



UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D.C. 20548

NATIONAL SECURITY AND INTERNATIONAL AFFAIRS DIVISION

NOVEMBER 9, 1984

B214536

The Honorable Caspar W. Weinberger Secretary of Defense



Dear Mr. Secretary:

Subject: Opportunities to Improve the DOD Personal Property Shipping Program (GAO/NSIAD-85-10)

Each year the Department of Defense (DOD) spends over a billion dollars to move the personal effects of its military members and civilian employees. Our review of DOD's management of these movements identified several opportunities to reduce costs and improve the efficiency of the shipping program. These are summarized below and are discussed in detail in enclosure I.

At the same time DOD has been consolidating its personal property shipping offices, it has been planning to automate them. However, these efforts were directed by different steering committees and have not been coordinated. Without coordination, the full potential for consolidation cannot be achieved and money may be spent to automate offices that should be merged with others.

In addition, DOD has been trying to develop a standardized automated system for use in managing its shipping program since 1975. Because of the delay in development of a standard system, many offices have become frustrated and have independently developed their own systems. According to officials working on the automation project, these systems are not compatible and cannot be merged with the standardized system. On November 8, 1983, the Acting Deputy Assistant Secretary of Defense (Logistics and Materiel Management) issued a memorandum restricting development of additional new systems.

We also found that DOD's cost of storing household goods awaiting delivery has increased substantially since 1978. When compared to our estimate of the cost of providing the storage in-house, the rates charged by the moving companies appear high. We believe DOD's costs could be reduced significantly if it leased storage space and provided the service in-house, rather than having the moving companies arrange storage. Even more could be saved by using government-owned space where available.

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RECOMMENDATIONS

We recommend that you direct the Assistant Secretary of Defense (Manpower, Installations and Logistics) to

- --expedite development of a standard automated system for processing personal property shipments, while closely monitoring compliance with the November 8, 1983, memorandum restricting independent development of systems;
- --integrate plans to automate the personal property shipping offices with plans to consolidate them; and
- --explore ways of reducing the cost of storage in transit. If the moving industry cannot offer storage rates that are competitive with the cost of providing the service in-house, the military services should lease storage space directly or use government-owned space in accordance with OMB Circular A-76.

DOD officials concurred in our recommendations. Their comments on specific findings and recommendations are discussed on page 10.

As you know, 31 U.S.C. § 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen of the above four committees and to the Chairmen of the Senate and House Committees on Armed Services. We are also sending copies to the Director, Office of Management and Budget, and to the Secretaries of the Army, the Navy, and the Air Force.

Sincerely yours,

Frank C. Conahan

Director

Enclosures - 2

OPPORTUNITIES TO IMPROVE THE DOD PERSONAL PROPERTY SHIPPING PROGRAM

BACKGROUND

Personal property is moved at DOD expense for eligible personnel in accordance with the DOD Joint Travel Regulations. In fiscal year 1982, DOD spent \$1.2 billion to ship and store the personal property of DOD civilian employees and service members. The Military Traffic Management Command (MTMC), DOD's traffic manager, provides technical direction, supervision, and evaluation of the traffic management program carried out by the various personal property shipping offices.

Personal property is transported by commercial trucking and shipping firms and the Military Sealift Command and the Military Airlift Command. The number of shipments varies throughout the year; June, July, and August are the peak months.

Besides packing, hauling, and delivering household goods, personal property shipping offices may authorize temporary or longer term storage for personal property under certain circumstances. For example, military and civilian personnel often are not ready to move into new residences until some time after their personal property has arrived at their new locations. In such cases, DOD authorizes and pays for up to 90 days of storage in transit (SIT). This period may be extended for 90 more days if necessary. At the time of our review, commercial storage companies provided storage for DOD and rates were set by industry associations subject to the approval of the Interstate Commerce Commission (ICC).

In fiscal year 1982, according to MTMC's estimates, DOD paid \$85.2 million for SIT services. The personal property shipping program is administered by each of the military services through 271 personal property shipping activities operating at or near various military installations. In fiscal year 1982, 155 activities were located in the continental United States (CONUS) and 116 overseas. The Defense Audit Service (DAS) estimated that annual operating costs were over \$80 million in fiscal year 1978. These costs are absorbed by each of the services and are merged with other operation and maintenance costs. Personal property shipping activities include (1) Joint Personal Property Shipping Offices, (2) Consolidated Personal Property Shipping Offices, and (5) Personal Property Processing Offices.

The first three types reflect some degree of consolidation as they serve members of all the services in a geographic area. The Personal Property Shipping and Processing Offices are staffed by an individual service and generally serve only a limited number of installations. These latter offices are the predominant types worldwide.

OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives were to see how efficient and effective DOD has been in planning the automation of personal property shipping offices and to determine the reasonableness of the SIT rates.

We reviewed the history of DOD's proposed automation program --called the Transportation Operational Personal Property Standard System (TOPS)--and discussed our observations with the DOD project officer; the services; and the project personnel at the Department of Transportation's Transportation Systems Center at Cambridge, Massachusetts, which was analyzing proposed automation configurations for DOD. We either visited or made telephone contact with the personal property shipping offices at Charleston, South Carolina; Langley Air Force Base and Cameron Station, Virginia; the San Antonio, Texas, Joint Personal Property Shipping Office; and four other locations. We also developed a questionnaire which was sent to the personal property shipping offices, through the services, requesting their officials' views on automation and information on the level of automation at those offices. We received responses from 152 of the 271 offices.

Concerning the consolidation issue, we relied on the 1981 DAS report on the potential savings of consolidating certain personal property shipping offices, on our reports listed below, and on criteria developed in our report entitled Consolidating Military Base Support Services Could Save Billions (GAO/LCD-80-92, Sept. 5, 1980).

We compared the cost of storage by private storage companies under the Military Rate Tender with the cost of storage in commercial warehouses leased directly by the government. Since storage in leased space would be more costly than storage in government-owned facilities, we used this cost as a baseline for comparison with costs presently incurred by DOD.

Concerning the current SIT rates, we asked industry and agency officials about the methodology used to establish them and about changes in the methodology between fiscal years 1978 and 1982. For our cost comparisons, we used the rates for the local areas published in the Military Rate Tender No. 1-M, effective May 1, 1982.

¹ Consolidation of Personal Property Shipping Offices (GAO/NSIAD-84-81, Apr. 5, 1984) and Strong Central Management of Office Automation Will Boost Productivity (GAO/AFMD-82-54, Sept. 5, 1982).

We compared these rates with the costs which would have been incurred had DOD leased commercial warehouse space directly. Estimates of space, equipment, and personnel requirements and their costs were provided to us by industry and personal property officials. We applied these estimates to the volume of shipments handled in 1982 by six personal property shipping offices in the areas of Sacramento and San Francisco, California; San Antonio, Texas; Tacoma, Washington; and Washington, D.C.

From personal property shipping office files and from personal property officials, we derived estimates of

- -- the volume of SIT for 1982 by number of shipments and weight,
- -- the average weight per shipment,
- -- the number of SIT shipments handled during the peak month,
- -- the average number of days a shipment was in SIT, and
- -- the annual cost of storage based on the local rates.

From industry or from personal property officials, we also obtained estimates of

- -- the cost of leasing commercial space locally and the availability of suitable space;
- -- the method of storage and the cost of storage material and equipment;
- --personnel requirements and the cost of labor needed to handle shipments into and out of storage; and
- -- the percentage of costs necessary to cover miscellaneous expenses, such as claims, lost/stolen equipment, etc.

In addition, we obtained data from the General Services Administration on the amount of government warehouse space available in the areas.

We selected the six shipping offices used in our analysis based on the volume and weight of the shipments placed in SIT. These locations represent about 16 percent of SIT costs DOD incurred in CONUS during fiscal year 1982. Our review was conducted in accordance with generally accepted government audit standards.

IMPROVING EXISTING CONSOLIDATION AND AUTOMATION EFFORTS

In fiscal year 1978, the services spent over \$80 million to operate the personal property shipping offices. In previous reports (see note 1 on p. 4), we found that personnel savings are possible through consolidation and that, in general, 15 percent of managerial and professional time can be saved through automation. These reports noted that the effectiveness of operations after consolidation either improves or remains the same.

Efforts by DOD to achieve optimum consolidation and automation, however, have been frustrated by difficulties in obtaining agreements among the military services. Consolidations implemented have been limited in scope, and automation has been delayed for years pending agreement on an automation concept and plan. Furthermore, the consolidation and automation programs have been directed by different steering committees and have not been coordinated. Coordination would maximize the efficiency of both programs and the savings they could generate.

In February 1981, DAS reported that the consolidation of 66 personal property shipping offices out of over 300 offices existing at that time worldwide could reduce administrative personnel from 1,217 to 860 (357 positions) and could save \$4.8 million annually. DAS noted the potential for automation and in several cases recommended consolidating manually operated shipping offices with offices possessing some automation.

DOD consolidated some of the shipping offices in 1982 in response to the DAS report. However, the consolidations generally were limited to the shipment booking function and so did not achieve the expected savings.

We believe that, even if DOD had tried to more fully implement the DAS recommendations, economies of scale might have been difficult to fully achieve because, for the most part, DOD would have tried to consolidate operations which handle large masses of data manually. The merging of thousands of file folders and a multiplicity of handwritten logs and other shipment-monitoring devices would be extremely cumbersome without automation.

This problem was recognized by the Deputy Chief of Staff for Logistics, Department of the Army, in replying to the DAS report. He stated that Army officials

"... continue to support the concept of consolidation of personal property shipping activities provided a greater efficiency of facility resources and improvements of services to the member is achieved. In many cases this can only be accomplished with the implementation of the Transportation Operational Personal

Property Standard System (TOPS). Until the broader goal of increased economy and service is realized, mere consolidation proposals are going to be counterproductive . . ."

This recognition of the value of automation in conjunction with consolidation has been limited, and their integration is not at all assured. For example, analyses done for DOD by the Department of Transportation's Transportation Systems Center on proposed automation configurations were based upon the assumption that shipping offices would be automated as they now exist, without consideration of the need for further consolidations. As a result, if further needed consolidation is implemented, some offices may have less equipment than is needed while others may have more than is needed or may have the wrong kind.

PROLIFERATION OF NONCOMPATIBLE AUTOMATION SYSTEMS

TOPS has been in the planning stage since 1975. It is intended to standardize personal property shipping office procedures throughout the Department of Defense and to use automation to reduce the manual workload associated with preparing, controlling, and distributing documents and maintaining registers, rosters, and files relating to personal property shipping activities. This reduction in manual workload should result in significant personnel savings and improve service to military members.

Despite general agreement among the services that automation of shipping offices is needed, the project has been delayed due to their inability to agree on the structure of TOPS. After expending several years of in-house effort and enlisting the aid of the Department of Transportation's Transportation Systems Center, at the time our review was completed the services still were not in agreement on a system concept.

During the time that TOPS has been under consideration, the number of unique automated systems at shipping offices has increased. In the spring of 1983, when we began our review, the services and their installations had developed or were developing varying degrees of automation. Projects were in place or were under development at the following activities visited:

- --Naval Supply Center, Charleston, South Carolina;
- --Joint Personal Property Shipping Office, Cameron Station, Alexandria, Virginia;

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-- Camp LeJeune, North Carolina; and

--Joint Personal Property Shipping Office, San Antonio, Texas.

In addition, questionnaire responses from 152 shipping offices disclosed at least 18 other projects either implemented or under way at the following locations:

Location	Estimated/ actual costs
Joint projects involving Peterson Air Force Base (AFB); the Air Force Academy; Langley AFB; Williams AFB; and Forts Carson, Eustis, Monroe, Hood, and Lee	\$711,211
Fort Devens, Mass.	2,700ª
Rock Island Arsenal, Ill.	7,695
Fort Bliss, Tex.	96,000
McGuire AFB, N.J.	14,000
McClellan AFB, Calif.	69,710
Fort Benning, Ga.	16,625
Naval Air Station, Corpus Christi, Tex.	14,400 ^a
Tinker AFB, Okla.	6,672ª
Fort Gordon, Ga.	50,000b
Total	\$989,013 ^C

aThis figure represents annual lease payments on equipment in place.

bThis figure represents the cost of the system and not the cost of the high speed and letter quality printers.

CMaintenance contract costs are not included in this total.

According to MTMC and Transportation Systems Center officials, the systems in existence are not compatible with the proposed system for TOPS and for the most part would have to be retired, returned to the lessor, or diverted to other uses. Most of the software would have to be scrapped.

Officials we talked to at various installations are skeptical that TOPS will be fully operational by 1986 and are anxious to begin automating some of the functions at their offices. For example, one questionnaire respondent commented that ". . . due to the length of time it is taking to complete TOPS, this installation decided to connect with a local computer for a more efficient office." Several respondents indicated that they had been trying to secure a level of automation for some time, while two acknowledged that "we are in desperate need of automation . . "

On November 8, 1983, the Acting Deputy Assistant Secretary of Defense (Logistics and Materiel Management) issued a memorandum restricting the development of additional new personal property automated systems by the services independent of TOPS. We support this action. Because of the skepticism we found concerning TOPS' implementation schedule and the strong desires for expeditious automation, we believe that it should be monitored closely to ensure that resources are not expended on additional non-TOPS-compatible systems.

REDUCING SIT COSTS

In 1982, DOD spent an estimated \$7 million in the Sacramento, San Antonio, San Francisco, Tacoma, and Washington, D.C., areas for storage in transit. These costs were based on the tariffs which were effective in these areas as of May 1, 1982.

As indicated in enclosure II, if the government had leased commercial space directly and provided the services in-house, the cost of storage in transit would have been reduced by \$3.8 million, or 53 percent. Savings from the five locations ranged from 38 to 67 percent. We found that such space was readily available.

If government owned or controlled warehouse space had been used, costs could have been reduced further. As of September 1983, over 1.3 million square feet of suitable government warehouse space was available in the San Francisco and Tacoma areas, against a demand of 135,276 square feet.

In the Tacoma area, over 800,000 square feet of suitable space was available only 12 miles from Fort Lewis and McChord Air Force Base. For over a year, the General Services Administration had been asking local federal agencies, including the military,

if they could use this space. Only about 84,000 square feet would have been required to temporarily store 1982 military personal property shipments in that area.

Under Office of Management and Budget Circular No. A-76, estimated savings should represent at least 10 percent of contract costs to justify a government-operated activity. As indicated above and demonstrated in enclosure II, should DOD handle storage in transit directly, savings could be in the range of 50 percent.

MTMC agreed that DOD is paying too much and that SIT costs should be reduced. However, MTMC protests to the Interstate Commerce Commission over storage rates have met with little success.

In July 1980, ICC, acting at DOD's request, ruled that moving companies were to use a daily rate for storage in transit instead of the 30-day rate in effect at that time. ICC stated that since DOD had found that shipments were averaging only 13 days in SIT, a flat 30-day rate did not reflect the services actually rendered. ICC acknowledged that a shipment in storage for 30 days under the new daily rate system might incur charges greater than the previous monthly rate, but conversely a shipment in storage only a few days would incur charges significantly less than the previous monthly rate.

In November 1980, the Household Goods Carriers Bureau proposed to ICC new daily rates which would have effectively increased DOD costs by some 33 percent. DOD filed a protest with ICC; the Bureau withdrew its proposal and submitted another one with lower rates. DOD also protested this new proposal, demonstrating that these rates would still raise DOD costs by 17 percent.

Over MTMC's protest, ICC approved the Bureau's second proposal, which became effective in May 1981. According to information provided to us, this daily rate structure was based on an average first day rate of 68 percent of the previous monthly rate, with additional charges to be levied for each additional day in storage. MTMC projected that domestic costs would increase by \$1.4 million over then-current costs. Subsequently, MTMC tried, without success, to get industry to accept a 5-percent rate reduction, which would have been more in line with inflation.

AGENCY COMMENTS AND OUR EVALUATION

DOD generally concurred in our findings and recommendations. It agreed that opportunities exist to improve the personal property shipping program and cited actions taken or planned to achieve the desired improvements.

DOD said it is closely monitoring TOPS implementation to ensure expeditious development of a standard automated system. Additionally, MTMC has been designated the project manager and has developed a project management plan which has been approved by the services and the Office of the Assistant Secretary of Defense (Manpower, Installations, and Logistics). This, in conjunction with the development of a detailed milestone schedule, will be used to closely monitor TOPS implementation.

DOD said that it has reassessed the merits of past consolidation efforts, and a refined consolidation plan for personal property offices worldwide is presently being developed in conjunction with the military services. The establishment of the TOPS project management charter and appointment of a project manager will ensure automation objectives are achieved. DOD intends to closely monitor these efforts.

While DOD agreed to review the storage-in-transit program to determine how expenditures can be reduced, it questioned our recommendation that it provide storage in government-controlled space. DOD said that such action would be a radical change from current procedures and would result in considerable industry resistance. It also said that we had failed to address several key cost elements of SIT in our cost analysis.

We agree that a change in the current practice of storage in privately owned space would meet with industry resistance. Nevertheless, we believe that unless industry members are willing to offer rates which are competitive with the cost of providing the service in-house, such a change should be considered, because it could lower government costs significantly.

We discussed our analysis of SIT costs with DOD representatives to determine which cost elements had been omitted. The officials cited the cost of unpacking shipments at destination, a service presently provided by the moving companies at a predetermined rate for packing and unpacking. They also felt that storing shipments outside the control of the moving companies could adversely affect the recovery of damage claims from the companies.

We did not include an increase in the cost of unpacking shipments in our analysis, because we believe the extent of any such increase would depend on the way the plan is implemented. One alternative would be to have the moving companies retain responsibility for delivery and unpacking. If this were the case, the costs should not change. Another alternative would be to break out the rates for packing services from those for unpacking services so that the unpacking services could be provided under local contract for those shipments going into

storage. In this case the effect on cost would depend on the level of the rates solicited from the local contractors. In either case, we believe this cost, if any, would not be enough to offset the substantial savings of using government-controlled SIT facilities.

With regard to recovery of payments for claims, shipments should be inspected for visible damage upon receipt into storage to establish the movers' liability. Also, the moving companies' liability for damage, in any case, is quite limited. Due to the above, we do not believe any reduction in claims recovery would materially affect our estimate of cost savings.

COMPARISON OF STORAGE IN TRANSIT COSTS BY TENDER

WITH ESTIMATED COSTS OF DOD DIRECTLY LEASING COMMERCIAL

WAREHOUSE SPACE AT SELECTED INSTALLATIONS

	Naval Supply Center, Oakland	McClellan AFB	San Antonio	McChord AFB	Fort Lewis	Cameron Station
Total weight in SIT (lbs.) 1982	24,844,500	10,330,000	20,301,635	6,673,200	25,203,750	40,768,994
Total shipments into SIT, 1982	5,521	2,066	4,555	1,992	6,875	8,654
Average shipment weight (lbs.)	4,500	5,000	4,457	3,350	3,666	4,711
Weight in SIT, peak month (1bs.)	3,001,500	1,000,218	3,369,492	810,700	2,837,484	6,854,505
Shipments in SIT, peak month	667	239	756	242	774	1,455
Average days in SIT	36	33	38	12	41	31
ANNUAL COST UNDER TRNDER &	\$ 1,758,991	\$ 538,193	\$ 848,607	\$ 322,983	\$ 1,731,501	\$ 1,850,913

FOR DOD DIRECT LEASING:						
Gross space required (sq. ft.) b,c	51,507	16,379	61,600	15,551	68,218	93,640
Monthly warehouse cost per square footd	\$.25	\$.25	\$.18	\$.18	\$.18	\$.30
Annual warehouse coste	\$ 154,524	\$ 49,140	\$ 133,056	\$ 33,588	\$ 147,348	\$ 337,104
Annual labor costf	300,000	100,000	260,000	120,000	480,000	460,000
Other costs: ⁹ Vaults Pads/blankets Porklifts	23,140 63,000 4,800	5,782 17,500 1,600	28,485 76,883 4,800	7,493 15,243 1,600	41,595 92,293 4,800	40,085 114,243 11,200
Subtotal h	545,464	174,022	503,224	177,924	766,036	962,632
Miscellaneous costs ¹	27,273	8,701	25,161	8,896	38,302	40,132
Total	\$ 572,737	\$ 182,723	\$ 528,385	\$ 186,820	\$ 804,338	\$ 1,010,764
ANNUAL SAVINGS PROM DOD DIRECT LEASING	\$ 1,186,254	\$ 355,470	\$ 320,222	\$ 136,163	\$ 927,163	\$ 840,149
Percent savings	67.4	66.0	37.7	42.2	53.5	45.4

METHODOLOGY NOTES

aUnder the Government and Military Rate Tender No. 1-M, SIT costs are based on three rates: SIT first day, SIT each additional day, and warehouse charges, all levied per hundred weight. The calculation was based on total shipments stored at each installation, the average shipment weight, the average number of days each shipment was in SIT, and the tender rates in effect on May 1, 1982.

bThe calculation was based on the number of vaults required to store the peak month shipments. For the purpose of calculating the square footage required to store these vaults, we surveyed industry and found that a typical shipment generally requires 3.5 vaults of the approximate dimension 5'x 7.5' x 7' and that vaults can be stacked three high in a warehouse.

CAdditional square footage would be required for aisles, office space, etc. The calculation was based on a 68 percent net to gross floor space requirement, which is used by Navy and Air Force warehouse personnel.

dwe surveyed private warehouse leasing firms in the areas surrounding each installation evaluated to determine the availability of storage space suitable for household goods and the cost of leasing it. In each area, adequate space was available to temporarily store the volume of shipments handled by the installation in 1982.

eGross square feet required times the commercial warehouse cost per square foot per month; this figure was multiplied by 12 months in a year.

fThe calculation was based upon the time and personnel required to unload and load typical shipments of CONUS or international origin times the average number of domestic and international origin shipments handled in 1 day. The resulting number of employees required was multiplied by a DOD-estimated annual salary, including fringe benefits of \$20,000 per warehouse employee.

9The calculations were based on the estimated number of vaults and pads required to store the peak month shipments. The number of forklifts required was based on an estimated need of one forklift per 1 million pounds of goods applied against the weight of household goods stored during the peak month in 1982. All estimates, including the price of vaults, pads, and forklifts, were provided by industry and personal property officials. The resulting costs were distributed over the estimated life span of each item.

hBasic annual warehouse cost + annual labor cost + other annual costs.

iFive percent of the subtotal was added to cover miscellaneous expenses, such as lost/stolen pads, additional packing material, utilities, and claims.