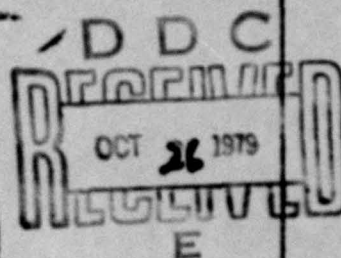
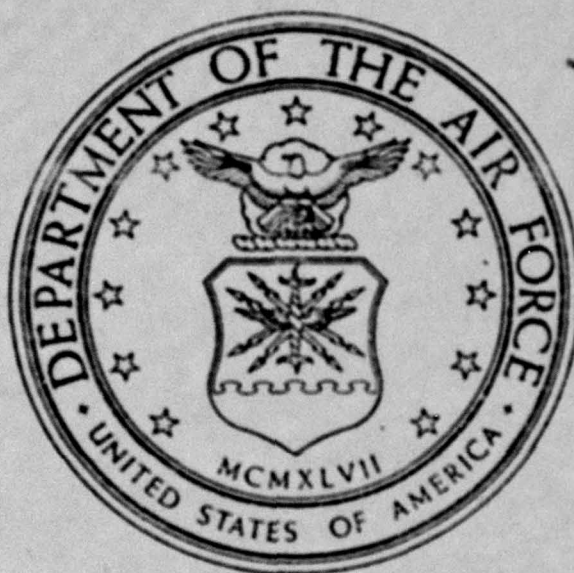


AD A 075531

**LEVEL**

AIR FORCE SECTION

U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE



SECOND DESTINATION TRANSPORTATION:  
PROGRAM MANAGEMENT AND FORCE READINESS  
BY  
Andrew J. McIntyre, Jr., Major, USAF

A RESEARCH STUDY SUBMITTED TO THE AIR FORCE FACULTY

May 1979

FORT LEAVENWORTH, KANSAS

This document has been approved  
for public release and sale; its  
distribution is unlimited.

DDC FILE COPY

79 10 23 008

| REPORT DOCUMENTATION PAGE                                                                                                                                                                                      |                       | READ INSTRUCTIONS<br>BEFORE COMPLETING FORM                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------|
| 1. REPORT NUMBER                                                                                                                                                                                               | 2. GOVT ACCESSION NO. | 3. RECIPIENT'S CATALOG NUMBER                               |
| 4. TITLE (and Subtitle)<br><b>Second Destination Transportation: Program Management and Force Readiness</b>                                                                                                    |                       | 5. TYPE OF REPORT & PERIOD COVERED                          |
| 7. AUTHOR(s)<br><b>Major Andrew J. McIntyre, Jr. USAF</b>                                                                                                                                                      |                       | 6. PERFORMING ORG. REPORT NUMBER                            |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br><b>US Army Command and General Staff College<br/>Ft Leavenworth, KS 66027<br/>ATTN: ATZLSW-AF</b>                                                               |                       | 8. CONTRACT OR GRANT NUMBER(s)                              |
| 11. CONTROLLING OFFICE NAME AND ADDRESS<br><b>Same As #9</b>                                                                                                                                                   |                       | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)                                                                                                                                    |                       | 12. REPORT DATE<br><b>May 1979</b>                          |
|                                                                                                                                                                                                                |                       | 13. NUMBER OF PAGES<br><b>51</b>                            |
|                                                                                                                                                                                                                |                       | 15. SECURITY CLASS. (of this report)                        |
|                                                                                                                                                                                                                |                       | 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE                  |
| 16. DISTRIBUTION STATEMENT (of this Report)<br><b>Distribution unlimited</b>                                                                                                                                   |                       |                                                             |
| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)<br><b>Approved for release; distribution unlimited</b>                                                              |                       |                                                             |
| 18. SUPPLEMENTARY NOTES<br><b>AF paper prepared at CGSC, Ft Leavenworth, KS 66027</b>                                                                                                                          |                       |                                                             |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number)<br><b>material movement requirements, relocations, unit deployments</b>                                                     |                       |                                                             |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number)<br><b>Provide general understanding of AF second destination transportation program and its importance to AF operations.</b> |                       |                                                             |



(2)

AIR FORCE SECTION  
U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE

(6) SECOND DESTINATION TRANSPORTATION:  
PROGRAM MANAGEMENT AND FORCE READINESS .

(10) by  
Andrew J. McIntyre, Jr., Major, USAF

DDC  
RECEIVED  
OCT 26 1979

E  
(12) 62

(9) RESEARCH STUDY, SUBMITTED TO THE AIR FORCE FACULTY  
(11) May 1979

Nathan S. Goldberg  
Colonel, USAF  
Research Advisor

U.S. ARMY COMMAND AND GENERAL STAFF COLLEGE  
FORT LEAVENWORTH, KANSAS

037260 Lmu

## ABSTRACT

The Air Force Second Destination Transportation program is vital to Air Force operational readiness. It provides resources to support the material movement requirements of forward deployed combat forces, unit deployments, redeployments, relocations, deactivations and Air Force activities in general. This presentation provides a general understanding of the Air Force Second Destination Transportation program and its importance to Air Force operations, readiness and cost effective resource management.

|                   |         |
|-------------------|---------|
| Accreditation For |         |
| NRIC              | 6-1-1   |
| DOC TIR           |         |
| Unannounced       |         |
| Accreditation     |         |
| By                |         |
| Director          |         |
| Availability      |         |
| Dist              | Area    |
|                   | Special |



## PREFACE

This presentation addresses the management, goals and objectives of the Air Force Second Destination Transportation program. It was undertaken by the author to satisfy the requirements of Advanced Professional Development Course (APDC) A 854, "Air Force Research Project", an elective course offered as part of the curriculum of the resident program of the Army Command and General Staff College, Fort Leavenworth, Kansas.

The author served as the Program Element Monitor (PEM) Air Force Program Element 7 80 10F, "Second Destination Transportation" while assigned to the Directorate of Transportation, Headquarters, United States Air Force (HQ USAF) from June 1976 through May 1978. In addition, he represented the Directorate of Transportation in the capacity of technical advisor to the Operating Budget Review Committee (OBRC), HQ USAF. He also served as focal point within the Air Staff for the OY 1977 HQ USAF Review of First Destination Transportation within the Air Force.

The author possesses a Bachelor of Science degree and Masters of Business Administration degree, both with major concentrations in transportation, from the University

of Maryland. His primary Air Force specialty is transportation with qualification in data systems analysis. His secondary specialty is budgeting.



## TABLE OF CONTENTS

|                                                                                    | Page |
|------------------------------------------------------------------------------------|------|
| ABSTRACT.....                                                                      | 11   |
| PREFACE.....                                                                       | 111  |
| EXECUTIVE SUMMARY.....                                                             | v11  |
| Chapter                                                                            |      |
| I. INTRODUCTION.....                                                               | 1    |
| II. DEFINITION, GOALS AND OBJECTIVES.....                                          | 4    |
| Definition                                                                         |      |
| Program Goals and Objectives                                                       |      |
| III. IMPORTANCE TO THE AIR FORCE.....                                              | 7    |
| As a Cost Effective Trade Off for<br>Inventories, Facilities and Per-<br>sonnel    |      |
| As a Key Assumption in the Inventory<br>Manager's Equation                         |      |
| As a Major Source of Revenue for the<br>Airlift Services Industrial Fund<br>(ASIF) |      |
| As a Major Factor Contributing to<br>Force Readiness                               |      |
| IV. PROGRAM MANAGEMENT.....                                                        | 13   |
| Within the Department of Defense                                                   |      |
| Within Headquarters, United States<br>Air Force                                    |      |
| Within the Air Force Major Commands                                                |      |
| Within the DOD Planning, Programming<br>and Budgeting System                       |      |
| V. CONSIDERATIONS FOR THE FUTURE.....                                              | 29   |
| Energy and the Future                                                              |      |
| Wartime Versus Peacetime Operations                                                |      |

| Chapter                                                                                                                                         | Page |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------|
| VI. SUMMARY AND CONCLUSIONS.....                                                                                                                | 38   |
| BIBLIOGRAPHY.....                                                                                                                               | 40   |
| Appendix                                                                                                                                        |      |
| A. SUMMARY OF THE DEPARTMENT OF AIR FORCE<br>EXHIBIT OP-16, "SECOND DESTINATION<br>TRANSPORTATION BY MAJOR ACTIVITY," PE<br>7 80 10 F ONLY..... | 45   |
| B. AIR FORCE SDT PROGRAM BY COMMAND FOR<br>FY 1975.....                                                                                         | 46   |
| C. U.S. OIL CONSUMPTION BY SOURCE.....                                                                                                          | 47   |
| D. DOD ENERGY DEMAND BY MILITARY SERVICE:<br>FY 1976.....                                                                                       | 48   |
| Total Energy<br>Petroleum Energy                                                                                                                |      |
| E. DOD ENERGY DEMAND BY OPERATIONAL FUNCTION...                                                                                                 | 50   |
| Total Energy<br>Petroleum Energy                                                                                                                |      |



## EXECUTIVE SUMMARY

TITLE: SECOND DESTINATION TRANSPORTATION: PROGRAM  
MANAGEMENT AND FORCE READINESS

AUTHOR: MAJ Andrew J. McIntyre, Jr.

ADVISOR: COL Nathan S. Goldberg

I. Purpose: To promote a general understanding of the Air Force second destination transportation (SDT) program and its importance to Air Force operations, readiness and cost effective resource management.

II. Problem: Since the early 1950's, the United States Air Force has continuously sought new methods and concepts to reduce logistical cost while maintaining or improving support to combat forces. In recent years, emphasis on improving the efficiency of logistical operations has increased with the rapidly increasing costs of new weapon systems and spare parts and the steadily decreasing real purchasing power of the Air Force budget. The Air Force SDT program has been and continues to be a major factor in the successful reduction of overall Air Force logistical support cost. It is also a major source of revenue for the Airlift Services Industrial Fund (ASIF). However, the importance, magnitude and management of this vital program are

relatively unknown within the Air Force.

III. Data: In 1978, the Department of the Air Force requested \$415.2 million to meet Air Force SDT funding requirements projected for fiscal year (FY) 1979. These resources are required to support the material movement requirements of CONUS and forward deployed combat forces, unit deployments, redeployments, relocations, deactivations and Air Force activities in general. Inadequate funding of this important program could directly impact the operational efficiency and readiness of the major commands of the Air Force. Future funding requirements will be greatly influenced by the rapidly escalating cost of petroleum products.

IV. Conclusions: The Air Force has become increasingly dependent on responsive transportation to enhance the logistical readiness of operational combat forces and to reduce expensive inventories and associated facilities and personnel. The importance of the Air Force SDT program to the readiness of Air Force operational forces indicates continued growth. However, the future cost of energy and its resultant impact on the expense of transportation services, particularly energy consumptive means of transportation, may reduce the future appeal of using high speed transportation in lieu of purchasing inventory. Also, care must be taken to insure that the trade-offs made in a peacetime economy oriented enviro-



onment permit effective employment of combat forces in time of conflict.

V. Recommendations: Air Force managers should continuously evaluate the costs and benefits of using high speed transportation both in a peacetime and wartime context. The SDT program should receive a relatively high priority for funding consistent with the overall activity level of the Air Force.

## CHAPTER I

### INTRODUCTION

Today, a conservative mood toward government spending is sweeping America. The American taxpayer is demanding increased public efficiency and effectiveness. Hugh Sidney, political analyst for Time magazine concluded that one of the main themes of the 1978 elections was..."the burden of Government." (9:40) An article in the January 22, 1979 issue of Time having the title subscript..."while taxpayers howl and a time bomb ticks, Carter asks for cuts", noted that..."the budget that Jimmy Carter sends to Congress"...(in January 1979)..."will make history in one respect: it will propose the first significant cuts ever made in Social Security benefits." (10:52) More recently, Senator Byrd summarized the legislative outlook by stating that..."Congress has an eye toward fiscal restraint."(4:11) The message is clear to all departments and officers of the government. The taxpayers are dissatisfied to the point of effecting political action to achieve their expectations and goals.

During the period 1789-1790, the infant United States



government spent less than \$1 million. (2:348). In contrast, the Department of Air Force requested \$415.2 million to meet Air Force second destination transportation (SDT) funding requirements projected for fiscal year (FY) 1979. (36:4,5) Surely, the magnitude of dollars allocated to the Air Force SDT program invites intense Congressional as well as Executive Branch scrutiny.

The purpose of this presentation is to promote a general understanding of the Air Force SDT program and its importance to Air Force operations, readiness and cost effective resource management. Although Air Force management philosophy and practices form the basis for the concepts presented, many of the concepts, principles and relationships set forth have tri-service application.

The report is organized into six chapters; **the first** is the introduction. Chapter Two provides a definition of the term second destination transportation and an overview of the goals and objectives of the Air Force second destination transportation program. Chapter Three discusses the importance of the SDT program in regard to cost effective inventory management, the Airlift Services Industrial Fund (ASIF) and Air Force worldwide combat readiness. Chapter Four discusses program management responsibilities within the Department of Defense, Headquarters United States Air Force, and the major operating commands of the Air Force. The methodologies used to project future

SDT requirements are also addressed as well as SDT program management within the context of the DOD planning, programming budgeting system (PPBS). Chapter Five presents several considerations for the future application of SDT resources. Finally, Chapter Six provides a summary and conclusions.

## CHAPTER II

### DEFINITION, GOALS AND OBJECTIVES

#### Definition

Air Force manual 172-1 defines second destination transportation as..."any transportation other than first destination." (31:10-18) Department of Defense Instruction 5000.8 defines first destination transportation as:

"...the movement of property from f.o.b. (freight on board) 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..." (13:124)

and second destination transportation as:

"...the subsequent movement of property for intra-department or interdepartment distribution from the point of storage at which originally received from f.o.b. point of origin." (13:124)

The guidance found in Air Force manual 172-1 concerning both first and second destination transportation can be summarized to produce a relatively clear definition of second destination transportation within the Air Force. Second destination transportation can be defined as any transportation of material other than that..."required to effect delivery of material from a procurement source outside the Department of Defense supply system to the first



point of use or storage"...or aerial or water port of debarkation from CONUS (Continental United States)..."for subsequent distribution within the Air Force Supply system." (31:10-18) There are minor exceptions to this definition. For example, transportation from point of origin of shipment to the point of overseas use or storage incident to selected HQ USAF approved package programs, such as the Semiautomatic Ground Environment (SAGE) defense system, is considered first destination transportation. (31:10-18) These exceptions are made in the interest of management efficiency and do not erode the general value of the definition of second destination transportation presented above.

#### Program Goals and Objectives

The long-range goal of the Air Force SDT program is... "to provide essential land, sea and air second destination transportation which will effectively and efficiently support worldwide operational forces..." (32:3) A special note is appropriate at this point. SDT requirements submitted to Office of the Assistant Secretary of Defense (Comptroller) (OASD(C)) and Office of Management and Budget (OMB) in peacetime reflect only peacetime SDT requirements. If a major contingency deployment or war should occur, the Air Force SDT requirements would change in proportion to the demands of the situation. (26:2) Therefore, resources allocated by the Air Force to SDT in Air Force Budget Estimate and Program Objective Memorandum (POM) would increase.

Major objectives of the Air Force SDT program include:

- (1) provision of "...a level of program activity

which will enhance...(Air Force)...logistical and combat readiness and responsiveness while promoting economy and positive resource management." (32:3)

(ii) capitalization on opportunities "...to effect inventory savings or enhanced logistical readiness through improved transportation management to include use of more timely modes of transportation which reduce pipeline time where cost effective." (32:3)

(iii) support of programmed force relocations and enhancements.

(iv) support of "...the positioning and dispositioning of conventional and nuclear weapons and missiles in support of strategic and tactical planning guidance." (32:3)

(v) provision of "...a level of program activity which will insure availability of required spare parts support to CONUS based and forward deployed combat forces and retrograde of reparable components to repair locations at the lowest total costs to the Department of the Air Force." (32:3)

The objectives reflect an active program supportive of the general activity level of the Air Force. The objectives also reflect emphasis on cost efficiency both within the function of transportation and in the use of transportation as a cost effective trade for more expensive variables within the logistics functions such as inventory.

## CHAPTER III

### IMPORTANCE TO THE AIR FORCE

#### As a Cost Effective Trade Off for Inventories, Facilities and Personnel

Since the early 1950's, the United States Air Force has continuously sought new methods and concepts to reduce logistical cost while maintaining or improving support to combat forces. In recent years, emphasis on improving the efficiency of logistical operations has increased with the rapidly increasing costs of new weapon systems and spare parts and the steadily decreasing real purchasing power of the Air Force budget. (24:12)

The Air Force second destination transportation (SDT) program has been and continues to be a major factor in the successful reduction of overall Air Force logistical support costs. The Air Force has increasingly come to rely on timely transportation as a cost-effective trade off for expensive inventories, depot facilities, and associated personnel. The result has been a general reduction of the overall operating costs of the Air Force and an increasing dependence on the transportation system to meet the everyday logistical support requirements of Air Force operational



units. This increasing dependence on transportation has made the Air Force SDT program a key element in the Air Force logistical support program and a vital factor to force readiness.

Use of timely transportation as a cost-effective trade off for expensive inventories is a widely accepted way of doing business within the Air Force. The Air Force estimates that for every one day increase in transportation time, an increase of \$52.5 million in investment spares inventory results. (3Q:2) This figure excludes the costs associated with increased facilities and personnel required to support the increased inventory level.

The time an asset spends in the transportation system, otherwise referred to as the transportation pipeline, is the key to two logistical factors which can be influenced by Air Force management action. These factors are order and ship time (OST) and depot repair cycle time (DRCT). Order and ship time is the time which elapses between the placement of a requisition and the satisfaction of that requisition. Base operating stock levels are a direct function of OST. DRCT is similar in concept. DRCT is the time which elapses between the turn in of an asset for depot repair and the return of that asset to the active inventory.

In a recent study conducted by the Air Force Logistics Command, transportation was found to be the most time consuming component of the OST factor. (28:8) This finding is

not revolutionary considering the dispersion of Air Force activities worldwide. However, the finding emphasizes the prospect of improving inventory posture through intensified traffic management action.

Reducing the time assets spent in the transportation system has several impacts. First, the magnitude of base safety stocks significantly decrease since transportation is a key factor in the determination of base safety stock levels. Second, less inventory is trapped within the transportation system. Third, inventory requirements within the depot are also reduced. The overall result is less inventory required to maintain a compleable level of peacetime readiness. (28:8,9,10)

An interesting extension of a transportation trade off concept is the application of inventory savings derived from the use of timely transportation to the satisfaction of War Readiness Material (WRM) requirements. Under this concept, peacetime operating stock (POS) requirements for specific assets are recomputed using faster modes of transportation. Since some WRM requirements also depend upon OST and DROT, the WRM stock requirements are also recomputed. The end result is a reduction of required peacetime operating stocks, a lower WRM requirement, and where appropriate reductions in WRM deficits through application of assets previously dedicated to the role of peacetime operating stocks. (28:11)



As a Key Assumption in the Inventory Manager's Equation

The Air Force SDT program is basically a collection of SDT requirements which directly support other Air Force programs. The concept of relating transportation requirements directly to the supported programs is extremely important. Increases in Air Force programs generally increase the SDT requirement. Similarly, reductions in Air Force programs generally decrease the SDT requirement.

Air Force program managers consider SDT as one of several key variables during supported program formulation. However, upon final program presentation, each Air Force program manager assumes a given level and type of transportation support. This level of support, which includes delivery times, pipeline times and system responsiveness and reliability, is one of several variables which directly impact the dollar magnitude of the supported program.

As a Major Source of Revenue for  
The Airlift Services Industrial Fund (ASIF)

SDT funds are also a major source of revenue for the Airlift Services Industrial Fund (ASIF) and therefore a major source of financing for Military Airlift Command (MAC) air crew readiness training. (11:48) Approximately 43% of total Air Force SDT resources are programmed for the purchase of MAC channel or special assignment airlift. (36:4,5) Because the ASIF requires a basic level of funding to insure strategic and tactical airlift readiness, a major shift of material movement to military sealift could have



a substantial impact on the financing of the ASIF depending on the capability of MAC to reduce its commercial airlift augmentation program, the amount of cargo offered for movement in the MAC system by other users, and the revenues to be derived from other users for services rendered.

A significant reduction in the number of short tons offered by the Air Force for movement in the Military Airlift Command (MAC) airlift system also reduces proficiency training opportunities for aerial port personnel, thereby reducing overall aerial port war readiness capability.

(21:13) Additionally, as the volume of cargo offered to the MAC airlift system for movement to specific points or geographic areas declines, frequency of service offered decreases. Reduced frequency of movement increases the logistical pipeline.

#### As a Major Factor Contributing to Force Readiness

The concept of "force readiness" is a central theme within the Air Force. It connotes the ability and capability of the Air Force to deploy and employ a force anywhere within the world and sustain that force so as to be capable of performing at a high level of effectiveness and efficiency. The logistical support aspect of "force readiness" is referred to as "logistical readiness". Initiatives to improve the Air Force's posture in either area are referred to as "readiness initiatives".

Readiness initiatives frequently involve weapon

systems deployments, redeployments, relocations and to some extent deactivations. Transportation support is a key influence in the success of these types of "readiness initiatives", both in the initial phase of weapon system displacement, movement and placement and in the follow on phase of routine support once the weapon system is established in a defined support area. The mobility and wide dispersion of Air Force elements and units throughout the world magnify the absolute requirement for an active, efficient and effective transportation program that is responsive to the changing demands of the international environment and national defense requirements.

## CHAPTER IV

### PROGRAM MANAGEMENT

#### Within the Department of Defense

The Assistant Secretary of Defense (Installations and Logistics) or ASD(I&L) is the principal staff assistant to the Secretary of Defense in matters of transportation (15:3-6) and has overall responsibility for..."establishing policies and providing guidance to DOD components concerning the efficient and effective use of DOD and commercial transportation resources and the establishment and operation of Transportation Single Manager Agencies." (14:2) However, the ASD(I&L) is not assigned specific responsibility for SDT management. This responsibility is accepted as being implied as a component of the ASD(I&L)'s overall responsibility for transportation management. (12:5) As a part of this responsibility, the ASD(I&L)..."issues formal policy and instructions,...participates in the budget/program review process...and...participates and provides guidance in resolving current DOD transportation problems." (12:6) However, the ASD(I&L)'s principle involvement in the Service Component's SDT programs occurs during budget



review. During the budget review process, the ASD(I&L) ... "assists the ASD(C)"... (Assistant Secretary of Defense (Comptroller))... "who conducts the review, although advance data is not routinely received for review and analysis." (12:6) "The ASD(I&L) does not explicitly monitor the performance of the Military Services during execution of the SDT budget." (12:6)

Within Headquarters United States Air Force

The Military Services are directly responsible for planning, programming, budgeting, and obligating second destination transportation funding resources. (12:3) Within the Air Force, the Plans and Programs Division, Directorate of Transportation, Office of the Deputy Chief of Staff, Systems and Logistics, is the office of primary responsibility for management of the Air Force SDT program. This Division is directly involved in the Air Force programming, budgeting, and resource apportionment cycles.

The Plans and Programs Division serves as the Program Element Monitor (PEM) for SDT funding resources included in Major Force Program (MFP 7), Central Supply and Maintenance. (19:37) SDT resources included in MFP 7 account for approximately 75% of the Air Force SDT program. (21:4) Resources included in MFP 7 provide for: (24:3,4)

(1) the movement of materials from continental United States depots to field activities located throughout the world, to include overocean transportation performed

by the Military Sealift Command (MSC) and the Military Airlift Command (MAC),

(ii) the movement of retrograde materials from overseas,

(iii) the operation of the Logistics Airlift system (LOGAIR).

(iv) the movement of materials within and between theaters of operations via MSC and the MAC channel airlift system.

(v) the movement of missiles, conventional weapons and nuclear weapons.

(vi) the Air Force share of the costs to move Army Air Force Exchange Service (AAFES) materials overseas and the distribution of Army Post Office (APO) mail to, from, and within overseas areas.

(vii) the movement of Air Force subsistence overseas, and

(viii) the costs of associated transportation accessorial services to include CONUS port handling, vessel retention, vessel per diem and demurrage.

As PEM, the Plans and Programs Division reviews, consolidates and validates SDT requirements estimates received from the Directorate of Administration, Office of the Chief of Staff, Headquarters United States Air Force and Headquarters Air Force Logistics Command (AFLC). These validated requirements become the basis for development of the Air Force SDT requirements included



in the Air Force (POM), the Air Force budget submission to the Office of the Assistant Secretary of Defense (Comptroller) (OASD(C)), and the apportionment of available Air Force Operation and Maintenance (O&M) funds.

The Plans and Programs Division involvement in Air Force POM development includes presentation of MFP 7 projected SDT requirements to the Air Force Support Panel, a permanent panel of the Air Staff Board. (26:11,13,15) The Support Panel reviews the SDT program and makes recommendations through the Air Force Board Structure. The deliberative elements of the Board Structure, other than the Support Panel, concerned with review and/or validation of the Air Force SDT program are the Airlift panel, the Air Staff Board (ASB) and the Air Force Council (AFC). Changes in the SDT program are recorded in the A series Air Force program exercise documents. (20:L-4) Impact statements concerning changes to the recommended SDT program are developed and presented by the Plans and Programs Division.

The Plans and Programs Division is equally active in the development of the Air Force SDT budget which is forwarded to OASD(C) in the fall of each year. The Division insures the accuracy of budget estimates and exhibits and represents the Directorate of Transportation at the annual joint OASD(C) and OMB SDT requirements hearing. (18:1) The purpose of the joint hearing process and subsequent joint OASD(C)/OMB review of the Air Force Budget estimate is to formulate the correct allocation of resources by



appropriation, program and project to be included in the forthcoming President's Budget to be submitted to the Congress sometime after the New Year. (35:42) The Plans and Programs Division plays a central role in the defense of the Air Force SDT budget by recommending and, if appropriate, formulating appeal action in response to adjustments made to the budget estimate during the Department of Defense budget review, and by responding through the Budget Office of the Air Force Comptroller to questions and inquiries made by OASD(C), OMB, and the respective staffs of both houses of the Congress. (22)

The Plans and Programs Division plays a broad role in the apportionment of transportation funding during the Headquarters Air Force review of Command Operations Operating Budget (COB) submissions. The Division furnishes a technical advisor to the Operating Budget Review Committee (OBRC) to assist in funding decisions impacting the functional area of transportation and to provide specific advice concerning the validity of estimated SDT funding requirements included in all Air Force major force programs. (17:1) SDT funding requirements included in major force programs other than Central Supply and Maintenance (MFP 7) provide for: (24:5)

(1) overseas port handling charges (overseas major commands only),

(11) inland overseas commercial transportation

(overseas major commands only),

(iii) CONUS inland commercial transportation directed by a major command other than AFLC,

(iv) Special Assignment Airlift Mission (SAAM) support for unit deployments, redeployments and relocations.

The Plans and Programs Division is also active in the establishment and maintenance of Air Force resource management policy pertaining to the effective and efficient planning, programming, budgeting and general use of Air Force funds. In this role, the division coordinates the solution of interservice funding problems directly with the impacted offices of the involved service component in close coordination with the Policy and Procedure Division of the Air Force Comptroller. Issues involving Air Force major commands are coordinated directly with the interested command. Policy decisions involving the general overall conduct of the Air Force are coordinated with the Policy and Procedure Division of the Air Force Comptroller and are incorporated in Air Force Manual 172-1, Volume I, Air Force Budget Manual.

#### Within the Air Force Major Commands

All Air Force major commands require and receive SDT funding. Each command... "plans, programs and budgets for its own requirement." (12:32) The degree of methodology sophistication employed to estimate future SDT requirements varies among the commands. The composite of all command

SDT requirements constitutes the Air Force SDT program.

The Air Force Logistics Command (AFLC) consumes approximately 70% of all Air Force SDT funding. HQ AFLC plans, programs and budgets for all SDT requirements included in PE 70 80 10 except those supporting the projected movement of APO mail and certain classified projects.(37) Since HQ AFLC plans, programs and budgets for the majority of Air Force SDT requirements, the remainder of this section will primarily be devoted to discussion of the AFLC SDT program management process.

AFLC segregates SDT into six major categories which coincide with the command's six major groupings of SDT expenditures. They are: Military Airlift Command (MAC) Military Sealift Command (MSC), Commercial Air, Commercial Surface, Logistical Airlift (LOGAIR) and Port Handling. (12:32,33) Each major category is identified by an Air Force Element of Expense/Investment Account Code (EEIC). (12:32)

SDT requirements developed by HQ AFLC are based on the PA series guidance documents which address the projected Air Force flying hour program and specific transportation requirements associated with individual Air Force programs.

The Air Force PA series guidance documents provide the basis for computation of 38% of the total Air Force SDT program as expressed in dollars or approximately 50%



of the SDT requirements computed by AFLC as expressed in dollars. (21:10) HQ AFLC uses linear regression analysis to correlate programmed flying hours as projected in the PA series guidance documents with estimated related SDT requirements as expressed in short or measurement tons. The technique uses the relationship between actual tons shipped and hours flown during numerous historical time segments and future programmed flying hours as the basis for projection of both near term and out year SDT requirements. (27:38)

The projected Air Force overseas flying hour program provides the basis for computing approximately 79% of military channel airlift and 46% of military sealift point to-point movement requirements, including CONUS port handling services. The total Air Force flying hour program provides the basis for computing approximately 20% of Air Force commercial transportation requirements. (29:648, 665-686)

Second destination transportation resource requirements identified with specific individual Air Force programs include those which are directly associated with (i) inventory manager (IM) programs such as the Air Force vehicle, airmunitions, and special weapons programs: (ii) receiving non-IM programs such as the Logistical Airlift (LOGAIR) system and (iii) actions programmed for execution within the Air Force.

- Inventory Manager Program Requirements:

SDT requirements associated with Air Force inventory manager programs are generally stable and relatively well defined. These are normally based on movement requirements associated with the distribution of assets purchased in a specific time period, the movement of material or weapons units in support of specific Air Force depot maintenance or depot modification programs, the movement of material or weapons units in support of specific Air Force testing programs and the movement of assets in conformity with specific Air Force or Department of Defense program guidance. A respective example of each is the overseas distribution of newly procured vehicles, the movement of a strategic missile to an Air Force depot for engine modification, the movement of a Minuteman missile to Vandenberg Air Force Base (AFB), California, in support of the Air Force test launch program and the movement of special (nuclear) weapons in response to guidance received from the Defense Nuclear Agency (DNA). The distribution of newly procured items such as vehicles and conventional airmunitions generally takes place in the O&M year subsequent to the year of programmed procurement.

- Recurring Non-Inventory Manager (IM) Requirements:

SDT requirements in this category are those associated with recurring non-inventory manager (IM) programs. Included in this category are transportation requirements



associated with the resupply of US bases in Greenland and the contractual costs of operating the Air Force Logistical Airlift (LOGAIR) system. SDT estimates associated with the resupply of US bases in Greenland are based on historical movement tonnages adjusted for rate increases or decreases, movement requirements associated with significant programs or projects which influence the flow of material to and from Greenland and adjustments to Air Force manning and basing. SDT estimates associated with the future cost of operating the Air Force's Logistical Airlift System' (LOGAIR) are based on the projected great circle mileages to be flown, number of forecasted landings, fuel prices and type aircraft utilized by the contractor. (29:654,662,663)

- Non-Recurring Requirements:

SDT requirements associated with relatively short duration action programmed for execution, or relatively short duration actions not programmed but directed for execution are often referred to within the Air Force as non-recurring requirements. Non-recurring requirements result from actions taken by entities other than the United States Government, by actions directed by non Air Force Government activities such as the White House, the Department of State or the Department of Defense, by actions approved by the Chief of Staff of the Air Force to enhance combat force readiness and by actions initiated



by Air Force major commands to enhance theater or command readiness. The forced closure of United States military installations in Libya in the late 1960's, the projected withdrawal of United States ground forces from the Republic of Korea and associated realignments actions, the programmed enhancement of United States Air Forces in Europe (USAFE) in support of the North Atlantic Treaty Organization (NATO) and command sponsored improvement of firing range equipment designed to improve tactical air crew training within theater provide an example of each respectively.

These requirements often materialize on short notice and outside of the Air Force program and budget cycles. They are initially very vaguely defined, particularly in regard to logistical support requirements to include SDT.

SDT requirements associated with non-recurring programs and projects are of concern at various times to all of the major commands of the Air Force. However, some Air Force major commands manage non-recurring SDT requirements daily because of their mission and involvement in non-recurring programs and projects. As the logistical provider for the Air Force and as the single command having planning, programming and budgeting responsibility for the movement of all Air Force material shipped via the MAC channel airlift and MSC point to point sealift system worldwide, AFLC daily manages a wide spectrum of non-recurring programs.

and projects. Pacific Air Forces (PACAF) and United States Air Forces Europe (USAFE), the major oversea commands of the Air Force, also manage non-recurring SDT requirements with significant frequency. These two forward deployed commands are frequently the beneficiaries of Air Force readiness initiatives and are responsible for theater port handling charges and inland commercial transportation costs. Other major commands that participate in non-recurring SDT requirements include the Strategic Air Command (SAC) and the Tactical Air Command (TAC).

To insure coordination of non-recurring SDT requirements, HQ AFPC bi-annually requests a summary of non-recurring SDT requirements from the other Air Force major commands. AFPC encourages the other major commands to update their submissions as required and in a timely manner. The information provided is reviewed, validated and coordinated with the Plans and Programs Division, Directorate of Transportation, Office of the Deputy Chief of Staff, Systems and Logistics. (34:654) The Plans and Programs Division reviews and validates each non-recurring SDT requirement based on a review of the PD series Air Force guidance documents which project changes in Air Force units and bases, review of the PM series Air Force guidance documents which project Air Force manpower authorizations and coordination with other offices within the Air Staff and Air Force.



- Estimation of SDT Requirements Associated with Readiness Initiatives:

Material movement requirements in support of readiness initiatives involving weapon systems deployments, redeployments, relocations, and deactivations are frequently difficult to project but vital to the combat readiness of the Air Force. These requirements may be divided into two categories: initial requirements and sustaining requirements.

The first category includes those materiel movements in support of the initial deployment, redeployment, relocation or deactivation of an Air Force weapons system or facility. As a rule, these actions involve more than one Air Force major command and demand close inter and intra command coordination. The fluid nature of these types of non-recurring programmed actions makes projection of SDT requirements difficult since these requirements are driven by both the concept of operation and the methodology selected to logistically support the concept of operation. (23) Changes in the concept of operation and concept of logistical support often occur up to and sometimes during program execution. These changes frequently have a significant impact on the type of transportation support and the magnitude of resources required. For example, reducing the time a weapons system is to be operationally ready once in place may dictate the use of expensive but more responsive



MAC special assignment airlift in lieu of MAC cargo channel airlift or even selected use of over-ocean sealift.

The second category includes those materiel movements required to support and sustain a weapons system once located or relocated. In the case of the relocation of a weapons system already accepted into the Air Force inventory and operational, the cost of relocation is the difference in transportation resources expended on the support of the weapon at its current location as compared to its programmed location.

Resource estimates involving the projection of transportation resource requirements to sustain a weapons system once in place are also often difficult. Since many Air Force installations support more than one weapons system, the costs of currently supporting a given weapons system at a given installation usually are not well defined. The concept of weapons systems deployment and/or concept of logistical support at the gaining location may also vary greatly from past employment and support.

Within the DOD Planning, Programming and Budgeting System

Program Element (PE) 7 80 10F, "Second Destination Transportation", which accounts for approximately 75% of SDT resources of the Air Force, is one of numerous program elements which form the basic decision units in the DOD PPBS. SDT requirements not included in PE 7 80 10F are included as subelements within other Program Elements. Every dollar

of the Air Force budget is identified with a specific program element.

The PPBS was adopted by the DOD in the early 1960's to avoid..."obstacles to efficiency in conventionally governmental budgeting." (2:406) It is a comprehensive budgeting system which places heavy emphasis on programs, goals and cost-benefit analysis and focuses on both the short and long terms. The planning aspect of the system connotes..."long-term evaluation as opposed to the short-run consideration of costs and benefits in only one or two fiscal years". (2:407) The programming aspect connotes the structuring of the budget in terms of goals (programs). (2:407) In brief, the PPBS is the process through which the DOD allocates and manages the funds provided by the Congress. (35:12) The Air Force SDT program is one of numerous basic elements considered in this allocative process.

A new managerial tool recently added to the PPBS is zero based budgeting (ZBB). ZBB is intended to reduce or eliminate programs, as appropriate, which yield low benefits given specific goals. "Zero-based budgeting procedures require that each activity be examined and justified from the ground or base up prior to the beginning of each budget cycle." (3:420) Like the PPBS, ZBB is based on "decision units". However, these "decision units" under the ZBB approach represent a decision unit of sufficient magnitude and composition so as to..."reduce the inter-



dependence between decision units and reduce the paper-work - but at a level low enough to identify specific objectives and goals." (35:100) PE 7 80 10P is included as an activity group within ZBB..."decision package A-13, 'Logistical Support Activities'". (32:3) Thus the Air Force SDT program is evaluated twice during two allocative steps (programming and budgeting) in the PPBS cycle: (i) once as an entity and (ii) once as a major component of a broader ZBB decision unit.



## CHAPTER V

### CONSIDERATIONS FOR THE FUTURE

#### Energy and the Future

The use of faster modes and means of transportation certainly holds the prospect of reduced inventory requirements. However, the charges incurred for using faster modes and means of transportation are most generally more expensive than the charges incurred for using slower modes and means of transportation. Therefore, as previously implied, a comparison must be made between the cost of using faster modes and means of transportation and the costs of purchasing and maintaining inventories. Both the cost of transportation and the cost of inventories are comprised of several sub-cost components.

The cost of petroleum, the primary fuel used to power the American transportation system, has increased sharply in the past decade. In 1973, the selling price of the Organization of Oil Exporting Countries (OPEC) oil per barrel was \$2.41. Today, the selling price per barrel has leaped to \$14.55. (7:72) Richard N. Cooper projects that:

"In 1985,...the total demand for OPEC oil by the non-Communist countries assuming present energy policies continue, could range between 44 and 49 million barrels per day. Although OPEC's productive capacity might amount to as much as 40 - 45 million barrels per day, it's likely level of production, due to economic and political considerations, might be more on the order of 36 million barrels per day, up from 31 million barrels per day in 1977. We, therefore, have a potential daily shortfall of up to 13 million barrels. This prospective shortfall translates into the threat of another leap in prices"...(6:26)

The cost of energy is a sub-cost component of the cost of transportation. Since the price of a service in the capitalist system must in the long run cover all costs of production and marketing, energy costs are passed to the consumer. High speed modes and means of transportation most generally consume significantly more fuel per short ton mile than slower modes and means of transportation. Therefore, as the price of fuel to the transportation company increases, the rates of the faster modes and means of transportation are likely to increase disproportionately as compared to the rates of slower modes and means of transportation. Assuming no decrease in support to dependent Air Force programs, the Air Force SDT program budget estimates must consider these rate increases.

The cost of energy also impacts the final price assessed for an inventory item since the price of a product, like the price of a service, must in the long



run cover all costs of production and marketing. The transportation cost added by movement of material varies depending on the nature of the product and the location(s) of raw material. Transportation costs and energy costs other than those incurred for the movement of material must also be passed to the consumer (1:14) Energy costs excluded from material movement cost but a part of the final product price include those associated with manufacture, marketing and plant heating. The cost of energy is dependent on the type of energy and the transportation charges associated with its relocation from source to point of consumption.

The cost-benefit analysis which generally precedes the decision to use a more expensive mode or means of transportation in lieu of inventory purchase is generally based on existing transportation rates and inventory costs. Therefore, the analysis is most likely highly accurate for a specific point in time but insensitive to trends and projected changes in the energy and raw material availability and cost. Standard escalation rates may be employed to project future costs and benefits. However, standard rates are also frequently insensitive to recent changes in future trends and projections. In short,



the process of cost-benefit analysis must be continuous and based on a projection of the most current information available.

The availability of energy may also impact the fast transportation versus inventory equation. The industrialized nations of the North Atlantic Treaty Organization (NATO) and Japan consume almost 70% of the world's energy production. (5:16) In 1972, the United States consumed 32% of the world's oil production while producing only 18% of the World's supply. "Even with production in Alaska and increased recovery from reserves through improved technology, the United States may have to import 53% of its oil needs by 1985." (5:16) The Department of Defense..."uses nearly 80 percent of the energy consumed by the US government and oil provides 67 percent of the Department's energy needs." (5:17) Approximately 44 percent of the energy consumed by the DOD is used in aircraft operations, a category in which the Military Airlift Command - the primary overseas provider of high speed transportation service - is included. (5:17) The vulnerability of the United States to a reduction of oil supplies is increasing as foreign dependence increases. The question to be addressed is the potential impact of this trend on the National Defense capability.

Although the Department of Defense may receive priority for energy resources during a national emergency, the Department of Air Force significantly relies on

commercial enterprise to meet its logistical requirements and to effect movement of material and personnel. Colonel Theodore G. Brna, USAR in a recent article in the Army Logistician provides the following observation.

"Any plans for meeting future military petroleum needs must recognize both direct and indirect oil requirements. Indirect requirements account for the oil used in other economic sectors to provide equipment and services to the Defense Department. Using a complex model and assuming that oil will provide about half of the Nation's energy, the combined direct and indirect oil requirements of the Defense Department are projected to be 150 percent of its direct petroleum needs." (5:17)

The Air Force utilizes the services of a broad number and type of commercial carriers to satisfy its material movement requirements and relies on the free enterprise system to produce and offer schedules, routes and operational frequency. Many of the material shipments made by the Air Force are classified as "small shipments", "less than truck load" or "less than car load". Shipments in these categories are very vulnerable to delays during a severe fuel crisis since a shortage of fuel will increase the pressures on commercial firms to increase utilization, eliminate low usage routes and reduce the frequency of



operations. Reduced frequency of operations and routes could result in longer "pipeline" times and therefore inventory shortfalls. Inventory shortfalls equate to reduced logistical readiness which could, in turn, adversely impact the operational readiness of Air Force combat forces.

In summary, the increasing cost of energy, in particular petroleum, and its escalating effect on the cost of transportation could force a reassessment of the applicability of certain management assumptions regarding the desirability of heavy reliance on high speed transportation rather than investments in inventories. Overseas depot level repair of weapon systems and weapon systems components employed predominately in one geographic theater may become highly desirable. Higher MAC channel special airlift rates may encourage the users of the MAC airlift system to seek other alternatives to the use of military airlift. A reduced flow of revenues into the ASIF may force a reduction in the MAC flying hour program and an increased reliance on flight simulator training as an alternative means of insuring minimum essential aircrew training. A reduction in the tonnage offered for movement in the MAC channel airlift system could result in an increased reliance on static training aids for the instruction of ground support personnel.

#### Wartime Versus Peacetime Operations

Air Force SDT requirements submitted to OASD(C) and OMB annually and those reflected in the Air Force POM are based solely on peacetime support requirements. Should



a major contingency deployment or war occur, Air Force SDT requirements and/or inventory requirements would change in proportion to the operational demands of the situation. Several factors and considerations may influence the degree of change and the proportion of resources allocated to SDT and inventory requirements. They include the projected (i) length of the contingency or war, (ii) enemy destruction of inventories, (iii) enemy disruption of the lines of communication (LOC'S), (iv) enemy destruction of air and surface transportation movement assets, (v) enemy destruction of air and seaport facilities, equipment and personnel, (vi) attrition of combat weapons by type and geographic theater, (vii) distance from point of purchase or repair to location of use of consumables and repairable parts, (viii) theater repair and cannibalization capability and policy, (ix) competing logistical support requirements of other service components, and (x) industrial capability to produce or procure replacement parts and consumable items. National goals and objectives in respect to the criteria for favorable conflict termination may also affect the availability and allocation of resources.

The capability of the Armed Forces of the United States to respond to various conflict scenarios depends largely on the nation's strategic mobility capability. The ability to project combat forces on a worldwide basis is directly contingent on the timely availability of airlift and

sealift assets. Rapid response is directly related to the use of airlift assets, specifically those assets dedicated to the Military Airlift Command. It is important to note that the MAC airlift system is also the primary source of premium high speed transportation service for the movement of priority Air Force materials overseas. Any significant deployment of forces, therefore, disrupts the logistical pipeline.

The time an asset spends in the transportation system during wartime may differ significantly from peacetime. Airlift resources may, out of necessity, be allocated to one geographic theater at the expense of another. Theater airlift requirements for the repositioning of combat forces may take precedence over the maintenance of a stable logistical pipeline. Damaged reparable components may accumulate at forward operating locations because of insufficient tactical airlift, risks to tactical airlift of servicing the location or enemy interruption of surface LOC's. The attrition of airlift forces may force a reduction or total disruption of service frequencies, as well as reduced cargo movement capability. The destruction of airfields, ground servicing equipment and trained aerial port personnel may force reversion to less efficient and effective methods of processing and handling material shipments. The result may be significantly increased pipeline times.

The implication is simple. The decision to use high



speed transportation as a trade off for inventory should not be predicated solely on efficiency and effectiveness of operation in a peacetime environment. Consideration must be given to the potential lethality and fluid environment of the modern battlefield. Confusion, disruption, attrition and instability must be considered in projecting logistical support requirements. The program manager must insure the viability of his program in a wartime environment by continuously remaining attuned to changes in the projection of the threat and future allied and U.S. capabilities.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

The Air Force has become increasingly dependent on responsive transportation to enhance the logistical readiness of operational combat forces and to reduce expensive inventories and associated facilities and personnel.

The Plans and Programs Division, Directorate of Transportation, Office of the Deputy Chief of Staff, Systems and Logistics, Headquarters, United States Air Force, is the office of primary responsibility for the management of the Air Force SDT program within the Air Staff. The Air Force Logistics Command plans, programs, budgets and consumes approximately 70% of all Air Force SDT resources. The planning, programming and budgeting responsibility for the remaining 30% rests with the other operating commands of the Air Force.

The Air Force SDT program provides transportation funds to support Air Force activities and units located worldwide, Air Force unit deployments and redeployments to include those in support of special task forces to meet global contingency requirements, and the majority of Air



Force readiness initiatives. These funds also are a major source of revenue of the Airlift Services Industrial Fund which, in turn, provides funding for air crew readiness training. Additionally, cargo moved through the MAC Airlift System using SDT funds provides proficiency training opportunities for Air Force aerial port personnel, thereby contributing to overall readiness of the Defense Transportation System.

The importance of the Air Force SDT program to the readiness of Air Force operational forces shows no sign of decreasing. The opposite trend is more evident. The increasing emphasis on reducing the magnitude of support dollars spent in relation to expenditures on operational combat units and new weapon systems will most likely continue to make responsive transportation support an attractive alternative to expensive inventories and associated facilities and personnel. However, the future cost of energy and its resultant impact on the expense transportation services, particularly energy consumptive means of transportation, may reduce the future appeal of the high speed transportation alternative. Also, care must be taken to insure that the trade-offs made in a peacetime economy oriented environment permit effective employment of combat forces in time of conflict.

## BIBLIOGRAPHY

### Books

1. Fair, Marvin L., and Willian, Ernest W. Economics of Transportation. New York: Harper and Brothers Publishers, 1950.
2. Herber, Bernard P. Modern Public Finance: The Study of Public Sector Economics, 3rd ed. Homewood, Illinois: The Dorey Press, 1979.
3. Starling, Grover. The Politics and Economics of Public Policy: An Introductory Analysis With Cases. Homewood, Illinois: The Dorey Press, 1979.

### Articles and Periodicals

4. \_\_\_\_\_. "A Cautious Senate Begins", Time, Vol. 113, No. 5, January 29, 1979, p. 11.
5. Brna, Theodore G. "Petroleum's Role in National Security", Army Logistician, Vol. 9, No. 1, January February 1977.
6. Cooper, Richard N. "Energy: Prospects for the Next Decade", Department of State Bulletin, Vol. 78, No. 2011, February 1978.
7. \_\_\_\_\_. "Inside the Big Oil Game", Time, Vol. 113, No. 19, May 13, 1979, pp. 70-74, 77-79.
8. Marienthal, George. "Energy: DoD's Lifeline for National Security", Commanders Digest, Vol. 20, No. 22, pp. 2-8.
9. Sidney, Hugh. "Winning was the Only Thing", Time, Vol. 112, No. 21, November 20, 1978, p. 40.
10. \_\_\_\_\_. "Trying to Slow Social Security", Time, Vol. 113, No. 5, January 22, 1979, P. 52.



Official Documents

11. Adamson, D.P., Jr. Examination of the Need for the Airlift Services Industrial Fund. A report prepared for and approved by the Airlift Panel of the Air Staff Board, Headquarters United States Air Force. Washington, DC; October 15, 1977.
12. Narragon, E.A. and Neil, J.M.. Second Destination Transportation, Phase 2, LMI Task 75-4. Report prepared pursuant to Department of Defense Contract No SD-321 by the Logistics Management Institute. Washington, DC: January, 1976.
- 13 U.S., Department of Defense, Assistant Secretary of Defense (Installations and Logistics)/Assistant Secretary of Defense (Comptroller), Department of Defense Instruction 5000.8, Glossary of Terms Used in the Areas of Financial, Supply and Installation Management. Washington, DC: June 15, 1961.
14. U.S., Department of Defense, Assistant Secretary of Defense (Installations and Logistics), Department of Defense Directive 4500.9, Transportation and Traffic Management. Washington, DC: November 29, 1971.
15. U.S., Department of Defense, Assistant Secretary of Defense (Installations and Logistics), Department of Defense Directive 5126.22, Assistant Secretary of Defense (Installation and Logistics) Charter. Washington, DC: January 30, 1961.
16. U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller) Department of Defense Manual 7110-1-M, Budget Guidance Manual, Part II, Section 3, Chapter 232, Change 5. Washington, DC: July 12, 1977.
17. U.S., Department of the Air Force, Directorate of Budget. "Operating Budget Review Committee (OBRC)". Letter, Washington, DC: January 6, 1978.
18. U.S., Department of the Air Force, Directorate of Budget. "OSD/OMB Hearing, FY 78 Revised and FY 79 Budget, Operation and Maintenance, and Civilian/Military Manpower". Letter, Washington, DC: September 19, 1977.

19. U.S., Department of the Air Force, Directorate of Programs. USAF Program Element Monitor Directory. Washington, DC: December 7, 1977.
20. U.S., Department of the Air Force, Directorate of Programs. "Program Exercise 79-A1". Basic document as posted for changes 1 and 2, Washington, DC: March 1, 1977.
21. U.S., Department of the Air Force, Directorate of Transportation. "Air Force Second Destination Transportation: Resource Management and Readiness". General purpose briefing, Washington, DC: April, 1978.
22. U.S., Department of the Air Force, Directorate of Transportation. "Fact and Issue Papers" and other documents prepared by the Plans and Programs Division in response to inquiries made by OASD(C), OMB and the respective staffs of both houses of the United States Congress, January 1, 1975 through March 15, 1978.
23. U.S., Department of the Air Force, Directorate of Transportation. Review of Air Force Programmed Action Directives (PAD's) executed between January 1 1976 and March 15, 1978 administratively maintained within the Plans and Programs Division, Pentagon, Washington, DC.
24. U.S., Department of the Air Force, Directorate of Transportation. "Second Destination Transportation, PE 7 80 10F". Briefing to the Office of the Assistant Secretary of Defense (Comptroller) and the Office of Management and Budget, Washington, DC: October 14, 1977.
25. U.S., Department of the Air Force, Directorate of Transportation. "Second Destination Transportation, PE 7 80 10F". Briefing to the Support Panel, Headquarters, United States Air Force, Washington, DC: January 1976.
26. U.S., Department of the Air Force, Directorate of Transportation. "Second Destination Transportation, PE 7 80 10F". Briefing to the Support Panel, Headquarters, United States Air Force, Washington, DC: January 18, 1977.



27. U.S., Department of the Air Force, Directorate of Transportation. "Second Destination Transportation, PE 7 80 10P". Briefing to the Support Panel, Headquarters, United States Air Force, Washington, DC: January 12, 1978.
28. U.S., Department of the Air Force, Headquarters, Air Force Logistics Command, APLC Management Initiatives to Improve Support Readiness: An Evaluation of Transportation Alternatives. Wright-Patterson Air Force Base, Ohio: May, 1977.
29. U.S., Department of the Air Force, Headquarters, Air Force Logistics Command. "Decision Unit Summary: FY 80 Operations Operating Budget". Exhibit F, Decision Unit 7-80-10, Second Destination Transportation, Wright-Patterson AFB, Ohio: March, 1978.
30. U.S., Department of the Air Force, Headquarters, Air Force Logistics Command, Directorate of Material Requirements. "Command Requirement for Second Destination Transportation: President's Budget". Electrical message cite number P131600 OCT 77, Wright-Patterson AFB, Ohio, October 13, 1977.
31. U.S., Department of the Air Force, Headquarters, United States Air Force. Air Force Manual 172-1, USAF Budget Manual: Policies and Procedures, Vol. I, Change 3. Washington, DC: March 15, 1977.
32. U.S., Department of the Air Force, Headquarters, United States Air Force. "Exhibit OP-5: Decision Unit A-13, Activity Group - Second Destination Transportation." (Component of the Comptroller of the Air Force ZERO Base Decision Package Set Number 026) Submittal to the Assistant Secretary of Defense (Comptroller). Washington, DC: October, 1977.
33. U.S., Department of the Air Force, Headquarters, United States Air Force. "Exhibit OP-16: Second Destination Transportation by Major Activity" (Component of the Department of the Air Force Budget submission to the Assistant Secretary of Defense (Comptroller)).
34. U.S., Department of the Air Force, Headquarters, United States Air Force, Program Guidance. Washington, DC: 1978.

35. U.S., Department of the Air Force, Office of the Comptroller. Air Force Pamphlet 172-4, The Air Force Budget. Washington, DC: March, 1978.
36. U.S., Department of the Air Force, Office of the Comptroller of the Air Force. "USAF Force and Financial Program, FY79 Presidential Budget - Transportation of Things." Mechanized report, run number PB-133, Washington, DC: 1978.

#### Other Sources

37. U.S., Department of the Air Force, Directorate of Transportation. Personal interview with Major Robert Mantor, Program Element Monitor, Program Element 7 80 10F, "Second Destination Transportation", Plans and Programs Division, Pentagon, Washington, DC: April 16, 1979.



# APPENDIX A

## SUMMARY OF THE DEPARTMENT OF AIR FORCE EXHIBIT OP-16, "SECOND DESTINATION TRANSPORTATION BY MAJOR ACTIVITY," PE 7 80 10F ONLY (33:1,2)

|                                                   |                   | <u>FY 80 Estimate</u>       |
|---------------------------------------------------|-------------------|-----------------------------|
|                                                   | <u>Program*</u>   | <u>Dollars in Thousands</u> |
| <u>Military Airlift Command:</u>                  |                   | <u>\$147,173</u>            |
| Channel Airlift (Short Tons)                      | 96,909            | \$119,146                   |
| Special Assignment Airlift<br>(Flying Hours)      | 3,372             | \$ 8,195                    |
| APC Mail-Commercial<br>(Short Tons)               | 17,762            | \$ 19,832                   |
| <u>Military Sealift Command:</u>                  |                   | <u>\$ 80,698</u>            |
| Cargo (Measurement Tons)                          | 1,141,895         | \$ 79,760                   |
| Other Charges                                     |                   | \$ 938                      |
| <u>Commercial Air:</u>                            |                   | <u>\$ 2,420</u>             |
| Non Contractual<br>(Short Tons)                   | 3,585             | \$ 1,514                    |
| Contractual (Flights)                             | 26                | \$ 906                      |
| <u>Commercial Surface: (Short Tons)</u>           | <u>285,408</u>    | <u>\$ 32,703</u>            |
| <u>LOGAIR: (Plane Miles)</u>                      | <u>12,565,778</u> | <u>\$ 52,119</u>            |
| <u>Military Traffic Management Command:</u>       |                   | <u>\$ 18,959</u>            |
| CONUS Port Handling Charges<br>(Measurement Tons) | 1,072,373         | \$ 18,959                   |
| <u>Total Program Dollar Requirements</u>          |                   | <u>\$334,072</u>            |

\*Program is expressed as short tons, measurement tons,  
flying hours, flights or plane miles.

## APPENDIX B

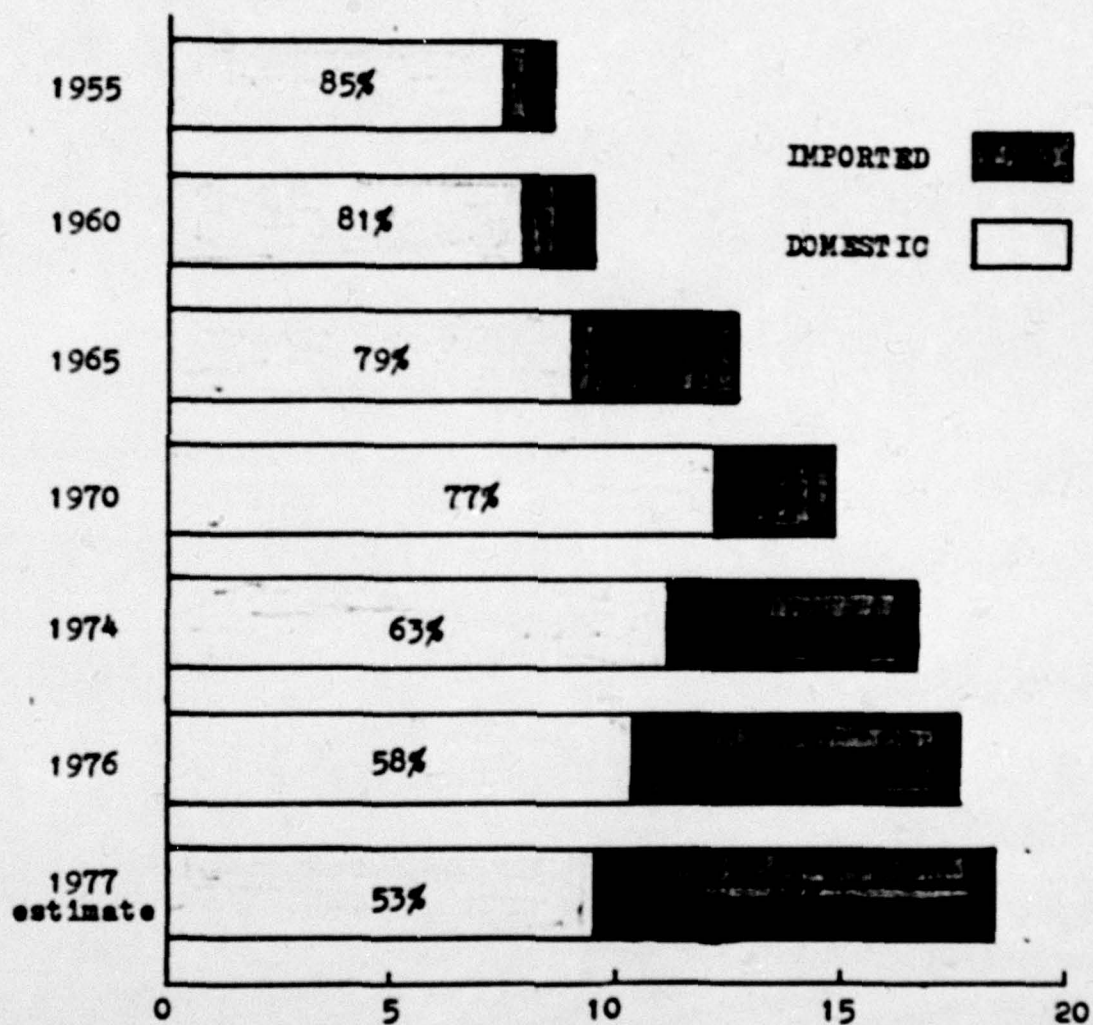
### AIR FORCE SDT PROGRAM BY COMMAND FOR FY 1975 (12:33)

| <u>Command</u>                          | <u>Dollars in Thousands</u> |
|-----------------------------------------|-----------------------------|
| Air Force Logistics Command (AFLC)      | \$268,009                   |
| HQ USAF/DALB                            | 54,795                      |
| Pacific Air Forces (PACAF)              | 19,956                      |
| Aerospace Defense Command (ADCOM)       | 9,529                       |
| Strategic Air Command (SAC)             | 6,035                       |
| United States Air Forces Europe (USAFE) | 5,689                       |
| Military Airlift Command (MAC)          | 3,147                       |
| Tactical Air Command (TAC)              | 3,052                       |
| Communications Service                  | 1,750                       |
| Air Training Command (ATC)              | 1,539                       |
| Alaskan Air Command (AAC)               | 1,529                       |
| Air Force Systems Command (AFSC)        | 1,275                       |
| Headquarters Command, Hq USAF           | 1,266                       |
| Others                                  | <u>2,300</u>                |
| Total                                   | \$379,871                   |



# APPENDIX C

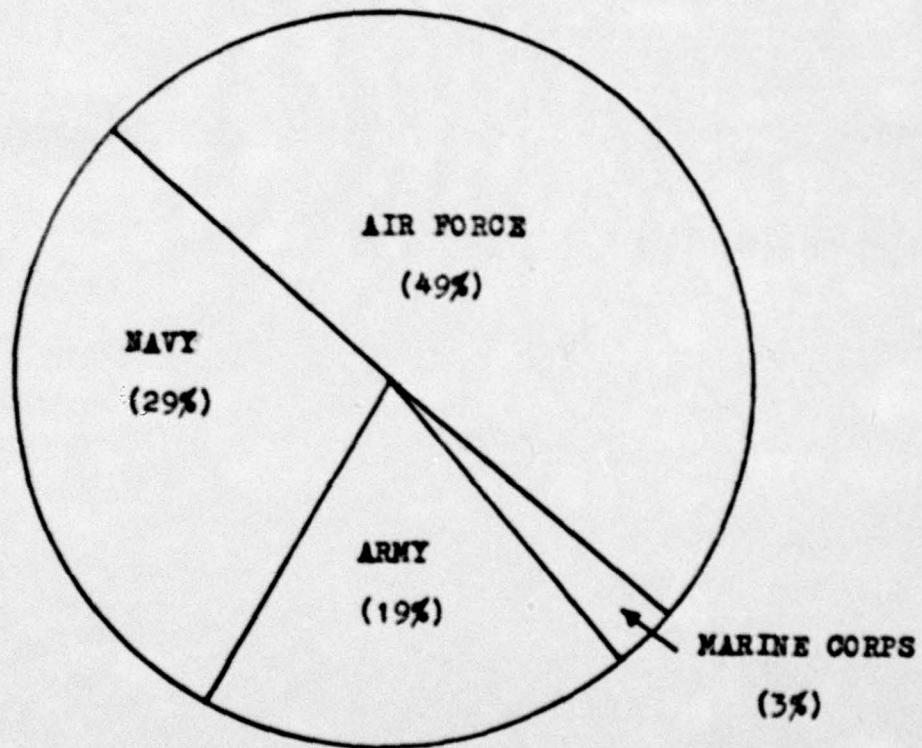
## U.S. OIL CONSUMPTION BY SOURCE (6:27)



APPENDIX D

DOD ENERGY DEMAND BY MILITARY SERVICE:  
FY 1976 (8:7)

TOTAL ENERGY\*



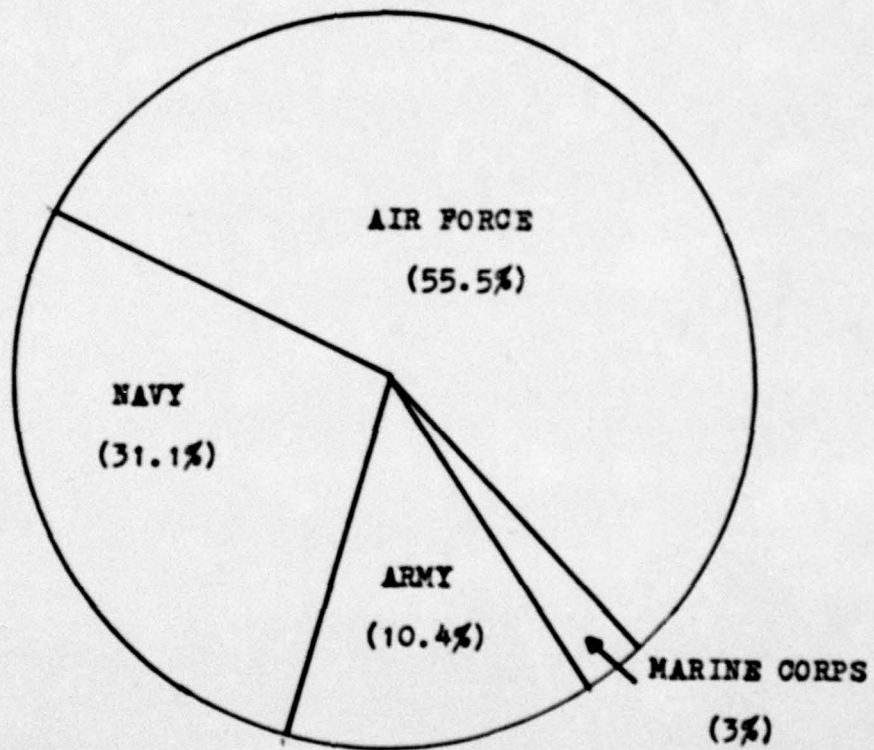
\*percentages rounded



APPENDIX D

DOD ENERGY DEMAND BY MILITARY SERVICE  
FY 1976 (8:7)

PETROLEUM ENERGY\*



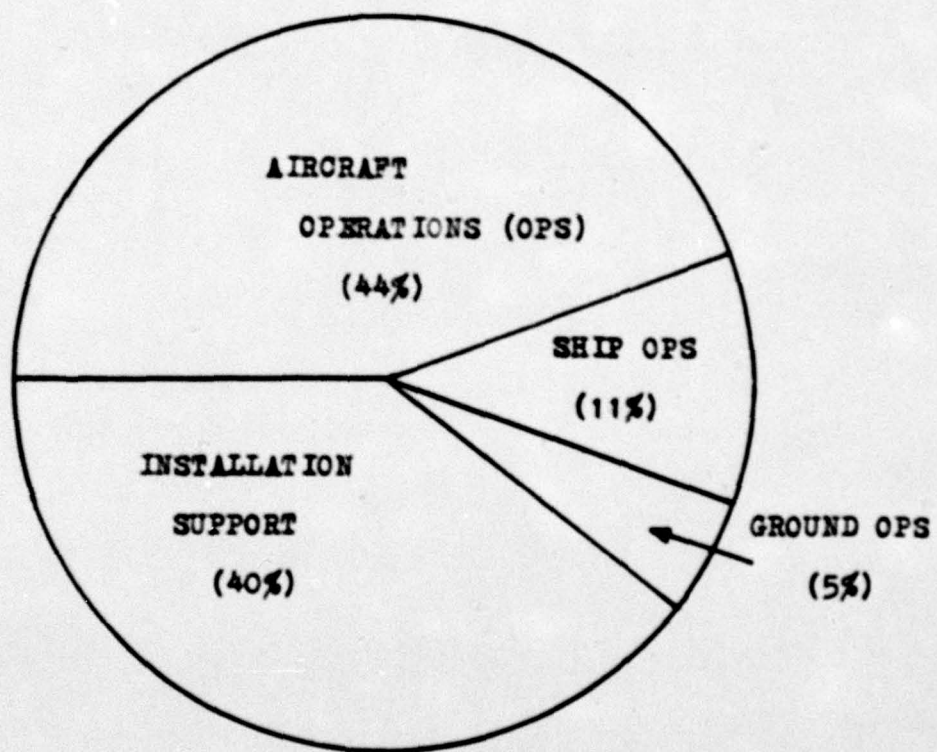
\*percentages rounded

APPENDIX E

DOD ENERGY DEMAND BY OPERATIONAL FUNCTION (8:8)

TOTAL ENERGY

FY 1976





APPENDIX B

DOD ENERGY DEMAND BY OPERATIONAL FUNCTION (8:8)

PETROLEUM ENERGY

FY 1976

