airlift system is oversimplified.

The assumptions delineated in Appendix G and the resulting analysis of alternatives to the current system indicate that substantial savings are possible through consideration of an integrated LOGAIR system, i.e., aircraft and dedicated truck, and other variations to the present system.

RECOMMENDATION 7: It is recommended that the ASD(I&L) request the Air Force to develop plans for modifying the LOGAIR system into an integrated air/surface transportation system, along the lines discussed in Appendix G, for the FY 1978 budget submission.

e. QUICKTRANS

QUICKTRANS is an integrated air and surface transportation system. The Navy has found that such an integrated system can be economical. Our analysis of the QUICKTRANS system and Navy traffic management procedures has shown that the dedicated truck portion of QUICKTRANS is substantially underutilized. There is considerable cargo moving between the points to which QUICKTRANS provides dedicated truck service which could be consolidated with the QUICKTRANS cargo so as to reduce overall transportation costs. However, there are few incentives for Navy TOs to seek out such consolidations.

RECOMMENDATION 8: It is recommended that ASD(I&L) request the Navy to provide guidance to its field activities which will increase the utilization of QUICKTRANS trucks and thereby reduce total transportation costs.

B. COROLLARY ISSUES REQUIRING ATTENTION

1. UMMIPS Abuse

There is considerable evidence that the UMMIPS priorities are being consistently abused by the Services. Since the UMMIPS issue priority also implies the associated transportation priority of each shipment, the shipper service must have an aggressive shipment challenge system to avoid incurring unnecessarily large transportation costs.

A requirement exists to reevaluate the current UMMIPS stucture to determine whether the system can be made more effective. Two potential alternatives to the current system appear to have significant potential: (1) a system in which the issue and transportation priorities would be individually specified and (2) a variation of the above, but the transportation priorities would be different for intra-CONUS and overseas shipments.

> RECOMMENDATION 9: It is recommended that the ASD(I&L) initiate a study of the UMMIPS system to determine if the overall structure of shipment priorities can be made more consistent with current supply and transportation requirements.

2. Airlift Policy

Discussions with Service representatives on what actions they would take given a potential SDT fund shortage revealed that most of them would either institute more aggressive challenge criteria for MAC eligible cargo or automatically divert certain materiel to a surface mode. Such actions could trigger another round of ASIF tariff increases leading to additional cargo diversion, and the cycle would repeat. It is recognized that this cycle has been of considerable interest, and has also been the focus of many specific proposals. Most of the proposals are directed specifically to the ASIF problem and have not been formulated within the context of the total defense transportation system.

RECOMMENDATION 10: It is recommended that the ASD(I&L) initiate an intensive study of airlift policy. The study should be structured so that it provides the ASD(I&L) with a comprehensive analysis of the numerous proposals now extant within the DoD.

APPENDIX A

ASSISTANT SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

INSTALLATIONS AND LOGISTICS

DATE: 13 August 1974

TASK ORDER SD-321-33
(Task 75-4)

1. Pursuant to Articles E-1 and E-3 of the Department of Defense Contract No. SD-321 with the Logistics Management Institute, the Institute is requested to undertake the following task:

A. TITLE: Second Destination Transportation

B. BACKGROUND: The administration and management of Second Destination Transportation is primarily the responsibility of each of the Military Departments or Defense agency. However, that responsibility may be affected by other DoD components: such as actions taken by the DoD Transportation Single Manager agencies; management controls each DoD component exercises over its second destination transportation program and budget; and the delegation of traffic management responsibilities to the Shipper Service. Therefore, Second Destination Transportation funds may not be used most effectively.

C. SCOPE OF WORK: LMI is requested to review the current funding, management, planning, route and mode selection of Second Destination Transportation. The study will determine whether cost effectiveness is being achieved by DoD components in their use of Second Destination Transportation.

Specific areas to be examined concerning the DoD use of Second Destination Transportation action should include: management controls established for programming and budgeting; obligation and expenditure reporting systems; criteria used for selection of carriers and modes of transportation; extent of crosshauling and backhauling; consolidation of shipments; adequacy of guidance provided to transportation officers, contractors, and other authorized shippers (volume and small shipment traffic) on routing DoD shipments; and consideration of traffic management in site selection, activation, expansion, or reduction of facilities.

The study will be conducted in two phases. Phase 1 will consist of a detailed definition of the objectives, scope and methodology to be used during Phase 2.

TASK ORDER SD-321-33
(Task 75-4)

2. The Sponsor of this study is the Deputy Assistant Secretary of Defense (Supply, Maintenance and Services).

3. SCHEDULE: LMI will begin work on this task on 2 September 1974. A report of Phase 1 will be provided by 11 October 1974. Subject to adjustment as a result of Phase 1 findings, an oral progress report will be made on 31 January 1975 and the final report will be completed by 30 June 1975.

O. J. Mandeville

ACCEPTED [signature]

DATE 8-13-74

APPENDIX B

TRANSPORTATION DIRECTIVES AND INSTRUCTIONS

	Number	Subject
1.	DoDI 1336.4	Military Stand-by Authorization for Commercial Air Travel (DD Form 1580), November 21, 1966
2.	DoDD 3005.7	Emergency Requirements, Allocations, Priorities, and Permits for DoD Use of Domestic Civil Transportation, May 7, 1968
3.	DoDD 4000.25	Administration of Military Standard Logistics Data Systems, March 23, 1971
4.	DoDI 4100.14	Packaging of Materiel, November 21, 1973
5.	DoDI 4100.31	Reports on Single Manager Operations, September 2, 1960
6.	DoDD 4120.15	Designating and Naming Military Aircraft, Rockets, and Guided Missiles, November 24, 1971
7.	DoDI 4145.5	Storage Space Management Report (DD Form 805), May 10, 1974
8.	DoDI 4145.19	Storage and Warehousing Facilities, December 11, 1969
9.	DoDD 4410.6	Uniform Materiel Movement and Issue Priority System (UMMIPS), February 18, 1971
10.	DoDI 4500.1	Handling/Air Route Decisions Requiring the President's Approval, October 8, 1954
11.	DoDD 4500.2	Land Transportation Within Areas Outside the Continental U. S., June 27, 1972
12.	DoDD 4500.9	Transportation and Traffic Management, November 29, 1971
13.	DoDI 4500.17	Proceedings Before Transportation Regulatory Bodies, January 16, 1969
14.	DoDD 4500.34	Shipment and Storage of Personal Property, October 22, 1970
15.	DoDI 4500.35	Processing and Shipping DoD Sponsored Retrograde Materiel Destined for Shipment to the U. S., its Territories, Trusts, and Possessions, September 26, 1970
16.	DoDD 4500.36	Management, Acquisition, and Use of Motor Vehicles, July 30, 1974

17.	DoDI 4500.37	Ownership and Use of Containers for Surface Transportation and Configuration of Shelters/Special Purpose Vans, October 5, 1972
18.	DoDI 4500.38	Administrative Support Air Transportation, February 12, 1973
19.	DoDI 4515.7	Use of Motor Transportation and Scheduled DoD Bus Service in the National Capital Region, August 11, 1972
20.	DoDD 4515.13	Transportation by Department of Defense Owned and Controlled Aircraft, October 31, 1970
21.	DoDD 4540.1	Operating Procedures for U. S. Military Aircraft Over the High Seas, June 23, 1962
22.	DoDD 4635.1	Department of Defense Postal Operations and Related Services, August 1, 1973
23.	DoDI 5030.3	Memorandum of Agreement Between the Department of Defense and Department of Commerce, Dealing with Utilization, Transfer, and Allocation of Merchant Ships, October 20, 1954
24.	DoDD 5030.19	DoD Responsibilities on Federal Aviation Matters, August 6, 1971
25.	DoDD 5126.22	Assistant Secretary of Defense (Installations and Logistics), January 30, 1961
26.	DoDD 5126.9	Exemption Under Title II, Federal Property and Administrative Services Act - Transportation and Traffic Management, October 2, 1954
27.	DoDD 5160.2	Single Manager Assignment for Airlift Service, October 17, 1973
28.	DoDD 5160.10	Single Manager Assignment for Ocean Transportation, March 24, 1967
29.	DoDD 5160.53	Single Manager Assignment for Military Traffic, Land Transportation, and Common-User Ocean Terminals, March 24, 1967
30.	DoDD 5160.60	Highways for National Defense, April 26, 1973
31.	DoDD 5500.9	Carrying Deadly or Dangerous Weapons Aboard Commercial Aircraft, June 2, 1962

APPENDIX C

ARMY SDT TERMINOLOGY[1]

LAND TRANSPORTATION

Provides for procurement of inland transportation, worldwide, except Southeast Asia, for U. S. troop support cargo, including Table of Organization and Equipment (TO&E) of military units on Permanent Change of Station (PCS). It excludes the initial shipment from production to either a CONUS depot, CONUS customer, or CONUS port. Also excluded are Stock Fund items (except for certain returns).

AIR TRANSPORTATION - MAC

These dollar amounts provide for worldwide reimbursement to the Military Airlift Command (MAC) for all U. S. troop support cargo, Army and Air Force Exchange (AAFE) cargo, APO Mail, Table of Organization and Equipment (TO&E) of military units on Permanent Change of Station, and civilian personnel on PCS, their dependents and personal property.

AIR TRANSPORTATION - COMMERCIAL

Provides for worldwide movement by Commercial Airlift of APO Mail and troop support cargo.

CONUS PORT TRANSSHIPMENT - MTMC

Provides funds for reimbursing the Military Traffic Management Command (MTMC) Army Industrial Fund (AIF) for services performed in connection with CONUS port transshipment of U. S. troop support cargo including Table of Organization and Equipment (TO&E) of military units on Permanent Change of Station (PCS) and Army and Air Force Exchange (AAFE) cargo. The "Special Missions" cost, which is a catch-all for all items not specifically related to pre-determined rates, is projected based on historical experience. Special missions does include $72,400 each year to exercise non revenue generating DFRIF cars held for mobilization purposes.

SEA TRANSPORTATION - MSC

The dry cargo amounts provides for reimbursing the Military Sealift Command (MSC) for U. S. troop support movements worldwide and miscellaneous per diem charges. The bulk POL cost is overseas intra-theater shipments of Army owned POL. The FAMF costs are basically reimbursement to MSC for the civilian crew, dockage fees, and utilities on the Corpus Christi Bay. The FAMF left Vietnam in October of 1972 and arrived at Corpus Christi on 19 December 1972. The FY 1974 and FY 1975 dollar amounts assumes the FAMF will remain at Corpus Christi.

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[1] Provided by DCSLOG personnel, 15 April 1975.

OVERSEA WATER PORTS

Includes all functions in the overseas water ports pertaining to the receipt and shipment of cargo. This includes administration, documentation, processing temporary storage, cargo handling material, and stevedoring.

OTHER TRANSPORTATION FACILITIES

Thru Government Bill of Lading (TGBL) provides for commercial transportation of cargo, exclusive of household goods of military personnel between CONUS and oversea areas. This is a combination of land, air, and sea transportation media on a single bill of lading. Rental and lease of transportation equipment is for tank and refrigerator rail cars, TDY and incidental costs for Fly-Away of Army Aircraft to or from Depot Maintenance shops and helicopter transportation costs associated with the closing of Nike-Hercules sites, "Other" represents cost of operating transportation installations other than ports, terminals and their subinstallations.

APPENDIX D

NAVY SDT TERMINOLOGY[1]

LAND TRANSPORTATION

Inland Commercial cargo:	The movement of material within the CONUS via commercial motor, water, and rail transport.

AIR TRANSPORTATION - MAC

Channel Traffic cargo:	Regularly scheduled, point to point movement of cargo over routes established by MAC using either military or commercial aircraft.
Overseas Mail:	FPO mail carried in MAC aircraft to destinations where there is no regularly scheduled, American flag, airline service.
Special Assignment:	Exclusive use of aircraft to meet special cargo considerations of pickup, delivery, classification and off route service requirements.

AIR TRANSPORTATION - COMMERCIAL

Commercial Overseas Mail:	Navy mail being moved overseas on American flag commercial airlines.
QUICKTRANS:	Commercial contract cargo airlift service operating within CONUS to provide expedited movement for high-priority fleet support. Dedicated truck service is used to augment and interface with the airlift service when feasible.

CONUS PORT TRANSSHIPMENT - MTMC

Terminal Services:	Charges for the movement of Navy cargo through military operated ocean terminals in CONUS.

SEA TRANSPORTATION - MSC

Ocean Cargo:	Regularly scheduled, port to port movement of cargo over routes established by MSC using either military or commercial ships.

[1] Provided by NAVSUP personnel, 22 April 1975.

Navy Exchange Cargo:	Material moved for the commissaries and Navy exchanges.
Overseas Mail:	Low priority FPO surface mail.
Per Diem:	Charges for special voyages or diversion of a ship because of a special lift requirement of Navy as authorized shipper service. Charges are levied on a daily basis from the time the ship leaves its regular service until it returns.
POL Japan:	Obsolete beginning in FY 76.

APPENDIX E

AIR FORCE SDT COST ELEMENTS BY MODE

The total Air Force SDT program for FY 1975 was summarized by mode in Table 7. The following provides the specific costs that are included in each mode.

LAND TRANSPORTATION

Ammunition - CONUS movement only

Missile - CONUS movement only

Cargo - CONUS movement only

Commercial Surface - within overseas areas

AIR TRANSPORTATION - MAC

Cargo - channel traffic

Base Exchange - channel traffic

APO Mail (Military) - channel traffic

Motion Picture - channel traffic

Special Assignment Missions

Unit Rotations and Exercises, ASIF - overseas

Other ASIF Transportation - overseas

AIR TRANSPORTATION - COMMERCIAL

APO Mail

Cargo

SAS Contracts

LOGAIR

Commercial Air - overseas

CONUS PORT TRANSSHIPMENT - MTMC

Ammunition - stevedoring

Base Exchange - stevedoring

General Cargo - stevedoring

SEA TRANSPORTATION - MSC

Ammunition

Base Exchange

General Cargo

POL

Per Diem and Vessel Retention

OTHER

Overseas stevedoring

Overseas - other costs

APPENDIX F

QUICKTRANS COST EVALUATION

A. SYSTEM DESCRIPTION

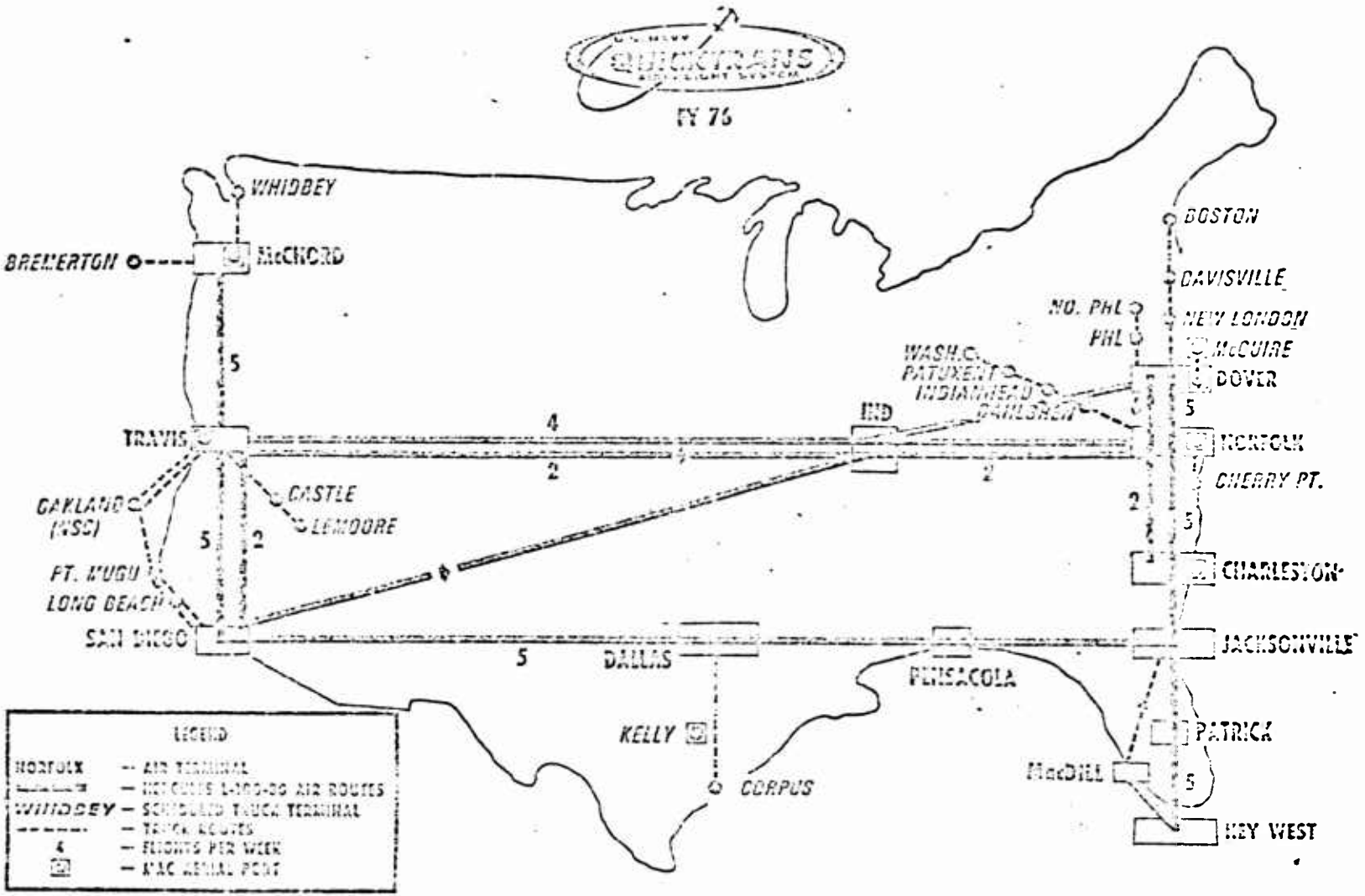
QUICKTRANS is a Navy sponsored, commercially operated, transportation system utilizing dedicated trucks and aircraft. It currently serves 32 CONUS installations including two Air Force Bases and five aerial ports. Exhibit F-1 depicts the route structure for FY 1976, while Table F-1 provides such information as installation served, frequency of service, and cost of each route in the system. The dedicated truck contracts are negotiated and procured by MTMC, while MAC provides the same service for the airlift contracts. The trucks are 40 foot, 20 ton-capacity units except on the West Coast where 27 foot tandem units may be employed. The aircraft used in the system is the L-100, which has a 23 ton capacity, including nets and pallets.

The objectives of the system are to reduce inventory levels, provide rapid transportation for high priority items, and assure timely and sufficient material for maintenance activities. The QUICKTRANS system is a free-flow operation in that few shipments (other than those which are excessive in number or weight) are challenged.

The Navy Material Transportation Office, Norfolk, Virginia is responsible for developing QUICKTRANS requirements and monitoring system operations.

B. DEVELOPMENT OF REQUIREMENTS

Movement requirements are developed at NAVMTO from historical data plus known changes in activity realignments, rates, and the like. Initially, a total matrix of expected work is generated (the previous FY workload is frequently used). The workload for origins/destinations served by truck are then extracted. Then, using an aircraft utilization factor of 75 percent, an aircraft route structure is developed. Preparation of the



Enclosure (1)

EXHIBIT F-1

TABLE F-1

THE QUICKTRANS SYSTEM -- FY 1976

PART A: SERVICE BY TRUCK				
ROUTE NUMBER	INSTALLATIONS/CITIES SERVED	FREQUENCY	TOTAL MILEAGE	TOTAL COST
701/702	Dallas Corpus Christi	Round Trip Daily, SU-TH	864	702.00
72E/72G/722	McChord AFB Whidbey Isl.	Round Trip Daily, M-F	176	333.00
725/726	McChord AFB Bremerton	Round Trip Daily, M-F	186	223.00
731/732	San Diego Long Beach Oxnard NSC, Oakland Travis AFB	Round Trip Daily, M-F (40½ hours for each round trip)	1,072	775.00
733/734	San Diego Long Beach Oxnard	Round Trip Daily, M-F	302	346.00
735/736	NSC, Oakland Travis AFB	Round Trip Daily, SU-TH	106	103.00
73A/73B	NSC, Oakland Travis AFB	One Way, F and SA only	53	103.00
737/738	Travis AFB Moore	Round Trip Daily, M-F	438	300.00
741	Dover AFB New London Divisville Chelsea	One Way Daily, M-F	400	479.00
742	Chelsea Davisville New London Dover AFB	One Way Daily, T-SA	400	479.00
745/746	Dover AFB McGuire AFB	Round Trip Daily, M-SA	216	410.00
747/748	Dover AFB NSY, Philadelphia	Round Trip Daily, SA	148	380.00
749/750	Dover AFB NSY, Philadelphia	Round Trip Daily, M-F	148	410.00
751/752	Norfolk Cherry Point	Round Trip Daily, M-F	316	372.00
753/754	Norfolk Patuxent River NSY, Washington, D. C.	Round Trip Daily, M-F	308	330.00
755	Norfolk Dahlgren Indianhead Patuxent River	One Way, M, W, and F	109	285.00
756	Patuxent River Indian Head Dahlgren Norfolk	One Way TH and FH	109	285.00

TABLE F-1 (Cont'd)

PART B: SERVICE BY AIR		
FLIGHT NUMBER	INSTALLATIONS/CITIES SERVED	FREQUENCY
115	Dover AFB Norfolk Travis AFB	Sunday
116	Travis AFB North Island Indianapolis Norfolk Charleston Norfolk Dover AFB	Monday
117	Dover AFB Norfolk Travis AFB	Monday
118	Travis AFB North Island Indianapolis Norfolk Charleston Norfolk Dover AFB	Sunday
141	Dover AFB Norfolk Indianapolis Travis AFB	Daily, Wednesday thru Saturday
142	Travis AFB Indianapolis Dover AFB	Daily, Tuesday thru Friday
155	Dover AFB Norfolk Charleston Jacksonville Pensacola Dallas North Island Travis AFB	Daily, Tuesday thru Saturday
156	Travis AFB North Island Dallas Pensacola Jacksonville Charleston Norfolk	Daily, Tuesday thru Saturday
212	Travis AFB McChord AFB Travis AFB	Sunday
242	Travis AFB McChord AFB Travis AFB	Daily, Tuesday thru Friday

PART C: LOGAIR FLORIDA OPERATION		
ROUTE NUMBER	INSTALLATIONS/CITIES SERVED	FREQUENCY
L3Q	Jacksonville Patrick AFB Key West McDill* Jacksonville	Daily, Monday thru Friday*

*Service from McDill AFB to Jacksonville NAS is by truck, all other service is by air. Truck service is provided daily, Tuesday thru Saturday.

requirements matrix and the airlift route structure is currently a manual operation; however a computer program at the Navy Ship Development Center, Carderock, Maryland was used to verify that the route structure ultimately selected for FY 1976 was the best of several under consideration. The route structure is then priced at the previous year's rate plus an estimated fuel surcharge. It is then submitted to NAVSUP for review and approval.

C. MONITORING AND CONTROLLING THE SYSTEM

NAVMTO monitors the system through a series of reports which enables them to maintain a close awareness of system costs, utilization, and performance. The major system reports include the:

- QUICKTRANS Segment Report which provides monthly data on each segment of the system concerning frequency of operation, tonnage lifted, and aircraft utilization;
- Transit Analysis Report which provides monthly data on transit time performance by priority from each QUICKTRANS origin station to all QUICKTRANS destination stations; and
- Commercial Movement Summary Report which provides monthly dedicated truck data including volume of cargo moved by weight and cube and unit cost information.

At the close of each month, the total system cost-per-pound-mile for that month is estimated and 5 percent is added to cover unforeseen costs. All users of QUICKTRANS in the following month are charged at this cost-per-pound-mile rate, regardless whether their cargo is moved by air, truck, or a combination of modes. By following this procedure, QUICKTRANS management is assured of breaking even during each FY.

D. FINDINGS AND CONCLUSIONS

The estimated (as of 15 January 1976) FY 1976 total system cost for QUICKTRANS is approximately $23.5 million. This figure is almost exactly one-half that of LOGAIR for

the same time frame (see Appendix G). However, imbedded in QUICKTRANS costs are several million dollars for the operation of the terminals (this is contractor supported in Navy, while in-house personnel are used by the Air Force) and its communications network (which is also outside LOGAIR's base cost). Extracting the terminal, communication and truck costs from the total QUICKTRANS system cost of $23.5 million, yields an airlift system costing approximately one-third that of LOGAIR (an exact figure as of 15 January 1976 was not made available). This relationship also applies to the ton-miles flown by the two systems during June 1975: LOGAIR flew 14.60 million ton-miles while QUICKTRANS flew approximately one-third that much or 5.235 million ton-miles.

The principal function of the system is to provide fast inter-coastal transportation for Navy cargo, with much of the intra-coastal movements being supported by a surface mode. This is reflected in both the route structure and June 1975 movement statistics. In FY 1976, QUICKTRANS has 22 trancontinental flights each week (11 in each direction). It also operates 5 round-trip flights each week between Travis and McChord Air Force Bases. Plus, the Navy is supported in Florida by LOGAIR on a Monday through Friday basis. The transcontinental flights accounted for almost 84 percent of the ton-miles flown in June 1975, as well as 82 percent of the total tons airlifted.

Table F-2 provides performance data on the QUICKTRANS system over the first six months of Calendar Year 1976. These data detail the extent dedicated trucks support the movement of cargo under 500 miles. Nearly 30 percent of all shipments (37 percent of the tonnage) moving less than 500 miles were transported exclusively by truck. While this integration of the air and surface modes is significant, Table F-3 identifies one serious weakness in QUICKTRANS performance: poor utilization of the dedicated trucks. With the exception of the Travis AFB/Lemoore NAS route on which tandems are used, twenty ton capacity trailers are being employed. Yet, the average load per move during June 1975 was only 5.03 tons, and this is an inflated figure due to the estimation procedures used to account for missing data.

TABLE F-2

DISTRIBUTION OF SHIPMENTS/TONNAGE
BY MODE: JANUARY - JUNE 1975

MODE	NUMBER OF SHIPMENTS	TONNAGE
A. SHIPMENTS 500 MILES OR LESS		
Air Only	36,934	5,189
Truck Only	16,430	3,404
Air/Truck	1,795	403
Unidentified	915	250
Total	56,074	9,246
B. SHIPMENTS OVER 500 MILES		
Air Only	103,474	15,444
Truck Only	415	72
Air/Truck	7,258	1,346
Unidentified	3,575	589
Total	114,724	17,451

Two alternatives for improving the cost effectiveness of the QUICKTRANS system and particularly the dedicated trucks are:

1) use TP 3 shipments as filler cargo, or

2) eliminate intra-coastal stops on transcontinental flights.

The implications of these alternatives are discussed below.

Alternative 1: Use TP 3 shipment as filler cargo.

It is Navy policy that only TP 1 and TP 2 cargo move on the dedicated trucks. This policy, however, prohibits many Navy shippers from taking advantage of the unused capacities on these trucks. These shippers are forced to procure commercial carriers, frequently at less-than-truckload rates, for movement of the TP 3 cargo, when it could have gone free (at least to the Navy) on the QUICKTRANS truck.

TABLE F-3

QUICKTRANS TRUCK OPERATIONS

June 1975

ROUTE NUMBER	DESTINATIONS SERVED	NUMBER OF MOVES	TONS LIFTED	TOTAL ROUTE COST ($)	COST PER TON-LIFTED ($)	COST PER TON-MILE ($)	AVERAGE LOAD PER MOVE (TONS)
701	1	21	39	8,193	210	0.486	1.86
702	1	21	62	8,193	132	0.306	2.95
722	1	21	66	3,496	54	0.602	3.14
725	1	20	138	2,926	21	0.228	6.90
726	1	21	113	3,255	29	0.310	5.38
72E	1	5	7	832	139	1.351	1.40
72G	1	15	42	2,497	59	0.676	2.80
731	4	20	165*	5,430	33	0.088	8.25
732	4	21	174	5,701	33	0.081	8.26
733	2	21	110	3,370	31	0.203	5.24
734	2	20	114	3,710	33	0.281	5.70
735	1	22	158	1,133	7	0.135	7.18
736	1	19	72	978	4	0.256	3.79
737	1	21	46	3,150	68	0.313	2.19
738	1	20	22	3,000	136	0.623	1.10
73A	1	4	35	412	12	0.222	8.75
73B	1	5	32	515	16	0.394	6.40
741	3	21	167	8,904	53	0.155	7.95
745	1	24	17	4,320	254	4.099	0.71
746	1	22	54	3,861	71	1.153	2.45
747	1	4	6	340	57	2.024	1.50
748	1	2	1	170	170	6.071	0.50
749	1	21	90	2,173	24	0.862	4.29
74B	3	16	102	6,784	67	0.226	6.38
74D	3	4	26	1,696	65	0.196	6.50
74E	1	21	163	1,365	8	0.182	7.76
74F	1	7	14	455	32	0.707	2.00
74G	1	9	43	585	14	0.296	4.78
74H	1	2	4	130	32	0.707	2.00
750	1	21	139	2,173	16	0.558	6.62
751	1	20	117	3,720	32	0.201	5.85
752	1	21	142	3,906	28	0.174	6.76
753	2	20	127	5,300	42	0.271	6.35
754	2	21	221	5,565	25	0.194	10.52
755**	1	12	30	3,420	114	1.046	2.50
756**	1	8	22	2,280	104	0.951	2.75
TOTAL	-	573	2,880	113,938	40	0.398	5.03

*All underlined entries were estimates; actual movement data were not available.

**The destinations on these routes could not be distinguished from one another, therefore, only one destination was displayed.

The cost advantages of using TP 3 shipments as filler cargo on QUICKTRANS trucks is extremely difficult to estimate. There are many unknown factors that will have an influence. However, it is the opinion of the study team that the benefits available to the Navy under this alternative could be significant.

Alternative 2: Eliminate intra-coastal stops on transcontinental flights.

By eliminating intra-coastal stops on transcontinental flights, the Navy would then have a strictly inter-coastal airlift shuttle system. This alternative implies that all priority shipments destined for another activity along the same coast would move by truck. One approach (among many) to restructuring the QUICKTRANS airlift system under this alternative is given in Table F-4. This approach involves eliminating several intra-coastal stops and then substituting surface transportation to satisfy the associated movement requirements.

TABLE F-4

RESTRUCTURED AIRLIFT SYSTEM: ALTERNATIVE 2

FLIGHT NUMBER	INSTALLATIONS/CITIES SERVED	FREQUENCY
115	Dover - Travis	Sunday
116	Travis - Indianapolis - Dover	Monday
117	Norfolk - Travis	Monday
118	Travis - Indianapolis - Norfolk	Sunday
141	Dover - Indianapolis - Travis	Daily, Wed.-Sat.
142*	Travis - Indianapolis - Dover	Daily, Tues.-Fri.
155	Jacksonville - Pensacola - Dallas - North Island	Daily, Tues.-Sat.
156	North Island - Dallas - Pensacola - Jacksonville	Daily, Tues.-Sat.
212*	Travis - McChord - Travis	Sunday
242*	Travis - McChord - Travis	Daily, Tues.-Sat.

*Not revised under this alternative.

The savings that are associated with this alternative stem primarily from a reduction in aircraft usage and landings. (There would also be savings resulting from eliminating the terminal services at Charleston; however, an estimate of these savings was unobtainable.) Table F-5 shows the reductions in landings and mileage that are possible under this alternative. At $150 per landing and an estimated cost (as per an undated NAVMTO QUICKTRANS budget submission document) of $3.2108 per mile, savings of $3.164 million should accumulate (i.e., 150.00 x 2,808 + 3.2108 x 854,048). Since information on the terminal costs at Charleston are not available, this savings of $3.164 million should be considered the minimum accruing through such a reduction in services.

TABLE F-5

REDUCTION IN MILEAGE AND
LANDINGS BY ROUTE - ALTERNATIVE 2

FLIGHT	REDUCTIONS PER FLIGHT		REDUCTIONS PER YEAR	
NUMBER	LANDINGS	MILEAGE	LANDINGS	MILEAGE
115	1	169	52	8,788
116	4	1,550	208	80,600
117	1	169	52	8,788
118	4	1,550	208	80,600
141	1	169	208	35,152
142	0	0	0	0
155	4	1,231	1,040	320,060
156	4	1,231	1,040	320,060
212	0	0	0	0
242	0	0	0	0
TOTAL	19	6,069	2,808	854,048

To achieve these savings, however, three additional dedicated truck routes must be initiated: 1) round trip, 7 day a week service between Dover and Norfolk, 2) round trip, 6 day a week service between Travis and North Island, and 3) round trip, six day a week

service between Norfolk, Charleston, and Jacksonville (not necessarily one route). The cost of these additional routes was estimated using current QUICKTRANS costs as the base. The two East Coast routes were costed using the average QUICKTRANS system truck cost per mile of $1.2834, while the Travis to North Island route was costed at the planned FY 1976 rate for routes 731 and 732 or $775 per round trip. The cost of each additional route is computed below:

Norfolk/Dover: 340 miles x 7 trips/week x 52 weeks/year
x $1.2834/mile = $158,834

Norfolk/Charleston/Jacksonville: 1,312 miles x 6 trips/week x 52 weeks/year
x $1.2834/mile = $525,352

Travis/North: $675/trip x 6 trips/week x 52 weeks/year
= $210,600

Total Truck Cost = $894,786

The net cost savings associated with this alternative is then $2.269 million (i.e., $3.164 million less $0.895 million). This $2.269 million is considered the minimum that the Navy should be able to realize from this alternative. Other potential savings which are not quantifiable but will accrue regardless, include savings in fuel reimbursements and an expanded capability for using TP 3 shipments as filler cargo. It is speculated that the latter savings may equal those obtainable from the airlift reduction.

While the second alternative offers substantial potential for cost savings, it also entails a significant realignment of the base QUICKTRANS system. The operational impact of this realignment was not assessed by the study team, except to insure that more than adequate surface capacity is available.

APPENDIX G

LOGAIR COST EVALUATION

A. SYSTEM DESCRIPTION

LOGAIR is an Air Force sponsored cargo airlift shuttle system operating between Air Logistics Centers, aerial ports, and CONUS bases. Two commercial carriers (i.e., Saturn and Overseas National) currently hold LOGAIR contracts. Three different types of aircraft are used by the carriers in satisfying transportation requirements: the DC-9 and L-188 both having a capacity of 17 tons (including nets and pallets) and the L-100 with a capacity of 23 tons (also including nets and pallets). LOGAIR is serving 59 installations in FY 1976 including two Naval bases, six Air Logistics Centers, and six aerial ports. Stations within 100 miles of each other are generally not permitted in the LOGAIR system, even though there are three notable exceptions: two aerial ports--McGuire and Dover (84 miles), McClellan and Travis Air Force Bases (39 miles), and Hanscom and Pease Air Force Bases (54 miles).

The objectives of the system include 1) reduce inventory levels through a shortened pipeline (especially for high value items), 2) provide rapid transportation of high priority cargo to maintain readiness objectives, and 3) assure sufficient and timely quantities of reparable items at maintenance activities. The system supports the movement of all TP 1 and TP 2 cargo. It also accepts TP 3 filler cargo to the next station down line. The system is completely airlift dedicated, does not consider alternative modes of transportation, and has a load factor objective of 70%.

The office responsible for developing LOGAIR requirements and monitoring the system is the Directorate of Transportation, Transportation Requirements Division of AFLC at Wright Patterson AFB, Ohio.

1. Developing Requirements for Commercial Airlift

Each major Air Force CONUS command and the six ALCs submit a forecast of TP 1 and TP 2 tonnage requirements for the following FY based on first quarter historical data supplied by AFLC. The Transportation Requirements Division then develops a series of requirements matrices from all origin stations to all destination stations. These matrices are then partitioned into trunk stations (an activity generating in excess of 2,000 tons of cargo per year) and feeder stations (those generating less than 2,000 tons of cargo per year). Matrices are then developed by trunk-trunk-feeder and feeder-trunk-trunk-feeder in a manner which will maximize utilization of the aircraft and provide responsive delivery of the cargo.

Finally, a route structure is developed considering tonnage and type of aircraft necessary, number of landings, flight patterns, etc. The route structure is costed in accordance with CAB rates and anticipated contract costs and then sent to the Air Staff (Directorate of Transportation, Traffic Management Division) for review and approval.

2. Monitoring and Controlling the System

The Transportation Requirements Division receives several monthly reports (through a LOGAIR Transportation Management System) on system operating costs, aircraft utilization, and on time performance. The major reports include:

- a LOGAIR Tonnage and Cost Report which provides detail and summary cost and utilization data by channel, flight, and system;
- a LOGAIR Allocation and Utilization Report which measures by channel, total flight, and total system, the space utilized compared to that requested and allocated; and
- an Air Transportation Transit Report which summarizes by channel and transportation priority, the average shipment delivery time.

B. COST EVALUATION APPROACH

The LOGAIR evaluation first centered on determining the base cost of the system. Budget data were inappropriate for this purpose because embedded in these data were an

anticipated number of overflys because of the non-generation of cargo. Since there was a rate increase effective 1 June 1975, that month's rate and flight patterns were used in developing the base LOGAIR costs. The regular flights in operation that month were costed out on a daily basis at the appropriate plane mile and landing cost (see Table G-1). This daily cost was then multiplied by 365 to yield an annualized figure of $36.892 million. Adding an airway tax of $1.389 million and a POL cost differential cost of $10.592 to this $36.892 million, yielded a total system cost of $48.873 million. While this figure is somewhat higher than the total gross system cost of $46.702 million for FY 1976 (as per the AFLC Budget Estimate dated August 1975), it facilitates a standard approach toward evaluating various alternatives to the base LOGAIR route structure.

All alternatives to the base LOGAIR system were costed in a manner similar to the above approach and then contrasted with the base LOGAIR system cost of $48.873 million. The alternatives evaluated herein are not intended to be complete, operationally viable variations of the base LOGAIR route structure. Rather, they are presented solely to demonstrate the potential savings associated with such alternatives.

C. SELECTION OF ALTERNATIVES

The alternatives to the current LOGAIR system center around the concept of an integrated airlift-surface transportation system. The base system is completely airlift oriented; however, many legs of several feeder routes are of such short distances that a conversion from airlift to surface movement for these segments appeared feasible. To illustrate this point, there were 2718 regularly scheduled LOGAIR flights (i.e., liftoffs) in June 1975. Approximately 24 percent of these flights (or 656) were for distances less than 200 miles; almost 53 percent of the flights (or 1,430) were between LOGAIR stations within 400 miles of each other; and, over 61 percent of the flights (or 1,661) were less than 500 miles. It is recognized that many of these short flights occur because stations were enroute to other stations; nevertheless, the resulting route structure indicates a substantial number of short distance flights.

The integrated airlift-surface transportation system concept was then extended to include a closer scrutiny of material moving via LOGAIR which could result in a reduction in airlift requirements. Such an extension may, at first, seem extreme; however, when one considers the Air Force policy of airlift transportation within CONUS, such an evaluation is natural. To illustrate, LOGAIR is presently a free flow system. All TP 1 and TP 2 cargo are eligible for movement on LOGAIR, as is all TP 3 cargo on a space-available basis to the next downline station. This free-flow practice appears to have resulted in inflated LOGAIR requirements, especially when Air Force experience on diverting MAC shipments is considered. All shipments destined for overseas via MAC must be cleared prior to release of the shipments to the aerial port of embarkation. Several examples of MAC airlift challenges indicated that in excess of 30 percent of all such shipments are diverted from airlift to surface movement. That is, these shipments were declared not eligible for airlift, even though they were assigned an air-eligible issue priority. Within CONUS, shipments moving via LOGAIR require no such clearance action. There is no evidence suggesting that the Air Force would experience a lower diversion rate if all shipments moving by LOGAIR were challenged. In fact, it is more likely, because of the current ease of moving cargo by LOGAIR, that the diversion rate would be in excess of 40 percent. The end result appears to be an inflated LOGAIR system.

The integrated airlift-surface concept and the reduction in LOGAIR requirements were the conclusion of the following observations and assumptions.

1. There is an excellent surface transportation system within CONUS upon which the LOGAIR managers are not capitalizing.

2. Closely associated with the above point, dedicated surface carriers can be effectively employed between LOGAIR stations located within 500 miles of each other. To demonstrate that such a position is viable, QUICKTRANS has a regularly scheduled truck operation between North Island NAS and Travis AFB for the intra-coastal movement

of high-priority shipments. The distance between these installations is 536 miles; cargo requirements of Long Beach, Oxnard, and NSC Oakland are also served enroute; and, trips are made in both directions, five days each week--Monday through Friday.

3. The use of dedicated trucks will eliminate the need for procuring much of the common carrier service for TP 3 cargo moving between the stations being served by these dedicated trucks. LOGAIR system data indicates that the average level of daily TP 1 and TP 2 traffic between stations that could potentially be served by dedicated truck is relatively low. TP 3 traffic can then be used as filler cargo. This approach may also tend to simplify some of the controls and complexities of shipment planning now required in the D009 Shipment Document Release and Control System.

4. An integrated airlift-surface system when coupled with reduced services, will require fewer aircraft, flights, and landings, along with reduced airway taxes and POL adjustments. It should also result in increased aircraft utilization through less transfers, better control, fewer stations to which pallets must be allocated, etc.

To illustrate the potential increase in aircraft utilization which should be obtained from an integrated and reduced system, one has to contrast LOGAIR's operation with that of QUICKTRANS. The airlift portion of QUICKTRANS is essentially an inter-coastal shuttle system, with a substantial portion of the intra-coastal movement being made by truck. This is in direct contrast to LOGAIR which serves installations almost uniformly nationwide, through two airlift networks: one is the movement of cargo between ALCs (i.e., trunk routes) and the other being the movement of cargo from the ALCs to Air Force bases (i.e., feeder routes). As a result, QUICKTRANS' aircraft utilization (based on weight) is considerably higher than that experienced by LOGAIR (72.8 versus 64.1 percent for the first six months of Calendar Year 1975).

5. The FEC and other commercial airlines are willing and capable of providing fast and efficient airlift service for overflow LOGAIR requirements. They are presently satisfying certain transportation requirements which LOGAIR is unable to meet.

6. Inventory levels and maintenance facilities are not so finely tuned that a one-day (maximum) increase in delivery time for cargo moving strictly within CONUS will increase inventory levels. That is, the order and ship times built into procurement models will probably not be exceeded for these items.

D. EVALUATION OF ALTERNATIVES

Four alternatives to the base LOGAIR system were selected for closer examination:

1. use of dedicated trucks to move cargo to and from ALCs, aerial ports, and nearby AF bases;
2. partial replacement of L-100 aircraft with DC-9s and L-188s;
3. limited reduction in LOGAIR service; and
4. extensive reduction in LOGAIR service

Alternatives 2, 3, and 4 are not intended to stand alone, but rather, they build upon the results of the first.

Evaluating the net effect of these alternatives quickly highlighted a severe problem–the paucity of applicable data to make a comprehensive evaluation. Much of the required data were either not available or were in formats not conducive to the intended analyses (this was especially true for the last two alternatives and for a more complete evaluation of the first two). The final result was that only for the first and second alternative could an appropriate evaluation be accomplished. The evaluations of the other alternatives had major deficiencies when reviewed for completeness. However, even these alternatives provide circumstantial evidence that there are considerable savings to the Air Force if it modifies its basic approach to the LOGAIR structure. The evaluation of these alternatives are discussed below.

Alternative 1: Use of Dedicated Trucks

The base LOGAIR route structure is given in Exhibit G-1 and, as previously noted, costed out in Table G-1. Exhibits G-2 and G-3 display the modified LOGAIR feeder and

TABLE G-1. DETERMINATION OF LOGAIR BASE COST

FLIGHT* NUMBER	PLANE MILE COST($)	DAILY MILES FLOWN	NUMBER OF LANDINGS	DAILY FLIGHT COST
2B	2.6229	3,873	7	11,208
2D	2.6229	2,999	4	8,466
2F	2.6229	4,231	8	12,297
2Q	2.6229	3,564	7	10,398
3C	1.8441	2,276	3	4,647
3J	1.8441	2,136	6	4,839
3K	1.8441	3,018	11	7,215
3M	1.8441	2,702	8	6,183
3N	1.8441	2,185	7	5,079
3P	1.8441	2.276	3	4,647
4T	1.8441	1,266	5	3,085
4U**	1.8441	1,534	8	4,029
4V	1.8441	4,230	6	8,701
4W	1.8441	2,695	4	5,570
5R	1.8441	1,822	9	4,710
TOTAL	-	40,807	96	101,074

*These flight numbers refer to those regularly scheduled LOGAIR flights in operation during June 1975. See Exhibit G-1 for the LOGAIR route structure.

**This flight flies one route five days per week and another route the remaining two days. For simplicity purposes, it was assumed that the route flown five days per week was also flown the other two days. The displayed daily flight cost assumes this schedule.

UNITED STATES AIR FORCE LOGISTIC AIRLIFT

ROUTE STRUCTURE

Effective 10 January 1975

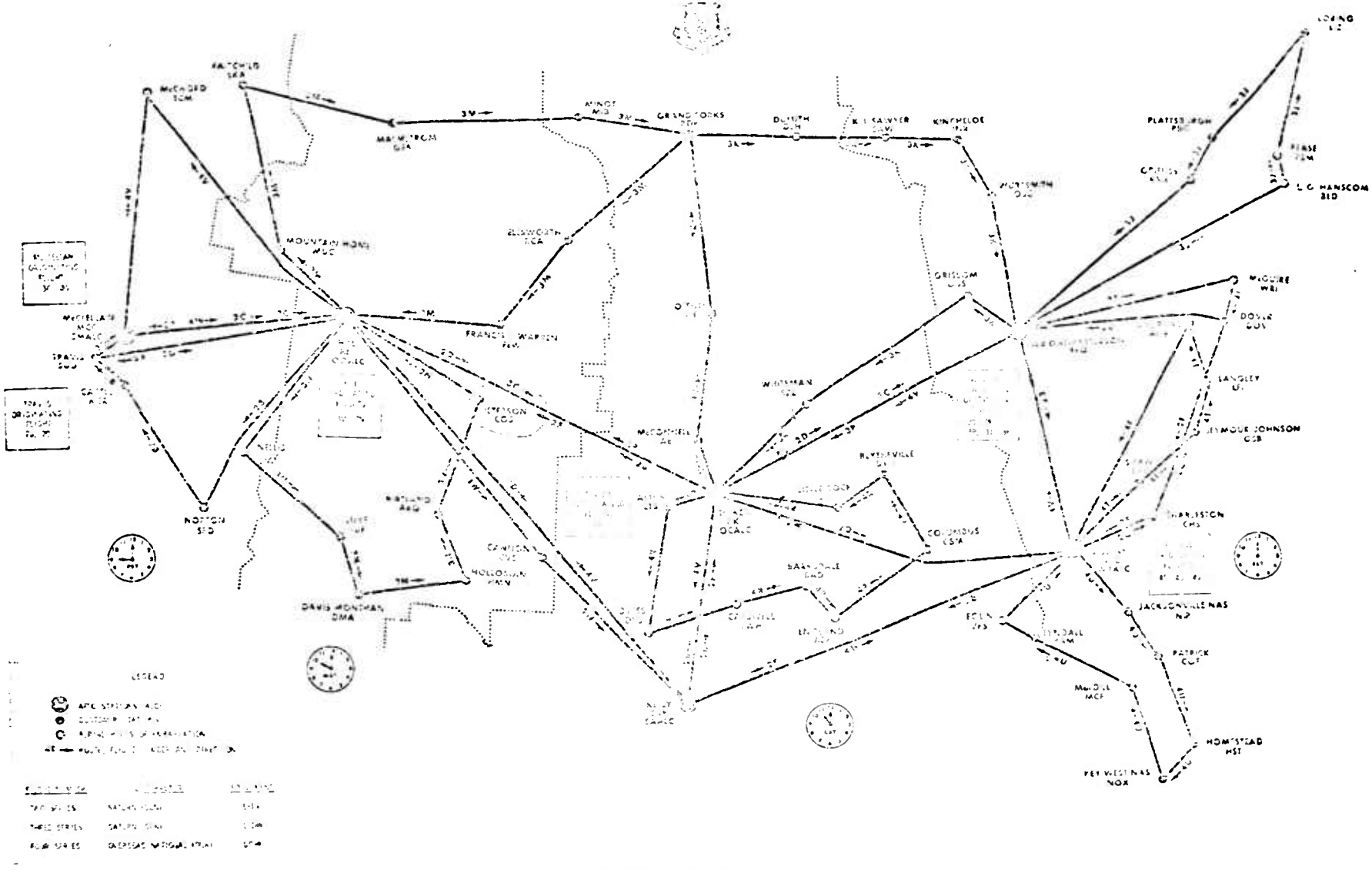


EXHIBIT G-1

ALTERNATIVE 1

LOGAIR FEEDER ROUTES

EXHIBIT G-2

ALTERNATIVE 1

LOGAIR TRUNK ROUTES

EXHIBIT G-3

trunk routes under this alternative. Table G-2 gives the cost of the feeder routes supported by dedicated trucks, while Tables G-3 and G-4 provide the same information for airlift supported feeder and trunk routes, respectively.

The total daily cost of this alternative is $90,235, which is the total of the following figures:

feeder routes - dedicated trucks:	$11,998
feeder routes - airlift:	$12,566
trunk routes - airlift:	$65,671

Annualizing the daily cost figure yields an annual cost of $32.936 million. Since the airlift feeder and trunk routes would fly 31,392 miles under this alternative (i.e., 5,158 miles from Table G-3 plus 26,234 from Table G-4), approximately 76.9 percent (i.e., 31,392/40,807) of the annual airway tax and POL adjustment costs would also be incurred by the alternative. Thus, $9,213 million (i.e., 0.769 x 11.981) would be added to the annualized daily cost of $32.936 million to yield a total Alternative 1 cost of $42.149 million, or a total savings of $6.724 million. Thus, an integrated surface-airlift LOGAIR could reduce LOGAIR system costs by $6.724 million, or 13.8 percent, over a completely airlift dedicated system.

Tables G-5, G-6, and G-7 provide additional data on average movements by dedicated truck, feeder and trunk aircraft that must be supported by the LOGAIR structure assumed under this alternative.

This alternative has a secondary benefit which was found impossible to quantify given the time frame of the task. By using dedicated trucks between specific installations for the movement of high-priority cargo, much of the TP 3 traffic moving between these same installations can now be used as filler cargo on the dedicated truck. (Table G-5 indicates that the anticipated average amount of high-priority cargo moving on these trucks will utilize only a small percentage of most trucks.) The net result is that most of this filler cargo can essentially be moved free, as the higher priority cargo has already

ALTERNATIVE 1

TABLE G-2: LOGAIR FEEDER ROUTES - DEDICATED TRUCKS

ORIG - DEST	MILEAGE[1] ONE WAY	MILEAGE[1] ROUND TRIP[2]	COST/MILE[3]	DAILY COST
1. MCC - MER	107	-		
MER - SUU	121	-		
SUU - MCC	49	-		
	277	277	$0.6849	$ 186
2. HIF - MUO	275	550	1.2834	706
3. SBD - LUF	333	-		
LUF - DMA	118	-		
	451	902	1.2834	1,158
4. TIK - LTS	145	-		
LTS - CVS	248	-		
	393	786	0.9051	712
5. CVS - ABQ	216	-		
ABQ - HMN	209	-		
HMN - CVS	229	-		
	654	654	0.9051	592

[1]Source: Rand McNally Standard Highway Mileage Guide.

[2]The number of trucks required to provide the necessary service is not specified. One truck could make a daily round trip or two trucks could be used daily -- one in each direction.

[3]The cost per mile used was either FY 1976 QUICKTRANS experience or, if QUICKTRANS did not have dedicated trucks in a particular section of CONUS, average QUICKTRANS costs for FY 1976 were used.

ALTERNATIVE 1

TABLE G-2: LOGAIR FEEDER ROUTES - DEDICATED TRUCKS

ORIG - DEST	MILEAGE ONE WAY	MILEAGE ROUND TRIP	COST/MILE	DAILY COST
6. TIK - IAB	159	-		
IAB - SZL	285	-		
SZL - TIK	368	-		
	812	812	$0.9051	$ 735
7. TIK - LRF	349	-		
LRF - RYH	193	-		
	542	1,084	0.9051	981
8. TIK - BAD	357	-		
BAD - AEX	122	-		
	479	958	0.9051	867
9. TIK - DYS	285	-		
DYS - FWH	152	-		
FWH - TIK	200	-		
	637	637	0.9051	577
10. FFO - GUS	151	302	1.2834	388
11. DOV - LFI	198	-		
LFI - ADW	175	-		
ADW - DOV	96	-		
	469	469	1.7208	808
12. DOV - WRI	110	220	3.3065	728
13. WRB - CHS	267	-		
CHS - SSC	95	-		
SSC - GSB	183	-		
	545	1,090	1.2834	1,398
14. WRB - CBM	351	702	1.2834	901

ALTERNATIVE 1

TABLE G-2: LOGAIR FEEDER ROUTES - DEDICATED TRUCKS

ORIG - DEST	MILEAGE		COST/MILE	DAILY COST
	ONE WAY	ROUND TRIP		
15. WRB - VPS	282	-		
VPS - PAM	96	-		
PAM - WRB	265	-		
	643	643	$1.2834	$ 825
16. COS - FEW	170	340	1.2834	436
GRAND TOTALS		10,320		$11,998

ALTERNATIVE 1

TABLE G-3: LOGAIR FEEDER ROUTES - AIRCRAFT ROUTES

	ORIG - DEST	MILEAGE[1]	MILEAGE COST[2]	LANDING COST[3]	TOTAL COST
A.	DOV - BED	334			
	BED - PSM	54			
	PSM - LIZ	312			
	LIZ - PBG	382			
	PBG - RME	149			
	RME - DOV	288			
		1,519	$2,801	$900	$3,701
B.	WRB - NIP	212			
	NIP - COF	160			
	COF - HST	196			
	HST - NQX	111			
	NQX - MCF	244			
	MCF - NIP	171			
	NIP - WRB	212			
		1,306	$2,408	$1,050	$3,458
	less Navy shuttle from MCF - NIP, 191 x 1.2834				245
				Net Cost	$3,213
C.	FFO - OSC	338			
	OSC - INR	154			
	INR - SAW	145			
	SAW - DLH	238			
	DLH - RDR	255			
	RDR - MIB	188			
	MIB - RCA	343			
	RCA - OFF	419			
	OFF - FFO	672			
		2,333	$4,302	$1,350	$5,652
GRAND TOTALS		5,158			$12,566

[1] Source: LOGAIR standard distances or U. S. Department of Commerce Coast and Geodetic Survey, Air Line Distances between Cities in the U. S.

[2] Mileage cost for the L-100 is $2.6229/plane mile; for the L-188 and DC-9, it is $1.8441/plane mile. All feeder routes use the L-188 or DC-9.

[3] The landing fee is $150/landing.

ALTERNATIVE 1

TABLE G-4: LOGAIR TRUNK ROUTES

FLIGHT NO.[1]	EQUIPMENT	COST/PLANE MILE
TWO SERIES	L-100	$2.6229
THREE SERIES	L-188	1.8441
FOUR SERIES	DC-9	1.8441

FLT[2]	ORIG - DEST	MILEAGE	MILEAGE COST	LANDING COST	TOTAL COST
2Q	MCC - HIF	545			
	HIF - TIK	927			
	TIK - WRB	848			
	WRB - DOV	734			
	DOV - FFO	471			
		3,525	$9,246	$ 750	$ 9,996
3C	MCC - HIF	545			
	HIF - TIK	927			
	TIK - FFO	804			
		2,276	4,197	450	4,647
4W	MCC - HIF	545			
	HIF - SKF	1,166			
	SKF - WRB	945			
		2,656	4,898	450	5,348
2D	SUU - HIF	581			
	HIF - SKF	1,166			
	SKF - TIK	448			
	TIK - FFO	804			
		2,999	7,866	600	8,466

[1]All landing fees are $150.

[2]The flights have been modified from the base LOGAIR route structure to better coordinate with the dedicated truck service illustrated in Table G-2.

ALTERNATIVE 1

TABLE G-4: LOGAIR TRUNK ROUTES					
FLT	ORIG - DEST	MILEAGE	MILEAGE COST	LANDING COST	TOTAL COST
3P	FFO - TIK	804			
	TIK - HIF	927			
	HIF - MCC	545			
		2,276	$ 4,197	$ 450	$ 4,647
2F	FFO - DOV	471			
	DOV - WRB	734			
	WRB - SKF	945			
	SKF - TIK	448			
	TIK - HIF	927			
	HIF - SUU	581			
		4,106	10,770	900	11,670
2B	FFO - WRB	525			
	WRB - SKF	945			
	SKF - TIK	448			
	TIK - COS	465			
	COS - HIF	487			
	HIF - LSV	389			
	LSV - SBD	187			
	SBD - SUV	424			
		3,870	10,151	1,200	11,351
4V	WRB - FFO	525			
	FFO - TIK	804			
	TIK - SKF	448			
	SKF - HIF	1,166			
	HIF - GFA	434			
	GFA - SKA	305			
	SKA - TCM	237			
	TCM - MCC	607			
		4,526	8,346	1,200	9,546
GRAND TOTAL		26,234	$59,671	$6,000	$65,671

ALTERNATIVE 1

TABLE G-5: VOLUMES ON DEDICATED TRUCK ROUTES[a]	
ORIG - DEST	DAILY VOLUME - TONS[b]
1. MCC - MER	1.60
SER - SUU	.11[c]
SUU - MCC	[c]
2. HIF - MUO	1.51
MUO - HIF	1.00
3. SBD - LUF	3.70
LUF - DMA	1.80
DMA - LUF	1.75
LUF - SBD	2.72
4. TIK - LTS	4.28
LTS - CVS	3.29
CVS - LTS	2.52
LTS - TIK	3.16
5. CVS - ABQ	2.15
ABQ - HMN	2.46
HMN - CVS	2.28

[a]Based on LOGAIR Point to Point Movement Report of January 1975.

[b]Volumes shown are average daily movements between the associated origins and destinations (in tons). An analysis of the LOGAIR Transportation Management System reports for Jan - June 1975 indicate an average of 28 flights/month for all flights -- thus an assumption of 28 flights or trips per month was used to develop a daily average.

[c]Incomplete -- data missing from LOGAIR Point to Point Movement Report.

ALTERNATIVE 1

TABLE G-5: VOLUMES ON DEDICATED TRUCK ROUTES	
ORIG - DEST	DAILY VOLUME - TONS
6. TIK - IAB	3.85
IAB - SZL	1.82
SZL - TIK	2.16
7. TIK - LRF	2.39
LRF - BYH	1.11
BYH - LRF	2.47
LRF - TIK	1.65
8. TIK - BAD	2.66
BAD - AEX	.62
AEX - BAD	1.43
BAD - TIK	1.73
9. TIK - DYS	4.13
DYS - FWH	7.54
FWH - TIK	4.51[a]
10. FFO - GUS	.81
GUS - FFO	.44
11. DOV - LFI	3.77
LFI - ADW	2.11[a]
ADW - DOV	.47[a]
12. DOV - WRI	4.29
WRI - DOV	4.64

[a] Incomplete -- data missing from LOGAIR Point to Point Movement Report.

ALTERNATIVE 1

TABLE G-5: VOLUMES ON DEDICATED TRUCK ROUTES	
ORIG - DEST	DAILY VOLUME - TONS
13. WRB - CHS	8.83
CHS - SSC	4.01
SSC - GSB	2.52
GSB - SSC	3.31
SSC - CHS	4.22
CHS - WRB	10.41
14. WRB - CBM	1.22
CBM - WRB	1.65
15. WRB - VPS	4.49
VPS - PAM	2.48
PAM - WRB	2.63
16. COS - FEW	1.19
FEW - COS	[a]

[a] Incomplete -- data missing from LOGAIR Point to Point Movement Report.

ALTERNATIVE 1

TABLE G-6: VOLUMES ON AIRCRAFT FEEDER ROUTES[a]		
	ORIG - DEST	DAILY VOLUME - TONS
A.	DOV - BED	9.39
	BED - PSM	12.19
	PSM - LIZ	11.79
	LIZ - PBG	11.98
	PBG - RME	11.25
	RME - DOV	11.35
B.	WRB - NIP	5.10
	NIP - COF	3.90[b]
	COF - HST	3.69[b]
	HST - NQX	3.54[b]
	NQX - MCF	3.45[b]
	MCF - NIP	3.07[b]
	NIP - WRB	3.07[b]
C.	FFO - OSC	9.54
	OSC - INR	10.80
	INR - SAW	11.33
	SAW - DLH	10.04[b]
	DLH - RDR	6.51[b]
	RDR - MIB	9.78[b]
	MIB - RCA	9.91[b]
	RCA - OFF	11.86[b]
	OFF - FFO	11.06[b]

[a] It is assumed that the aircraft used on the feeder routes are the L-188s and the DC-9s, each with a capacity of 17 tons including nets and pallets.

[b] Incomplete -- data missing from the LOGAIR Point to Point Movement Report.

ALTERNATIVE 1

TABLE G-7: VOLUMES ON AIRCRAFT TRUNK ROUTES

ORIG - DEST[1]		DAILY VOLUME - TONS[2]
2Q	MCC - HIF	7.13
	HIF - TIK	11.76
	TIK - WRB	11.52
	WRB - DOV	11.25
	DOV - FFO	4.73
3C	MCC - HIF	3.99
	HIF - TIK	4.98
	TIK - FFO	2.91
4W	MCC - HIF	5.04
	HIF - SKF	6.91
	SKF - WRB	5.08
2D	SUU - HIF	13.93
	HIF - SKF	13.23
	SKF - TIK	10.11
	TIK - FFO	3.07
3P	FFO - TIK	4.49
	TIK - HIF	4.10
	HIF - MCC	4.48

[1] In determining the volume between trunk route stations for flights 2Q, 2C, 4W, 2D, 3P, and 2F, it is assumed that all traffic originating at an origin station for all destination stations on the remainder of the flight is loaded on the aircraft even though there is more than one scheduled flight per day between trunk stations on the JOCAIR system. This conservative approach compensates for cargo from feeder stations which is not included. Furthermore, the volumes displayed have not been balanced, etc., so that considerable imbalances in aircraft utilization remain. The objective of these Tables are just to demonstrate that such an alternative to base system is feasible.

[2] The 2 series flights use the L-100 aircraft with a capacity of 23 tons; the 3 and 4 series flights use the L-188 and DC-9 aircraft with a capacity of 17 tons.

ALTERNATIVE 1

TABLE G-7: VOLUMES ON AIRCRAFT TRUNK ROUTES		
ORIG - DEST		DAILY VOLUME - TONS
2F	FFO - DOV	10.22
	DOV - WRB	13.23
	WRB - SKF	17.54
	SKF - TIK	20.34
	TIK - HIF	11.78
	HIF - SUU	12.72
2B[1]	FFO - WRB	6.89
	WRB - SKF	11.70
	SKF - TIK	18.27
	TIK - COS	16.24
	COS - HIF	15.41
	HIF - LSV	15.25
	LSV - SBD	13.30
	SBD - SUU	8.32
4V[2]	WRB - FFO	8.71
	FFO - TIK	13.79
	TIK - SKF	14.60
	SKF - HIF	16.00
	HIF - GFA	16.83
	GFA - SKA	16.38
	SKA - TCM	15.82
	TCM - MCC	14.31

[1]Since flight 2B travels a circuitous route, it is being limited to direct traffic between the points on the flight. Also, since COS, FEW, LSV, SBD, LUF and DFA have no alternative service, all traffic for these points is loaded onto the aircraft at TIK, 75% at SKF, 33% at WRB, and 25% at FFO.

[2]Since GFA, SKA, and TCM have no alternative service, all traffic for these points is loaded into the aircraft at SKF, 75% at TIK, 33% at FFO, and 25% at WRB. In addition, traffic to HIF from WRB and FFO is routed on more direct flights and is not included on 4V.

economically justified the dedicated trucks. Thus, this secondary benefit greatly enhances the desirability of the alternative.

The principal shortcomings of this alternative include a) additional handling of some cargo will be required--the exact amount is difficult to quantify, but it should be a relatively small percentage of the total cargo moving by dedicated truck, and b) it may increase transportation time to and from some bases by as much as one day over the current LOGAIR system--again, the potential impact of this shortcoming is difficult to quantify at this time; in some cases, reducing the cargo moving by air may increase the responsiveness of the entire system, (e.g., through less circuitous routing) as well as increase aircraft utilization. In any event, a complete dismissal of the entire alternative because of the above potential shortcomings will be a wrong decision until the cost implications of the shortcomings are fully detailed. It is the opinion of the study team that the cost implications of these shortcomings will be negligible when contrasted with the identified potential savings of $6.724 million.

Alternative 2: Increased Use of DC-9 and L-188 Aircraft

In the base LOGAIR system, both the L-100 and the smaller aircraft (i.e., the DC-9s and L-188s) are used on trunk routes. The principal reasons for use of the L-100 are that 1) its increased lift capability is required to satisfy the additional cargo requirements on certain trunk routes and 2) it can more easily accommodate large shipments such as aircraft engines.

The integration of dedicated trucks into the LOGAIR system, as per Alternative 1, reduced the volume of traffic on two of the four trunk routes served by L-100 aircraft so these routes can now be served by either DC-9s or L-188s (see Table G-7). Since the L-100 plane mile cost is considerably higher than the plane mile cost of the other aircraft (i.e., $2.6229 versus 1.8841), replacement of these larger, more expensive aircraft will result in additional savings to those already identified in Alternative 1 (see Table G-8).

TABLE G-8. ALTERNATIVE 2 - SAVINGS

FLIGHT NUMBER	TOTAL MILES	MILEAGE COST ($) DC-9/L-188	L-100	DAILY SAVINGS ($)
2Q	3,525	6,501	9,246	2,745
2D	2,999	5,531	7,866	2,335
TOTAL	6,524	12,032	17,112	5,080

The total daily savings of $5,080 associated with replacing two L-100 aircraft with DC-9s or L-188s, equates to $1.854 million annually. Adding this amount to the Alternative 1 savings of $6.724 million yields savings of $8.578 million for this alternative (or 17.6 percent of the total system cost).

Alternative 3: Limited Reduction in LOGAIR Service

The preceding alternative can be readily extended to yield additional savings to the LOGAIR system. The second alternative considered the advantages of replacing two unneeded L-100 aircraft with either DC-9s or L-188s. This alternative goes one step further and replaces the two remaining L-100 aircraft with the smaller aircraft. Such a replacement can be accomplished if the system manager more closely monitors the cargo moving on these two flights. If just 25 percent of the cargo moving on these flights were diverted to surface movement, then the DC-9 or L-188 aircraft could replace these L-100s (see Table G-7 for the unchallenged workloads). Table G-9 displays the cost impact of this action.

The daily savings of $6,213 equates to $2,267 million annually. However, the diverted material must still be moved to its destination and the surface transportation cost subtracted from this annual figure. It is nearly impossible to estimate the cost of moving this diverted material--origins, destinations, type of commodity, etc. are all unknown. As a rough estimate, suppose only one-half the identified savings are, in fact, achieved. This still leaves approximately $1.133 million in savings for this alternative,

TABLE G-9. ALTERNATIVE 3 - SAVINGS

FLIGHT NUMBER	TOTAL MILES	MILEAGE COST ($) DC-9/L-188	L-100	DAILY SAVINGS ($)
2F	4,106	7,572	10,770	3,198
2B	3,870	7,137	10,151	3,014
TOTAL	7,976	14,709	20,921	6,212

which when added to that identified through Alternatives 1 and 2, yields a total savings of $9,711 (or 19.9 percent of the total system cost).

Two principal arguments can be raised in opposition to this alternative 1) the lack of justification for the 25 percent diversion rate and 2) the assumption that the diverted cargo will require only one-half of the identified savings to cover the cost of movement by surface mode.

In response to the first argument, Air Force experience in challenging MAC shipments provides a strong foundation for extrapolation into the CONUS sector. Air Force requisitioners are not overstating the issue priority on just shipments destined for overseas, this overstatement is also occurring on CONUS shipments.

Concerning the second argument, it was assumed that the diverted cargo will frequently be consolidated with regular surface shipments at a low marginal cost. Thus, the one-half figure was an attempt to recognize such a situation.

Alternative 4: Extensive Reduction in LOGAIR Services

As noted previously, LOGAIR is a free-flow system in that it accepts all TP 1 and TP 2 traffic. The only air-eligible traffic not routinely accepted by the system include outsize cargo, shipments with an apparent excessive quantity, or shipments on which the requisition date or required delivery date is past 90 days. This is a sound approach since the space is procured on an annual basis and thus, it should be used to the maximum.

However, the data base for each succeeding year's procurement tends to be excessive since there is no means of quantifying that portion of the traffic which could have been transported in a surface mode and still meet the consignee's requirements.

The airlift challenge data displayed in Tables 10 and 11 in the body of this report indicate that a considerable percentage of high priority requirements are acceptable to the consignee in a surface mode. While there is limited Air Force data in these tables, there is no reason to suspect that Air Force requisitioners are any different than those in other Services.

Considering the available data on airlift challenges and the responsive transportation available in CONUS (both air and surface), a 25 percent success rate in airlift challenges appears to be attainable without a significant negative impact on the Air Force supply system. Therefore, all LOGAIR traffic with the exception of that destined for aerial ports (which supposedly had already been challenged) was reduced by 25 percent. The net result of this action, on top of that embedded in the preceding alternatives was the elimination of two trunk routes: 3C and 3P (as identified in Table G-4, Alternative 1). The traffic formerly carried by these routes can be readily satisfied by other routes. For example, Route 2Q has adequate capacity to absorb 3C's daily volume, while 4V can satisfy 3P's traffic (see Table G-7, Alternative 1 for the unchallenged daily volumes on these routes).

The elimination of these two routes then results in additional daily savings of $4,647 for each route (see Table G-4), or a total of $9,294 (or $3,392 million annually). By reducing daily mileage by 4,552 miles, a savings of $1.332 million in airways tax and POL adjustment also result, (i.e., 26,842 miles per day under this alternative/40,807 miles per day in the LOGAIR base system x $11.981 million less tax and POL savings under Alternative 1 = $1.332 million). The gross savings of this alternative is then $4.724 million, in addition to that identified previously in the other alternatives.

Again we have diverted material that must still be moved to its destination, and the cost of this transportation is assumed to be 50 percent of the associated savings, or $2.362 million. Therefore, the total savings of this alternative amount to $12.073 million, (i.e. $2.362 million plus $9.711 million under Alternatives 1, 2, and 3), or 24.7 percent of the total base LOGAIR cost.

APPENDIX H

SELECTED TRAFFIC MANAGEMENT SYSTEMS

The broad and complex nature of traffic management has made it difficult for transportation officers to be aware of all problems within the functions they supervise. In order for a TO to effectively utilize his resources, it is essential that he have adequate systems support. During the course of our review, we came in contact with five systems that provide (or soon will provide) valuable assistance to the traffic management function. These are the

- Air Force Shipment Document Release and Control System;
- Air Force Transportation Automated Routing System;
- MTMC Freight Movement Control System;
- DSA Mechanization of Freight Packing and Shipping Terminal; and
- Federal Supply Service Shipment Consolidation and Planned Order Selection System

1. Air Force Shipment Document Release and Control System (SDRCS - D009)

The D009 is a personalized shipment planning system used by the Air Logistics Centers. It is designed to meet the peculiar shipment planning requirements of each of the five ALCs.

The Material Release Order (MRO), i. e., the DD 1348, is the basic output document generated by the system. The DD 1348 is available to the Shipment Planning Section of the Transportation Division prior to the supply item being pulled from the shelf.

The system generates delivery requirements by transportation priority--TP 1 and TP 2 cargo requirements are processed daily while TP 3 cargo requirements are generated once a week to each destination. The CONUS is geographically sectioned so as to facilitate maximum consolidation and balance the workload. All requisitions (including parcel post eligible material where applicable) are consolidated by destination and freight

rating within these geographic areas.

Data generated by the D009 includes warehouse location, freight rating, specific information when applicable relative to identification of airlift investment items, airlift challenge (this applies to overocean destinations only), and the LOGAIR flight on which the cargo should be forwarded. In addition, Warner Robins ALC manually enters such data as the date due in packing, whether containers are to be used, etc.

The D009 also interfaces with the inventory control system so that inventory levels are adjusted from the one time entry of the customer requisition.

Our review indicated that the system enjoys the confidence of the user and is an effective shipment planning tool.

2. Air Force Transportation Automated Routing System (TARS)

TARS is a personalized routing system used by the Air Logistics Centers. It is designed to provide the particular routing and carrier selection guidance required at each of the five ALCs.

After the D009 system has consolidated shipments by weight, freight classification, etc., for each destination, the Traffic Section of the Shipment Planning Branch is responsible for selecting the most expeditious and least expensive mode for transporting the cargo to its destination.

For each destination served by a particular ALC, the system provides less than truckload (LTL) performance data for the previous ninety day period on all carriers used by the ALC. This may include truck, bus, freight forwarder, commercial air, LOGAIR, parcel post, etc. As an illustration, TARS provides Sacramento ALC a listing of all LTL carriers used in the previous ninety days to transport cargo to Charleston, South Carolina and the average intransit time performance of each carrier.

The system also provides the latest tariffs for the various freight classifications. Tariff information is also supplied for air and surface freight forwarders, commercial air, and others. For LOGAIR and commercial air, schedules are displayed as

well as distance from a LOGAIR station, preferred mode for NORS items, etc. It is expected that the system will soon include schedule and cost information for Federal Express, UPS, and air parcel post.

The key aspect of the system is that it is destination oriented. When the Shipment Planning Branch has to route a shipment to a given destination, the router references that destination in the TARS Guide for the necessary information.

The system is scheduled to be updated monthly with the latest tariffs, schedules, etc.; however, this schedule is not strictly adhered to.

Our review indicated that TARS has the support and confidence of the user and that it provides ready access to essential information that otherwise might take considerable research.

3. MTMC Freight Movement Control System (FMCS)

MTMC's Freight Movement Control System (FMCS) is a comprehensive traffic management system which is still in the concept stage. FMCS will consist of seven major applications when fully implemented:

- Freight Rate Retrieval
- Freight Traffic Request and Release;
- Point of Embarkation (POE) Selection Processing;
- Export Cargo Booking;
- Freight Movement Reporting;
- Shipment Statistics; and
- Volume Movement Report Processing.

The Freight Rate Retrieval (FRR) application is scheduled for implementation in FY 1977. The others are planned for implementation over a five-year period and have not been reviewed.

The FRR application is being designed to provide the Freight Traffic Division with the capability, through the use of remote access devices, to query a central data base

and provide the optimum service and cost effective route between any two CONUS locations. The purpose of the system is to shorten MTMC's response time to local TOs and thereby assist them in improving overall performance.

4. DSA Mechanization of Freight Packing and Shipping Terminal (MOFAST)

The MOFAST system is operational only at Defense Depot Ogden, but it is currently being implemented at Defense Depot Memphis. MOFAST is a heavily automated system directed toward expediting the packing, shipment consolidation, staging, and outloading functions.

The MOFAST system has an extensive computer capability which monitors both the status of the MROs, which are selected for processing each working day, and the operation of the material handling hardware.

The computer tracks the MROs through each processing stage: entry into the system, formation of shipping units, routing to the appropriate assembly point, and automatic generation of the GBL. Two innovative features of the system include the CUBITRON and the Container Automated Marking System (CAMS). The CUBITRON is an automatic weighing and cubing station through which each package must pass. In the process, the unit automatically adds the weight, cube, and length of each package to the computer file. The information is printed on the GBL and is used for load planning. The CAMS automatically imprints the address of the consignee directly onto the container or package surface using a non-impact process. The CAMS system has been undergoing extensive testing at Defense Depot Ogden and is scheduled to become operational shortly.

The depot had estimated that ninety-five positions would be eliminated with the full implementation of MOFAST; however, the GAO has recently reviewed the system and they have given the depot credit for 105 positions.

5. Federal Supply Service Shipment Consolidation and Planned Order Selection (SCAPOS) System

While we have had limited exposure to the SCAPOS system of the Federal

Supply Service, the system appears to have some attractive characteristics which may be applicable to DoD activities.

All customers served by a given activity are consolidated into specific routes which are determined by geographical locations. The routes are then segregated into three groups depending upon the average weekly tonnage. Routes with an average weekly tonnage over 50,000 pounds are served as often as required; those with an average weekly tonnage between 25,000 and 49,999 pounds are served no more than twice a week; while those under 25,000 pounds are served at most once a week.

Each route is then assigned a specific day(s) of the week in which shipments to the destinations on the route will be generated by the computer. One of the factors considered in assigning routes to days is workload balancing. It is our impression that SCAPOS eliminates the use of parcel post to large customers and small package carriers are used for minimum charge shipments.

APPENDIX I

EXHIBIT OP-16

DOD COMPONENT_____
OPERATIONS, _____
TRANSPORTATION OF THINGS

	PY/CY/BY Program $000
PART A - Summary	
Direct	
Depot level transportation (ton miles)	
(passengers)	
Medical Evacuation (passengers)	
APO Mail (ton miles)	
Unit movement and exercises (ton miles)	
Other	XXX
Subtotal (Direct Program)	
Reimbursable	
Depot level transportation (ton miles)	
(passengers)	
Medical Evacuation (passengers)	
APO Mail (ton miles)	
Unit movement and exercises (ton miles)	
Other (ton miles)	
(passengers)	
Subtotal (Reimbursable)	
Total	
PART B - Analysis of Total	
Military Sealift Command	
Cargo (ton miles)	
Passengers (number)	
Military Airlift Command	
Channel (ton miles)	
Special Assignment (flying hours)	
Military Traffic Management and Terminal Service	
Stevedoring (tons)	
Other (tons)	
Commercial	
Surface Transportation (ton miles)	
Air Transportation (ton miles)	
Stevedoring (tons)	

PY/CY/BY
Program $000

PART C - Detail of Depot Transportation

Commercial Transportation

Surface (S/Tons)
Logair (S/Tons)
Commercial Air (S/Tons)
Reimbursements

Military Sealift Command

Cargo (M/Tons)
(Logistical Support Items)
(Post Exchange Items)
Passengers (Number)
POL (L/Tons)
Per Diem (Days)
Reimbursements

Military Airlift Command

Channel (S/Tons)
(Logistical Support Items)
(Post Exchange Items)
Special Assignments (Flying Hours)
Reimbursements

Military Traffic Management and Terminal Service

Stevedoring (Tons)

Postage and Fees Paid Indicia

Postage and Fees Paid Indicia
Reimbursements

Total
Direct
Reimbursements

PART D - Ocean Transportation via Military Sealift Command (MSC)

Origin	Destination
U.S.	Alaska (Mona Lisa)
U.S.	North Atlantic
U.S.	Latin America
U.S.	Europe
U.S.	Mediterranean
U.S.	Mid-Pacific
U.S.	Far East

PY/CY/BY
Program $000

Origin	Destination
U.S.	North Pacific
U.S.	Indian Ocean
Subtotal (Outbound Cargo)	
North Atlantic	U.S.
Latin America	U.S.
Europe	U.S.
Mediterranean	U.S.
Mid-Pacific	U.S.
Far East	U.S.
North Pacific	U.S.
Indian Ocean	U.S.
Subtotal (Inbound Cargo)	
Total (Outbound-Inbound)	
Inter-Area Movements	
Intra-Area Movements	
Subtotal	
Pro-Rata Share:	Mail
	PX
	Conex
	Coal
Total (Pro-Rata Items)	
Total (Dry Cargo)	

PART E - Materiel Transportation - Military Airlift Command

Military Airlift Command

Channel
- Atlantic (S/Tons)
- Pacific (S/Tons)
- Total Channel

Special Assignment
- Hourly-Rate Aircraft (Hours)

EXHIBIT OP-16
(Page 3 of 3)

APPENDIX J

FORECASTING OVEROCEAN REQUIREMENTS AT THE TANK/AUTOMOTIVE COMMAND

This report included an evaluation of the financial and traffic management practices of the Shipper Services. While reviewing the Army Materiel Command financial management program at the Tank/Automotive Command (TACOM), we became familiar with TACOM's procedures for forecasting overocean requirements. Several weaknesses appear to exist in these procedures and they are briefly discussed below.

The responsibility for developing overocean requirements is assigned to the Transportation Management Branch of the Transportation Divison. The basis for the forecasts are short-and long-range surface and air overocean estimates prepared by the Inventory Managers. After the overocean estimates are summarized, the Transportation Management Branch automatically diverts ninety percent of all airlift requirements to surface movement. Upon closer inspection, we found the reason for the automatic diversion to be historical--it has always been done. We also found that the Inventory Managers are not aware of this practice.

The short-range forecasts, which are developed two to three months prior to the month of movement, are consolidated by the Logistics Control Agency (LCA) in the Presidio of San Francisco, California. The estimates are then compared with historical data and adjusted as necessary. Copies of the final package are forwarded to AMC Headquarters and the Army Data Processing Agency in Radford, Virginia. After review, evaluation, and consolidation with other Army requirements, the forecasts are sent to the Directorate of Transportation and Services, DCSLOG, for final review and approval.

The approved forecasts are then sent to the appropriate Single Manager Operating Agency and to the SDT Program Manager. Based on these forecasts the Program Manager prepares obligation estimates for MAC, MSC, and MTMC. The Finance and Accounting

Center receives a copy of these obligation estimates which are used as a basis for giving cross disbursing authority to the Single Manager Operating Agencies.

The important feature of the above process is that it is initiated by command estimates; however, the commands are not provided historical movement data which could be used to improve the quality of the estimates. Furthermore, one must question the necessity of the forecasts being developed at the command level with the extensive massaging of the data which takes place above.

When we inquired why LCA did not provide historical information to the commands, they responded "the Commodity Commands have never asked for the data." (It was not clear that the commands are aware that historical data are available.)

AMC is in the process of developing an Overocean Cargo Forecasting and Feedback System that will evaluate the quality of the forecasts and assist the Commodity Commands in preparing them. This system is scheduled for implementation in FY 1976.

APPENDIX K

SUPPLEMENTAL BUDGET EXHIBITS

EXHIBIT 1-A. DEPARTMENT OF THE ARMY

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSFER ACTIVITY - DIRECT PROGRAM - ANALYSIS OF CHANGES IN AIRLIFT REQUIREMENTS

FY76 VS. FY75

($000 OMITTED)

DESCRIPTION	TOTAL ARMY		[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PART I - SUMMARY												
FY75 PROGRAM	466,252		337,903		21,634		28,141		39,303		9,271	
INC/DEC FY75 TO FY76												
RATES	13,845		10,000		2,245		-		1,100		500	
WORKLOAD	(23,177)		(17,236)		(4,113)		-		(1,295)		(513)	
POLICY	(56,975)		(55,975)		(545)		-		(259)		-	
FY76 PROGRAM	389,945		274,792		19,221		28,141		38,849		9,258	
PART II - DETAIL												
1. RATE CHANGES												
MSC (MEAS. TONS)	6,500		6,500		-		-		-		-	
MAC (SHORT TONS)	1,100		1,100		-		-		-		-	
MTMC (MEAS. TONS)	2,323		2,323		-		-		-		-	
COMMERCIAL	3,845		-		2,245				1,100		500	
CIVILIAN PAY	77		77		-		-		-		-	
TOTAL DIFFERENCE DUE TO RATE CHANGES	13,845		10,000		2,245		-		1,100		500	
2. WORKLOAD CHANGES												
CHANGES OR REDISTRIBUTION OF TROOP STRENGTH												
MAC (SHORT TONS)	-	-	-	-	-	-			-	-		
MSC, MTMC (MEAS. TONS)	(6,990)	(50)	(6,990)	(50)	-	-			-	-		
COMMERCIAL	(650)	N/A	-	-	-	-			(650)	N/A		
REPOSITIONING OF STOCKS WITHIN EXISTING BASES												
MAC	(8,000)	(8)	(8,000)	(8)	-	-			-	-		
MSC, MTMC	-	-	-	-	-	-			-	-		
COMMERCIAL	(2,750)	N/A	-	-	(2,750)	N/A			-	-		
REALIGNMENT OF BASES, POSTS, CAMPS, OR STATIONS												
MAC	-	-	-	-	-	-			-	-		
MSC, MTMC	(2,236)	(16)	(2,236)	(16)	-	-			-	-		
COMMERCIAL	(1,551)	N/A	-	-	(1,393)	N/A			(645)	N/A	(513)	N/A
OTHER	-	-	-	-	-	-			-	-	-	-
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES	(23,177)	XX	(17,236)		(4,113)	XX			(1,295)	XX	(513)	XX
3. POLICY CHANGES**												
FUNDING CHANGE IN OVERSEAS AIRLIFT	(56,975)	(40)	(55,975)	(40)	-	-			-	-		
FLOATING A/C MAINTENANCE FACILITY INACTIVATION	(545)	N/A	-	-	(545)	N/A			-	-		
LOGISTICAL AUGMENTATION EUROPE	(259)	N/A	-	-	-	-			(259)	N/A		
OTHER	-	-	-	-	-	-			-	-	-	
TOTAL DIFFERENCES DUE TO POLICY CHANGES	(56,779)	XX	(55,975)	XX	(545)	XX			(259)	XX		

* OVERSEAS INCLUDES THE U.S. EIGHTH ARMY, U.S. ARMY IN JAPAN, U.S. ARMY IN EUROPE.
** THE SPECIFIC ENTRIES IN THIS SECTION WOULD BE DIFFERENT FOR EACH SERVICE.

EXHIBIT 1-B. DEPARTMENT OF THE NAVY

PROGRAM ELEMENT: 7 60 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM - ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PART I - SUMMARY										
FY75 PROGRAM										
INC/DEC FY75 TO FY76										
RATES										
WORKLOAD										
POLICY										
FY76 PROGRAM										
PART II - DETAIL										
1. RATE CHANGES										
MSC (MEAS. TONS)										
MAC (SHORT TONS)										
MTMC (MEAS. TONS)										
COMMERCIAL										
CIVILIAN PAY										
TOTAL DIFFERENCE DUE TO RATE CHANGES										
2. WORKLOAD CHANGES										
CHANGES OR REDISTRIBUTION OF TROOP STRENGTH										
MAC (SHORT TONS)										
MSC, MTMC (MEAS. TONS										
COMMERCIAL										
REPOSITIONING OF STOCKS WITHIN EXISTING BASES										
MAC										
MSC, MTMC										
COMMERCIAL										
REALIGNMENT OF BASES, PORTS, CAMPS, OR STATIONS										
MAC										
MSC, MTMC										
COMMERCIAL										
OTHER										
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES										
3. POLICY CHANGES										
• • • •										
TOTAL DIFFERENCES DUE TO POLICY CHANGES										

Page 2 of 4

EXHIBIT 1-C. MARINE CORPS

PROGRAM ELEMENT: 7 60 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM - ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	TOTAL AMOUNT	
PART I - SUMMARY		
FY75 PROGRAM		
INC/DEC FY75 TO FY76		
RATES		
WORKLOAD		
POLICY		
FY76 PROGRAM		
PART II - DETAIL		
1. RATE CHANGES		
MSC (MEAS. TONS)		
MAC (SHORT TONS)		
MTMC (MEAS. TONS)		
COMMERCIAL		
CIVILIAN PAY		
TOTAL DIFFERENCE DUE TO RATE CHANGES		
2. WORKLOAD CHANGES		
CHANGES OR REDISTRIBUTION OF TROOP STRENGTH		
MAC (SHORT TONS)		
MSC, MTMC (MEAS. TONS		
COMMERCIAL		
REPOSITIONING OF STOCKS WITHIN EXISTING BASES		
MAC		
MSC, MTMC		
COMMERCIAL		
REALIGNMENT OF BASES, POSTS, CAMPS, OR STATIONS		
MAC		
MSC, MTMC		
COMMERCIAL		
OTHER		
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES		
3. POLICY CHANGES		
•		
•		
•		
TOTAL DIFFERENCES DUE TO POLICY CHANGES		

EXHIBIT 1-D. DEPARTMENT OF THE AIR FORCE

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM - ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS

FY76 VS. FY75

($000 OMITTED)

DESCRIPTION	AIR FORCE		ARMY		AIR NAVY		OTHER	
	AMOUNT	OB	AMOUNT	OB	AMOUNT	OB	AMOUNT	OB
PART I - SUMMARY								
FY75 PROGRAM								
INC/DEC FY75 TO FY76								
RATES								
WORKLOAD								
POLICY								
FY76 PROGRAM								
PART II - DETAIL								
1. RATE CHANGES								
MSC (MEAS. TONS)								
MAC (SHORT TONS)								
MTMC (MEAS. TONS)								
COMMERCIAL								
CIVILIAN PAY								
TOTAL DIFFERENCE DUE TO RATE CHANGES								
2. WORKLOAD CHANGES								
CHANGES OR REDISTRIBUTION OF TROOP STRENGTH								
MAC (SHORT TONS)								
MSC, MTMC (MEAS. TONS								
COMMERCIAL								
REPOSITIONING OF STOCKS WITHIN EXISTING BASES								
MAC								
MSC, MTMC								
COMMERCIAL								
REALIGNMENT OF BASES, POSTS, CAMPS, OR STATIONS								
MAC								
MSC, MTMC								
COMMERCIAL								
OTHER								
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES								
3. POLICY CHANGES								
•								
•								
•								
•								
•								
TOTAL DIFFERENCES DUE TO POLICY CHANGES								

EXHIBIT 2. DEPARTMENT OF DEFENSE

PROGRAM ELEMENT: 7 00 10

[illegible]

[illegible]

[illegible]

[illegible]

DESCRIPTION	ARMY	NAVY	MARINE CORPS	AIR FORCE	TOTAL
PART I - SUMMARY					
FY75 PROGRAM	446,252	200,835	14,669	379,522	1,041,278
INC/DEC FY75 TO FY76					
RATES	13,845	1,700	331	3,200	19,076
WORKLOAD	(23,177)	(9,708)	4,300	(23,036)	(54,121)
POLICY	(56,279)	(37,500)	-	(7,300)	(101,079)
FY76 PROGRAM	380,141	155,327	19,800	352,386	904,574
PART II - DETAIL					
1. RATE CHANGES					
MSC (MEAS. TONS)					
MAC (SHORT TONS)					
MTMC (MEAS. TONS)					
COMMERCIAL					
CIVILIAN PAY					
TOTAL DIFFERENCE DUE TO RATE CHANGES					
2. WORKLOAD CHANGES					
CHANGES OR REDISTRIBUTION OF TROOP STRENGTH					
MAC (SHORT TONS)					
MSC, MTMC (MEAS. TONS)					
COMMERCIAL					
REPOSITIONING OF STOCKS WITHIN EXISTING BASES					
MAC (SHORT TONS)					
MSC, MTMC (MEAS.TONS)					
COMMERCIAL					
REALIGNMENT OF BASES, POSTS, CAMPS, OR STATIONS					
MAC (SHORT TONS)					
MSC, MTMC (MEAS. TONS)					
COMMERCIAL					
OTHER					
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES					
3. TOTAL DIFFERENCE DUE TO POLICY CHANGES					

EXHIBIT 3-A. DEPARTMENT OF THE ARMY

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM

ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS - BY MODE

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	MAC		MSC		CONTRACTUAL AIR		CONTRACTUAL SURFACE		LIGHTER/ OVERSEAS		PORT HANDLING		OTHER	TOTAL AMOUNT
	AMOUNT	SHORT TONS	AMOUNT	WORK YEARS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	WORK YEARS	AMOUNT	
PART I - SUMMARY														
FY75 PROGRAM	58,610	XX	237,748	XX	27,606	37	47,475	3,179	2,000	4	41,625	XX	31,188	446,252
INC/DEC FY75 TO FY76														
RATES	1,100	N/A	6,500		(24)	N/A	3,873	N/A			2,400			13,849
WORKLOAD	(1,125)	1	(12,942)	(66)			(5,726)	(172)			(3,159)	(59)	(225)	(23,177)
POLICY	(55,975)	(40)	-								-		(850)	(56,825)
FY76 PROGRAM	2,610	XX	231,306	XX	27,606	37	45,622	3,007	2,000	4	40,866	XX	30,163	380,173
PART II - DETAIL														
1. TOTAL DIFFERENCE DUE TO RATE CHANGES	1,100		6,500		(24)		3,873				2,400			13,849
2. WORKLOAD CHANGES														
CHGS OR REDISTRIB. OF TOP STRUCTURE			(4,683)	(50)	(400)	(2)	(250)	(17)			(2,307)	(50)		(7,640)
REDUC. OF SIZE WITHIN OPERATING BASES	(8,000)	(8)			(750)	(4)	(2,000)	(136)						(10,750)
REALIGNMENT OF AIR, PORTS, OTHER, STATIONS			(1,498)	(16)	(702)	(4)	(1,204)	(82)			(736)	(16)	(645)	(4,787)
OTHER														
TOTAL DIFFERENCES DUE TO WORKLOAD CHANGES	(8,000)	(8)	(6,181)	(66)	(1,852)	(10)	(3,454)	(235)			(3,043)	(66)	(645)	(23,177)
3. POLICY CHANGES*														
FUNDING CHANGE IN OVERSEAS AIRLIFT	(55,975)	(40)												(55,975)
REALIGN A/C MAINT. IND. INACTIVATION													(545)	(545)
LOGISTICAL RETRENCHMENT EUROPE													(259)	(259)
OTHER														
TOTAL DIFFERENCES DUE TO POLICY CHANGES	(55,975)	(40)											(804)	(56,779)

*THE SPECIFIC ENTRIES IN THIS SECTION WOULD BE DIFFERENT FOR EACH SERVICE.

EXHIBIT 3-B. DEPARTMENT OF THE NAVY

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM

ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS - BY MODE

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	MAC		MSC		COMMERCIAL AIR		COMMERCIAL SURFACE		LOCAL/ CONTRACTS		PORT HANDLING		OTHER	TOTAL
	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	MEAS TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	
PART I - SUMMARY														
FY75 PROGRAM														
INC/DEC FY75 TO FY76														
RATES														
WORKLOAD														
POLICY														
FY76 PROGRAM														
PART II - DETAIL														
1. TOTAL DIFFERENCE DUE TO RATE CHANGES														
2. WORKLOAD CHANGES														
CHGS OR REDISTRIB. OF T.O STRENGTH														
REDIS. OF STRG WITHIN EXISTING RATES														
REALIGNMENT OF RATES, POSTS, CMDS, STATIONS														
OTHER *														
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES														
3. POLICY CHANGES*														
•														
•														
•														
•														
•														
TOTAL DIFFERENCES DUE TO POLICY CHANGES														

*THE SPECIFIC ENTRIES IN THIS SECTION WOULD BE DIFFERENT FOR EACH SERVICE.

EXHIBIT 3-C. MARINE CORPS

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM

ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS - BY MODE

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	MAC		MSC		COMMERCIAL AIR		COMMERCIAL SURFACE		LOCAL/ OUTCONTRACT		PORT HANDLING		OTHER	TOTAL AMOUNT
	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	
PART I - SUMMARY														
FY75 PROGRAM														
INC/DEC FY75 TO FY76														
RATES														
WORKLOAD														
POLICY														
FY76 PROGRAM														
PART II - DETAIL														
1. TOTAL DIFFERENCE DUE TO RATE CHANGES														
2. WORKLOAD CHANGES														
CHGS OR REDISTRIB. OF TOE STRENGTH														
PROGR. OF UTAS WITHIN EXISTING TOES														
REALIGNMENT OF TROOPS, POSTS, CMDS, STATIONS														
OTHER														
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES														
3. POLICY CHANGES*														
•														
•														
•														
•														
•														
TOTAL DIFFERENCES DUE TO POLICY CHANGES														

*THE SPECIFIC ENTRIES IN THIS SECTION WOULD BE DIFFERENT FOR EACH SERVICE.

EXHIBIT 3-D. DEPARTMENT OF THE AIR FORCE

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM
ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS - BY MODE
FY76 VS. FY75
(000 OMITTED)

DESCRIPTION	MAC		MSC		COMMERCIAL AIR		COMMERCIAL SURFACE		LOGAIR/ QUICKTRANS		PORT HANDLING		OTHER	TOTAL AMOUNT
	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	
PART I - SUMMARY														
FY75 PROGRAM														
INC/DEC FY75 TO FY76														
RATES														
WORKLOAD														
POLICY														
FY76 PROGRAM														
PART II - DETAIL														
1. TOTAL DIFFERENCE DUE TO RATE CHANGES														
2. WORKLOAD CHANGES														
CHGS OR REDISTRIB. OF TRP STRENGTH														
REDEPL. OF SYS WITHIN EXISTING BASES														
REALIGNMENT OF BASES, POSTS, CAMPS, STATIONS														
OTHER														
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES														
3. POLICY CHANGES*														
•														
•														
•														
•														
•														
TOTAL DIFFERENCES DUE TO POLICY CHANGES														

*THE SPECIFIC ENTRIES IN THIS SECTION WOULD BE DIFFERENT FOR EACH SERVICE.

EXHIBIT 4. DEPARTMENT OF DEFENSE

PROGRAM ELEMENT: 7 80 10

SECOND DESTINATION TRANSPORTATION - DIRECT PROGRAM

SUMMARY ANALYSIS OF CHANGES IN FUNDING REQUIREMENTS - BY MODE

FY76 VS. FY75

(000 OMITTED)

DESCRIPTION	MAC		MSC		COMMERCIAL AIR		COMMERCIAL SURFACE		LOCAIR/ QUICKTRANS		PORT HANDLING		OTHER	TOTAL AMOUNT
	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	
PART I - SUMMARY														
FY75 PROGRAM	276,163	XX	374,099	XX	61,540	2,056	110,421	7,361	61,381	N/A	69,782		87,892	1,041,278
INC/DEC FY75 TO FY76														
RATES	7,000	N/A	17,500	N/A	(92)	N/A	6,000	N/A			7,558	N/A	740	38,716
WORKLOAD	(19,429)	(17)	(25,246)	(623)	(229)	(15)	(11,315)	(354)	1,756	(64)	(9,080)	(623)	(2,942)	(66,485)
POLICY	(99,935)	(80)	(4,000)	(67)									(6,000)	(109,935)
FY76 PROGRAM	164,799	XX	362,353	XX	61,220	2,041	105,106	7,007	63,137	N/A	68,260		79,690	904,574
PART II - DETAIL														
1. TOTAL DIFFERENCE DUE TO RATE CHANGES														
2. WORKLOAD CHANGES														
CHANGES OR REDISTRIB. OF TROOP STRENGTH														
REPOS. OF SVS WITHIN EXISTING BASES														
- [illegible] BASES, PORTS, CARS, STATIONS														
OTHER														
TOTAL DIFFERENCE DUE TO WORKLOAD CHANGES														
3. TOTAL DIFFERENCE DUE TO POLICY CHANGES														

EXHIBIT 5.

PROGRAM ELEMENT: 7 80 10

ASSISTANT SECRETARY OF DEFENSE - INSTALLATIONS & LOGISTICS

FY76 - TRACK OF BUDGET CHANGES

(000 OMITTED)

DESCRIPTION	OSD BUDGET OCTOBER	PBD[a/]	RECLAMA	PRESIDENT'S BUDGET JANUARY	APPORTIONMENT BUDGET
DEPARTMENT OF THE ARMY					
FY75 PROGRAM	446,252	446,989	446,989	445,185	
INC/DEC FY75 TO FY76		•	•	•	
RATES	13,845	•	•	•	
WORKLOAD	(23,177)	•	•	•	
POLICY	(56,779)	•	•	•	
FY76 PROGRAM	380,141	471,647	471,647	469,854	
DEPARTMENT OF THE NAVY					
FY75 PROGRAM					
INC/DEC FY75 TO FY76					
RATES					
WORKLOAD					
POLICY					
FY76 PROGRAM					
MARINE CORPS					
FY75 PROGRAM					
INC/DEC FY75 TO FY76					
RATES					
WORKLOAD					
POLICY					
FY76 PROGRAM					
DEPARTMENT OF THE AIR FORCE					
FY75 PROGRAM					
INC/DEC FY75 TO FY76					
RATES					
WORKLOAD					
POLICY					
FY76 PROGRAM					

a/ DURING THE FY 1976 OSD BUDGET REVIEW, THERE WERE TWELVE PROGRAM BUDGET DECISIONS (PBD) THAT HAD AN IMPACT UPON SDT.

EXPLANATION OF CHANGES IN FUNDING REQUIREMENTS

1. Rate Changes - MSC (see Exhibit 1-A, Page 1 of 4, Part II, Rate Changes)

Assuming the following:

FY75 ave. cost/meas. ton - $75.00

FY76 expected ave. cost/meas. ton - $80.00

FY76 estimated meas. tons to be shipped - 1,300,000

The difference in average unit cost between FY75 and FY76 multiplied by the FY76 quantity shipped = an increase/decrease in cost attributable to the MSC rate change

or

$5(1,300,000) = $6,500,000 increased cost for shipment of material via MSC due to rate increase.

2. Workload Changes - MAC (see Exhibit 1-A, Page 1 of 4, Part II, Workload Changes)

Assuming the following:

FY75 ave. unit cost = $1,000/short ton

FY75 volume shipped = 18,000 short tons

FY76 estimated volume to be shipped - 10,000 short tons

An expected reassignment of troops overseas to CONUS Commands resulted in a reduced amount of materiel to be airlifted in FY76.

$1,000(8,000) = $8,000,000 decrease in cost for shipment of material via MAC due to change in workload.

3. Policy Changes (see Exhibit 1-A, Page 1 of 4, Part II, Policy Changes)

Beginning in FY76, reimbursement to MAC will be limited to passenger traffic. The program decision memorandum from OSD concerning the consolidation of TAC airlift forces

under MAC removed the C-5 and C-141 aircraft from industrially funded operations. The AF Program will fund these operations by transferring programmed airlift funds from each of the Services in FY76.

This has resulted in a reduction of $55,975,000 in Army SDT fund requirements.

APPENDIX L

MANAGEMENT INDICATORS EXHIBIT

PROGRAM ELEMENT: 7 80 10

QUARTER ENDED _____

SECOND DESTINATION TRANSPORTATION

PROGRAM STATUS INDICATORS

(000 Omitted)

	MAC		MSC		COMMERCIAL AIR		COMMERCIAL SURFACE		LOGAIR/ QUICKTRANS		PORT HANDLING			
SERVICE/DESCRIPTION	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	SHORT TONS	AMOUNT	MEAS TONS	OTHER AMOUNT	TOTAL AMOUNT
ARMY:														
FY 76 Plan														
Actual YTD[1]														
F'cast-Bal of FY[2]														
NAVY:														

[1] Narrative explanation necessary when plan differs from actual by 20 percent or more.

[2] Explain in detail any anticipated rate, workload, or policy changes and their affect on the SDT program.

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At the request of the Assistant Secretary of Defense (Installations and Logistics), ASD(I&L), the Logistics Management Institute reviewed the second destination transportation (SDT) programs of the Department of Defense. The objectives of the review were to (1) evaluate service controls over SDT funds, (2) evaluate Service capabilities to use the funds in a cost effective manner, and (3) identify areas requiring increased participation by the ASD(I&L)

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in order to more fully carry out assigned responsibilities.

As a result of this review, several weaknesses in the SDT programs of the Department of Defense were identified. These included 1) the SDT budget submissions from the Services are inconsistent and inappropriate for program review, 2) the SDT program of the Navy is deficient in terms of program controls and direction to field activities, and 3) the LOGAIR and QUICKTRANS systems can be made more cost effective by employing surface transportation over short distances and increasing the utilization of dedicated trucks, respectively. Recommendations for alleviating these and other weaknesses in the SDT programs are included in the report.