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Report to the Assistant Secretary of
Defense (Production and Logistics)

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MILITARY TRANSPORTATION

Cost Savings of Expanding the Guaranteed Traffic Program



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**National Security and
International Affairs Division**

B-211456

November 9, 1987

The Honorable Robert B. Costello
The Assistant Secretary of Defense
(Production and Logistics)

Dear Dr. Costello:

We have completed our review of the Military Traffic Management Command's (MTMC's) Guaranteed Traffic (GT) program. Under the program, carriers are guaranteed a specific amount of freight in exchange for reduced rates. Our objective was to determine whether savings could be achieved by expanding the program to include additional military shippers.

Briefly, we found that MTMC's GT program offers the opportunity for significant savings. We also found that, while the program is expanding, there is potential for even further savings.

We compared highway (truck) shipment costs at five installations that do not use GT with costs at three nearby Defense Logistics Agency (DLA) depots that use GT. Our analyses showed that if these five installations negotiated rates comparable to those negotiated for the DLA depots, savings on less-than-truckload shipments could range from 22.2 to 49.3 percent of current costs. Over a 1-year period, savings for these five installations alone would total about \$2.5 million.

We believe that the estimated savings at these installations indicate the potential for savings at other Department of Defense (DOD) shipping activities. We selected installations that met MTMC's criteria for GT negotiations but were not using GT and that were near one of three DLA installations that were using GT. We used the three DLA installations as a basis for computing estimated savings.

MTMC recognizes that expanding the GT program would provide opportunities for transportation savings. However, according to MTMC, the initiation of a request for GT is the responsibility of the shipper installation. Also, existing regulations do not address the policies and procedures for this program. While regulations do call for promotion of the program through MTMC's staff assistance visits, such promotion has been lacking. MTMC's GT program officials told us that they were working on a draft regulation covering GT, which would be included in the next issue of the Defense Traffic Management Regulation.

MTMC officials stated that they need additional personnel to work on a backlog of new requests for GT. They also said that they need an operations research analyst to identify installations where MTMC should be negotiating GT and cost and financial analysts to further strengthen the program. MTMC is in the process of obtaining personnel with these skills but may need even more staff in the future to negotiate new GT agreements.

The individual services have not been consistent in implementing the GT program. Although DLA has directed that its defense depots use GT, all services except the Navy leave the decision to request GT negotiations up to the shipper installations. According to MTMC officials, the Navy does provide centralized direction to activities on the use of GT.

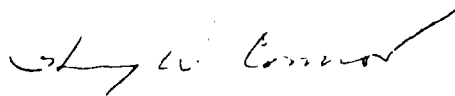
We believe that MTMC has taken positive steps to strengthen its program by assigning new staff to provide program analysis leading to new GT opportunities. However, since additional resources may be needed to eliminate a backlog of new GT requests, we recommend that you direct MTMC to evaluate its staffing requirements and the cost effectiveness of applying additional resources to the GT program. We also believe that the military services could do more to assist MTMC in promoting this program at the installation level. In March 1987, your office advised the services of MTMC's need for their support in expanding the GT program to promote further transportation savings. We recommend that you follow up to ensure that the services have taken or are planning appropriate action to expand their use of the GT program.

We would appreciate being advised of actions taken in response to our recommendations.

Our findings are discussed more fully in appendix I. Our objectives, scope, and methodology are described in appendix II.

We are sending copies of this report to the Director, Office of Management and Budget, and to the Secretaries of the Army, the Navy, and the Air Force. Copies will also be made available to other interested parties.

Sincerely yours,



Henry W. Connor
Senior Associate Director

Contents

Letter		1
Appendix I		6
Savings Can Be	Potential for Additional Transportation Savings	7
Achieved by	Other Advantages of Using GT	9
Expanding MTMC's	GT Program Management Needs to Be Strengthened	10
Guaranteed Traffic		
Program		
Appendix II		14
Objective, Scope, and		
Methodology		
Tables		
	Table I.1: Estimated Reduction in Transportation Costs of LTL Shipments	8
	Table I.2: Estimated Reduction in Transportation Costs of TL Shipments	9

Abbreviations

CONUS	continental United States
DLA	Defense Logistics Agency
DOD	Department of Defense
FINS	Freight Information System
GAO	General Accounting Office
GBL	Government Bill of Lading
GT	Guaranteed Traffic
LTL	less-than-truckload
MTMC	Military Traffic Management Command
TL	truckload
VMR	volume movement report

Savings Can Be Achieved by Expanding MTMC's Guaranteed Traffic Program

In fiscal year 1986, the Department of Defense (DOD) paid commercial carriers \$659 million to make over 1.3 million Government Bill of Lading (GBL) shipments within the continental United States (CONUS). The largest part of this amount—about \$440 million—was paid to motor carriers.

The Military Traffic Management Command's (MTMC's) Guaranteed Traffic (GT) program is used to select carriers to transport DOD shipments (1) between military installations or (2) between contractors' facilities and military installations for a specific period of time (usually 6 months or 1 year). The program was designed to award carriers with substantial volumes of freight in exchange for reduced shipping rates. Although GT does not involve a contractual relationship between the government and carriers, carriers selected for the program obtain the right to exclusively handle all traffic between two designated shipping points provided that they maintain responsible and responsive service.

The GT program, which began in July 1979, takes advantage of lower rates resulting from the deregulation of the motor carrier industry. It is a primary source of reported cost avoidances for MTMC's Inland Traffic Management Program. The increasing use of GT is reflected in the amounts of cost avoidance reported by MTMC—about \$1.8 million in fiscal year 1980, compared to \$50.6 million in fiscal year 1986. Through the end of fiscal year 1986, MTMC had made 673 GT awards with an estimated cost avoidance of \$260.7 million.

According to MTMC, a shipper must request GT and must meet at least one of the following conditions before a GT agreement can be considered. It must

- ship a large volume of freight (over one million pounds annually);
- move freight directly from origin to destination;
- ship special commodities that require specialized equipment or services;
- make recurring or repetitive shipments;
- require special services in special situations, such as military exercises;
- or
- make round-trip shipments.

DOD shippers at military installations or contract administration activities must submit volume movement reports (VMRS) to MTMC headquarters when freight movements within CONUS equal or exceed (1) 25 rail carloads, (2) 25 truckloads, or (3) 500,000 pounds within a 1-year period. VMRS may also be submitted when special services and equipment are

required. MTMC evaluates the VMR to determine whether negotiations might result in lower freight charges. Based on its VMR evaluation, MTMC will either continue using current transportation rates or recommend negotiations for new rates.

MTMC provides prospective GT carriers with information on the anticipated weight of traffic by state and weight category to assist carriers in establishing their rate bids. Carriers submit rates by state. MTMC selects the low-cost carrier. The second lowest bidder becomes the alternate, providing services when the primary carrier cannot. Other carriers are used by MTMC only if the primary and alternate carriers cannot respond to movement requirements.

According to MTMC, GT offers the following advantages. It

- reduces overall transportation costs;
- reduces administrative costs;
- allows the carrier to become more familiar with the installation's operations, resulting in better service for the shipper;
- simplifies procedures for claims of loss or damage; and
- stabilizes transportation costs as the rates are locked in.

Potential for Additional Transportation Savings

To determine the potential for additional transportation savings by expanding the GT program, we asked MTMC to identify shippers that could use the GT program by screening its Freight Information System (FINS). MTMC developed and used the following screening criteria:

- Annual truckload (TL) shipments for an installation must have a minimal weight of 1.5 million pounds to a single region, with 100,000 pounds or more to other regions and 50,000 pounds or more to a single destination.
- Annual less-than-truckload (LTL) shipments must have totaled 400 or more shipments to a single region, with at least 25 shipments to other regions and 12 or more shipments to the same destination.

MTMC screened all shipments paid between July 1985 and June 1986 and identified 60 DOD installations within CONUS with sufficient volumes to meet its GT criteria for LTL, TL, or both. Forty-four installations had sufficient volumes of LTL shipments, and 34 installations had sufficient volumes of TL shipments to meet the criteria for GT for most regions. Thirty-six of the 44 installations meeting the LTL criteria were not using

**Appendix I
Savings Can Be Achieved by Expanding
MTMC's Guaranteed Traffic Program**

GT, and 12 of the 34 installations meeting the TL criteria were not using GT.

From these 48 installations, we selected 5 that were located relatively close to Defense Logistics Agency (DLA) installations that were using GT: New Cumberland and Letterkenny Army Depots (near Mechanicsburg, Pennsylvania); Hill Air Force Base and Tooele Army Depot (near Ogden, Utah); and Sharpe Army Depot (near Tracy, California). Only New Cumberland was using GT for TL shipments. In April 1987, New Cumberland began using GT for LTL shipments as well.

LTL Shipments

All five installations have the potential to save on LTL shipments by using GT. If the transportation rates negotiated for the nearby DLA installations had been negotiated for the five installations not using GT, we estimate that transportation costs would have been reduced, as shown in table I.1.

Table I.1: Estimated Reduction in Transportation Costs of LTL Shipments

Figures in percent	
Installation/shipper	Estimated reduction
New Cumberland	49.3
Letterkenny	40.5
Tooele	40.3
Sharpe	22.2
Hill	36.0

Over the 1-year period, the potential savings in LTL transportation costs would have amounted to about \$2.5 million for the five installations. These savings were computed by comparing the actual transportation costs to estimated GT transportation costs for each shipment based on its weight and the appropriate GT transportation rate for the destination state used by the nearby DLA depot. For example, the savings for New Cumberland were based on the Mechanicsburg DLA Depot's GT rates in effect at the time the New Cumberland shipments were made.

In April 1987, New Cumberland began using GT for LTL shipments. The LTL rates negotiated by MTMC for New Cumberland averaged 25 percent less than the rates we used to estimate LTL savings for New Cumberland. Therefore, New Cumberland may well achieve even greater savings by using GT for LTL shipments than we estimated. After our fieldwork was

**Appendix I
Savings Can Be Achieved by Expanding
MTMC's Guaranteed Traffic Program**

completed, MTMC officials told us that they were negotiating LTL GT rates for Letterkenny Army Depot.

TL Shipments

We estimate that three installations—Tooele and Sharpe Army Depots and Hill Air Force Base—would realize savings of about \$71,000 by using GT for TL shipments. If they negotiated comparable rates to those negotiated for nearby DLA installations, transportation costs would be reduced, as shown in table I.2.

Table I.2: Estimated Reduction in Transportation Costs of TL Shipments

Figures in percent

Installation/shipper	Estimated reduction (increase)
New Cumberland	^a
Letterkenny	(1.0)
Tooele	5.2
Sharpe	5.7
Hill	29.8

^aNew Cumberland was using GT for its TL shipments

Although Letterkenny's TL costs would have been about 1 percent higher using Mechanicsburg's GT rates, recent LTL GT rates negotiated by New Cumberland were 25 percent lower than Mechanicsburg's LTL rates. Therefore, negotiating TL GT rates for Letterkenny may still be beneficial, provided that similar reductions are available.

Most TL shipments from Tooele involved large wheeled vehicles. Many are shipped on the same date to the same locations. Tooele officials stated that for these types of shipments they would have difficulty using one carrier to a single destination since most carriers do not have sufficient equipment available on a given date. However, MTMC informed us that Tooele's shipment patterns should not be a problem for GT, since alternate carriers could be used when requirements are too great for any one carrier.

The fact that the installations not using GT employed many of the same carriers as the DLA installations and shipped more LTL tonnage to some of the same states than did the DLA installations certainly supports our contention that GT should be considered.

Other Advantages of Using GT

None of the three DLA installations we visited had documented cost savings or other advantages of using GT. However, DLA headquarters officials estimate that they have saved \$15 million on outbound shipments and \$1 million on inbound shipments. The Defense Depot at Ogden estimated savings of about \$2 million for 1985 and 1986, based on average costs per hundred pounds in 1984. However, the Chief of the Traffic Management Branch said that this amount included savings from a program to consolidate LTL shipments into TL shipments, as well as from GT.

The transportation officer at the Defense Depot at Tracy said that it saves administrative time because its staff no longer needs to search for the lowest cost carrier or to request standing route orders from MTMC. Similarly, the transportation officer at the Ogden Defense Depot said that 3 days are saved by not having to contact MTMC for rating and routing instructions. Also, prior to GT, Ogden had to deal with 37 carriers; now it deals with only 12. Ogden has been able to eliminate two of three freight technicians as a result of the GT program.

GT provides a greater incentive for good performance because of the high volume of traffic awarded to a carrier. The primary carrier can be replaced by the first alternate if it does not perform satisfactorily.

GT Program Management Needs to Be Strengthened

To realize additional savings, MTMC needs to better promote the program among the military services and refine its FINS data base to identify individual shippers as GT candidates. MTMC currently has a backlog of requests for GT negotiations and recognizes the need to strengthen the program but claims that additional staff will be necessary to expand the program. Further, we believe that the military service headquarters could assist MTMC by promoting this program with their installation shippers as DLA has done.

Improved Promotion of the GT Program by MTMC Should Increase Participation

Generally, MTMC regulations do not address the GT program. Defense Traffic Management Regulation AR 55-355, dated July 31, 1986, covers the policies, procedures, and responsibilities for the performance of traffic management functions at DOD activities within CONUS. This regulation states that MTMC will provide technical direction and supervision over all traffic management functions relating to DOD freight and passenger movements within CONUS. Chapter 12, Negotiations, covers MTMC's responsibilities for negotiating rates and transportation officers' responsibilities for furnishing MTMC with shipment information for use in determining whether negotiations with commercial carriers should be

initiated. Transportation officers are to use VMRS to provide this information to MTMC. Although AR 55-355 provides the criteria for submitting a VMR, it does not mention MTMC's GT program. MTMC officials gave us an outline of the program, which provides the description, history, and criteria for the program, but this information has not been provided to DOD shippers. However, MTMC officials said that installation transportation officers should be aware of the program through annual workshops and that the next issue of the Defense Traffic Management Regulation would cover the GT program.

The only regulation we found that specifically mentions the program is MTMC Regulation 55-1, Chapter 7, Staff Assistance Visit Program. The regulation states that an explanation of the GT concept and how it can assist installations in reducing transportation charges should be items for discussion during MTMC staff assistance visits. The latest Report of Staff Visit for Sharpe Army Depot, Western Area, dated May 1983, indicated that Sharpe had reviewed the GT program but was not interested at that time. Sharpe did agree, however, to consider GT for shipments to several Army installations. None of the transportation officers at the other installations we visited that were not using GT could recall MTMC personnel discussing GT's potential during staff assistance or other visits. One transportation officer mentioned having discussed the program with MTMC personnel, and another asked if MTMC had a brochure describing the program.

MTMC's FINS Data Base Does Not Identify All GT Shipments

We believe that MTMC should be able to readily identify shippers that are actually using the GT program by analyzing the FINS data base. By eliminating shipments sent by GT carrier, MTMC could concentrate on identifying shipment patterns that indicate that GT negotiations would be beneficial. Early in our survey, we requested that MTMC provide us with GT shipment data for highway (truck) shipments to assist us in identifying installations that were actually using GT. Review of the shipments listing provided by MTMC for a 6-month period showed that most shipments originated from the eastern states and that at least one installation that said it ships most of its cargo by GT carrier, the Defense Depot at Tracy, had not been included. MTMC officials were unable to explain why. At our exit conference, MTMC officials said that they now have a special identifying code in FINS to identify GT shipments.

We believe that MTMC could use the FINS data base to identify potential candidates for transportation savings by analyzing shipment volumes

by destination. MTMC now looks to the installations for GT requests. However, MTMC could advise the services of potential GT savings by screening the FINS data base itself and advising the services when GT negotiations should be considered.

MTMC Maintains It Needs Additional Resources to Expand the Program

At the beginning of our review, MTMC officials told us that they had a backlog of requests for GT routes, mostly from the Navy. The GT negotiation process, which must follow each request, can be lengthy. It took about a year from the time New Cumberland made its request for GT until negotiations were completed and New Cumberland could begin using GT for its LTL shipments. Since MTMC headquarters manages and operates the GT program, its two area offices have little or no role in the program. At the time of our review, MTMC's negotiations division had 62 people but was being reviewed for potential staff cuts.

MTMC officials told us that—to identify new opportunities for the GT program and eliminate the backlog—they needed additional staff in their negotiations division. In December 1986, they said that they needed 11 new traffic management specialists to handle the backlog of 20 GT negotiations. They said that, to assist an economist they now have on board, they also needed an operations research analyst to identify installations where MTMC should be negotiating GT, a cost analyst to evaluate carrier rate submissions, and a financial analyst to study the long-term financial impact of GT on carriers. MTMC officials estimate that the new staff resources would let them reach 75 percent of their GT savings goal in 3 years. Also, they said that the operations research analyst and economist could be used to study the feasibility of negotiating LTL shipments regionally rather than installation by installation, as is done now.

Recently, MTMC's negotiations division informed us that they had obtained the personnel but that MTMC management had reassigned them to its Strategic Analytical Group, which will serve all of MTMC's analytical needs. They told us that, even so, the primary emphasis of the new staff, at least initially, will be to work on the GT program. In addition, they have obtained some additional personnel in the negotiations division to process the backlog but may need even more personnel in the future as the GT program expands. They also said that headquarters is considering involving the MTMC Eastern and Western Areas in the program to monitor carrier performance and implement new GT awards.

**Service Headquarters
Could Do More to Promote
the GT Program**

MTMC officials attributed the extensive use of the GT program by DLA depots to the emphasis DLA headquarters has placed on the program. DLA has directed all six of its defense depots to use GT for outbound air, TL, and LTL traffic.

Transportation officials at Army and Air Force headquarters told us that they leave the decision of whether to use GT up to each installation. Consequently, installation shippers in these services have not been as active in using the program as DLA, although they ship just as high or even higher tonnages to many of the same states, often using the same carriers as DLA.

We believe that, by promoting the GT program, the military services could assist MTMC in reducing costs. Of course, expansion of the program is contingent on the availability of adequate resources at MTMC.

In March 1987, the Office of the Secretary of Defense (Production and Logistics) encouraged the services to examine their freight transportation requirements for GT potential. Further, it asked them to work closely with MTMC to ensure that DOD realizes the full benefits of the GT program.

Objective, Scope, and Methodology

During our survey of cost-saving opportunities in military transportation, we learned that DLA's Defense Depot in Tracy, California, was using MTMC's GT program extensively for surface shipments within CONUS, while nearby Sharpe Army Depot was not. Our preliminary analysis indicated that Sharpe could realize significant transportation savings by using GT on its CONUS routes. The objective of this review was to determine the potential for further cost savings if Sharpe and other installations were to use negotiated GT rates for CONUS TL and LTL shipments. Our review covered interstate shipments of Freight-All-Kinds (commodity code 999912) in DOD. This is the commodity code DLA uses in the GT program.

Our review, which was conducted from October 1986 through June 1987, was performed in accordance with generally accepted government auditing standards. However, we did not review MTMC's internal controls. We did work at the Military Traffic Management Command, primarily at headquarters. We also visited eight military installations: three DLA depots (Mechanicsburg, Pennsylvania; Ogden, Utah; and Tracy, California); four Army depots (New Cumberland Army Depot, Pennsylvania; Letterkenny Army Depot, Pennsylvania; Tooele Army Depot, Utah; and Sharpe Army Depot, California); and one Air Force base (Hill Air Force Base, Utah). We also visited headquarters activities of DLA, the Air Force, and the Army Materiel Command.

To determine which installations had sufficient shipment volumes to warrant negotiations with carriers for the GT program, MTMC screened its FINS data base for a 1-year period (July 1985 through June 1986). This screening identified 60 DOD installations within CONUS that had sufficient shipment volumes to meet MTMC's criteria for GT for LTL, TL, or both types of shipments. Forty-four installations had sufficient volumes of LTL shipments, and 34 installations had sufficient volumes of TL shipments to meet MTMC's criteria. Thirty-six of these installations with LTL shipments and 12 with TL shipments were not using GT.

From the 60 installations, we selected 5 that were located relatively near 3 DLA installations that were using GT. New Cumberland Army Depot, which was using GT for TL shipments at the time of our review, began using GT for LTL shipments in April 1987. The other four installations were not using GT for either LTL or TL shipments.

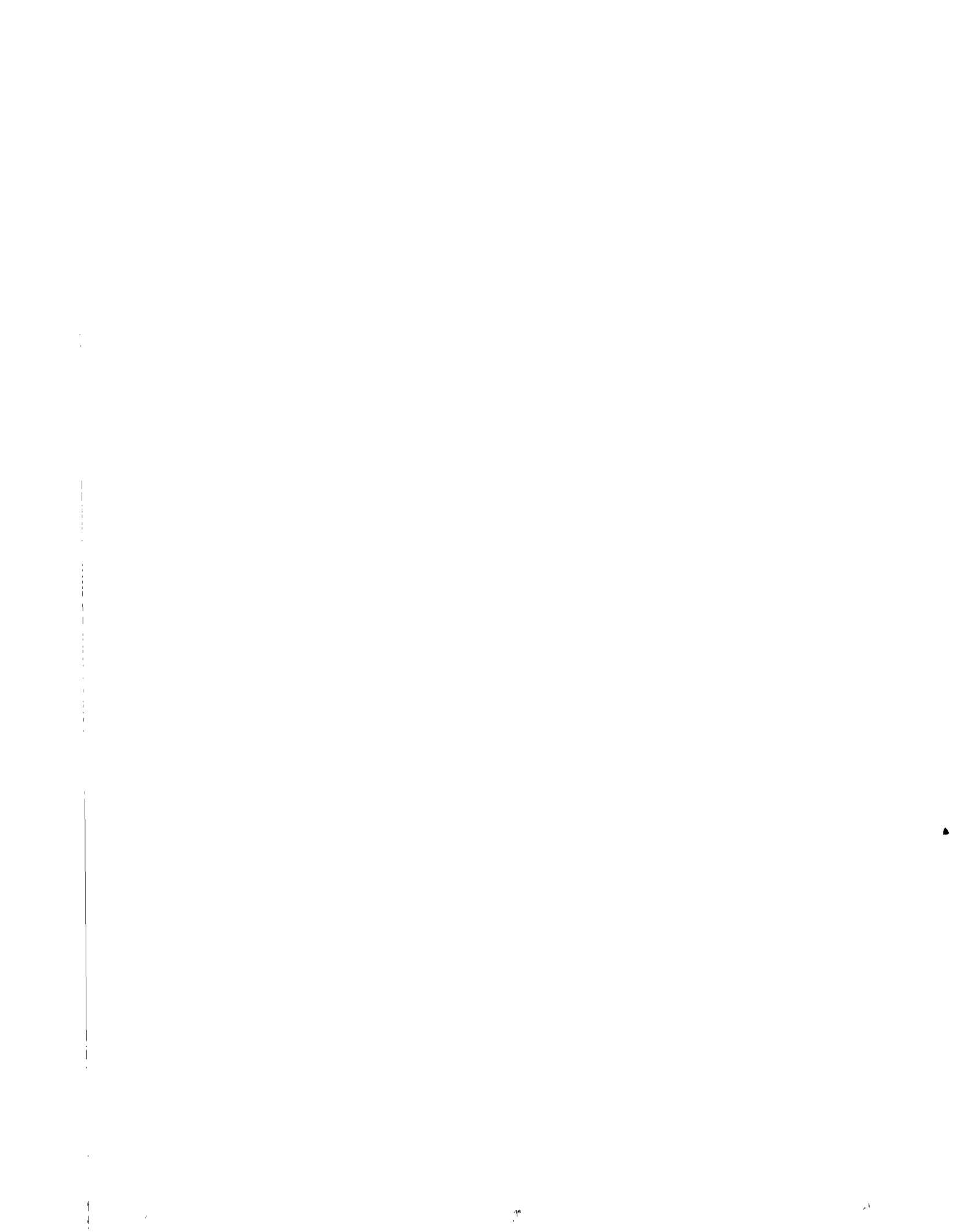
MTMC provided us with FINS shipment data for each of the eight installations. With computer assistance, we screened these data bases for Mechanicsburg, New Cumberland, Letterkenny, Tracy, and Sharpe to

include only Freight-All-Kinds shipments that were (1) shipped interstate via surface commercial carrier and (2) did not involve additional charges for protective services. We further screened the shipment data bases to categorize shipments as either LTL (less than 10,000 pounds) or TL (greater than 10,000 pounds) at all locations except Tracy and Sharpe. At these two locations we used 25,000 pounds as the break point for LTL and TL shipments, since this is the basis upon which Tracy's GT rates were negotiated.

For Ogden, Hill Air Force Base, and Tooele Army Depot, MTMC also provided paid shipment data for January through December 1986. We screened it as we screened data for the other installations, including only LTL shipments sent after July 14, 1986, and TL shipments sent after February 17, 1986, since these were the dates when GT rates first became effective at Ogden.

For the non-DLA installations, we estimated the savings that would have accrued if they had negotiated transportation rates comparable to those negotiated for the DLA installations. We computed the transportation charges from origin to the destination state rather than to a specific location within the destination state. We also used averages of the distance rates by weight category to compute estimated GT transportation charges for each shipment. We estimated the savings by comparing actual charges to estimated GT charges based on the shipment weight and DLA installation GT rate that was effective on the date each of the installation's shipments was shipped.

We tested the accuracy of the MTMC data by comparing selected data elements from the FINS data base with actual GBL data. We also tested the validity of our computations by comparing actual shipment charges to estimated charges based on the GT rates at the DLA installations.



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