

November 1993

**DEFENSE
TRANSPORTATION**

**Commercial Practices
Offer Improvement
Opportunities**





United States
General Accounting Office
Washington, D.C. 20548

**National Security and
International Affairs Division**

B-251208

November 26, 1993

The Honorable Les Aspin
The Secretary of Defense

Dear Mr. Secretary:

This report was conducted to assist the Department of Defense (DOD) in its efforts to improve its domestic motor freight transportation management practices. The report identifies (1) trends in the commercial sector to reduce costs and increase efficiencies in transportation, (2) the status of DOD's efforts to improve transportation management, and (3) commercial practices that could result in more efficient and effective DOD transportation practices. The report also contains recommendations to you.

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

We are sending copies of this report to the Chairman, Subcommittee on Oversight of Government Management, Senate Committee on Governmental Affairs. We will also make copies available to others on request.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in cursive script that reads "Donna Heivilin".

Donna M. Heivilin, Director
Defense Management and NASA Issues

Executive Summary

Purpose

The Department of Defense (DOD) spends over \$500 million each year for domestic commercial motor carriers to transport almost 90 percent of its freight. Due to resource constraints, DOD has placed greater emphasis on improving the way it manages transportation. GAO identified (1) trends in the commercial sector to reduce costs and increase efficiencies in transportation, (2) the status of DOD's efforts to improve transportation management, and (3) commercial practices that could result in more efficient and effective DOD transportation practices.

Background

The transportation industry has undergone major changes since the Motor Carrier Act of 1980 was established. The act reduced regulation in the domestic motor carrier industry and resulted in increased industry volatility and expanded price and service options. This environment made the motor carrier industry more competitive and attractive to shippers looking for cost reductions. In response, the commercial sector began exercising more control over its transportation activities to reduce costs and promote efficiencies.

In February 1992, DOD established the U.S. Transportation Command as the single manager of transportation for wartime and peacetime. The Military Traffic Management Command (MTMC), a component of the Transportation Command, is primarily responsible for the management of DOD's domestic motor freight transportation. Both commands are to ensure that DOD procures reliable and quality transportation.

GAO previously reported on deficiencies in DOD's management of its transportation. These deficiencies included the low rate of reporting and recovery of in-transit losses; carriers that are allowed to exceed loss and damage limits without penalty; and the lack of coordination among the services, which contributed to ineffective oversight programs.

Results in Brief

GAO noted common elements among shippers that are committed to improving their transportation management. For example, many commercial shippers have integrated their transportation functions with the entire logistics process, limited the number of carriers they use to those that provide high-quality service at a competitive price, expanded the use of information technology, and contracted out certain logistics operations. The companies also agree that top management commitment and support are important to improve transportation because they are an integral part of the process of producing quality products and services.

DOD is making some progress in improving transportation management, including emphasizing the establishment of a quality transportation program and expanding its program of awarding carriers a substantial volume of freight in exchange for reduced shipping rates. However, existing carrier management practices and redundant and nonstandard automated transportation systems constrain DOD's ability to obtain reliable and quality transportation services. GAO believes that DOD can improve transportation practices and reduce costs by adopting some commercial practices, such as refining its carrier selection process, comparing its transportation processes and costs with those of corporate shippers (known as benchmarking), and enhancing information technology. For example, opportunities may exist to reduce cost in the freight payment process by about \$4.70 per transaction.

Principal Findings

Commercial Shippers Share Common Strategies

One of the strategies employed by commercial shippers is to integrate transportation functions with other logistics activities. Integration of transportation efforts enables the development of consistent purchasing, inventory, and transportation strategies across multiple divisions to save money and improve service to the customer.

Commercial shippers have also reduced the number of carriers to focus on the highest performing carriers. Many corporate shippers GAO spoke with said that it was beneficial to focus on a small number of high-performing carriers rather than a large number of carriers, since changing and retraining carriers is costly and lowers transportation quality.

Another strategy commercial shippers employ is to use information technology to aid in transportation decision-making. Information technology promotes efficiencies through paperwork elimination, working capital reduction, and error elimination. Commercial shippers, however, are not using information technology for every application or for all of their carriers.

In addition, commercial shippers are contracting out certain transportation functions, such as the payment of freight bills and the management of carrier performance data bases. Benefits of contracting out functions include savings in staffing and fixed asset investment, a

ready source of expertise and technology, flexibility needed during market swings, and the opportunity to gain cost advantages through an outsourcer's volume.

Quality Carrier Management at DOD Is Constrained

DOD's efforts to ensure safe, secure, reliable, and quality transportation at the lowest cost is constrained by the large number of carriers it uses to transport defense freight. In fiscal year 1992, DOD used over 1,800 carriers (more than half of which moved less than six shipments during the year), which greatly hindered DOD's efforts to ensure reliable and quality transportation. In addition, DOD makes infrequent on-site inspections to verify a carrier's qualification, its carrier performance standards are lenient compared with those of the commercial sector, and it does not enforce or monitor compliance with the standards.

Automation Efforts Do Not Solve Problems

Although DOD expects automation of the transportation system to improve its oversight function, the systems are not integrated or standardized among the services. The U.S. Transportation Command has been tasked to control systems development, but decisions on funding of this effort have not been made. Thus, little progress has been made toward controlling systems development and eliminating redundancy in DOD's transportation system, yet funding continues for multiple transportation and tracking systems. For example, MTMC's automation efforts have focused on the development of a freight management system that would centralize transportation information. However, the services have also developed automated transportation systems that duplicate many of the freight management system's intended functions.

Commercial Practices Could Help Lower Costs

DOD is making progress in improving carrier management activities by placing an increased number of inactive carriers on non-use status and exploring ways to select high-quality carriers. DOD can also take advantage of strategies similar to those employed by the commercial sector to improve its carrier management activities. For example, DOD could significantly reduce the number of carriers it utilizes. In addition, benchmarking certain transportation processes may offer DOD opportunities for streamlining management. A benchmarking analysis helped the Air Force determine that it could save \$80 million by eliminating contracted air transport and replacing it with commercial transportation. One area that would benefit from benchmarking is DOD's freight payment process. Third-party logistics firms state that they can

process, pay, and audit freight bills at costs ranging from \$0.75 to \$1.25 per freight bill. In contrast, DOD spends \$5.70 for these activities.

Recommendations

GAO recommends that the Secretary of Defense direct the Under Secretary of Defense for Acquisition to (1) limit the number of carriers it uses to those that provide high-quality service and to fund efforts to control the development of current and future automated transportation systems; (2) identify ways to strengthen transportation practices, such as carrier performance standards and the collection of carrier performance data; and (3) create a group composed of corporate shippers and other transportation experts to assist the Under Secretary of Defense for Acquisition and the Commanders of the U.S. Transportation Command and MTMC in evaluating opportunities to benchmark and re-engineer DOD transportation practices. GAO makes other recommendations to the Secretary of Defense for improving transportation management in chapter 4.

Agency Comments

DOD generally agreed with GAO's findings and recommendations. DOD stated that the carrier base should be limited to a pool of quality carriers. DOD said that it was working with the Small Business Administration and minority carriers to foster the use of a socioeconomically diverse population of carriers. GAO agrees that DOD needs to maintain a sufficient and diverse carrier base and believes that DOD must consider such factors as it limits the base to a pool of quality carriers.

DOD stated that efforts were underway to strengthen performance standards and improve data collection to help ensure quality carriers move DOD freight and agreed to use benchmarking and outsourcing whenever possible. DOD stated that various initiatives were planned and underway but that resources were limited. DOD also stated that, unlike commercial shippers, it is constrained by requirements to respond to mobilization and contingencies in support of national policies. Within these limitations, DOD is amenable to using commercial practices whenever practicable.

Contents

Executive Summary		2
Chapter 1		8
Introduction	Objectives, Scope, and Methodology	9
Chapter 2		12
Commercial Practices in Transportation Management Focus on Reducing Costs and Improving Service	Top Management Commitment Drives Quality Transportation Management Efforts	12
	Integrating Transportation Into Logistics Chain Promotes Process Efficiencies	12
	Using a Smaller Number of Carriers Achieves Quality and Cost Benefits	13
	Using Information Technology Aids in Transportation Decision-Making	16
	Outsourcing and Benchmarking Can Reduce Costs and Improve Service	17
Chapter 3		19
Commercial Practices Offer DOD Opportunities for Improving Transportation Management	Quality Carrier Management Is Constrained Under Present Operating Conditions	19
	Current Automation Efforts Do Not Solve Transportation Management Problems	23
	DOD Has Additional Opportunities to Lower Transportation Costs	26
Chapter 4		29
Conclusions and Recommendations	Conclusions	29
	Recommendations	29
	Agency Comments and Our Evaluation	30
Appendixes		
	Appendix I: Corporate Information Management Initiative	32
	Appendix II: Comments From the Department of Defense	34
	Appendix III: Major Contributors to This Report	54

Contents

Abbreviations

AT&T	American Telephone and Telegraph
CFM	Continental United States Freight Management System
CIM	Corporate Information Management
DOD	Department of Defense
EDI	Electronic Data Interchange
GAO	General Accounting Office
MTMC	Military Traffic Management Command

Introduction

Due to declining peacetime requirements and fewer resources, the Department of Defense (DOD) has placed greater emphasis on improving transportation management. Each year DOD spends over \$500 million to transport government property throughout the continental United States. Almost 90 percent of DOD's shipments are transported by motor carriers.

The Motor Carrier Act of 1980 played a key role in reducing regulation of the U.S. motor carrier industry. The act has resulted in fundamental changes to the motor carrier industry that have fostered a competitive motor carrier environment, which is more advantageous to commercial shippers interested in reducing transportation costs and improving service.

One industry change caused by reduced regulation was increased volatility. For example, during the 1980s, the number of motor carriers had almost tripled, and more than 11,000 motor carriers failed. The failure rate in 1990 was 138 motor carriers out of every 10,000, which was about twice the failure rate for all U.S. businesses. Also, according to the American Trucking Association, only 54 percent of the top 100 motor carriers in 1980 (ranked by revenue) were still in business as of May 1992.

Another industry change resulting from reduced regulation was that carriers recognized they could compete on factors other than low cost. Carriers were free to offer specialized services to meet growing demands for fast, flexible, and reliable transportation. These specialized services included overnight less-than-truckload¹ delivery within a few hundred miles, dedicated service for emergency runs, hazardous waste handling and monitoring, and the flexibility to use multiple modes (i.e., rail, air, and motor) more efficiently.

DOD transportation policy states that DOD is to procure safe, secure, reliable, and quality transportation at the lowest cost and that transportation resources should be organized and managed to ensure optimum responsiveness to support DOD's mission. The policy also states that DOD should promote a viable commercial transportation network capable of meeting wartime and peacetime requirements.

¹Less-than-truckload shipments are typically shipments under 20,000 pounds, but they vary by commodity.

In addition, transportation issues are part of several Defense Management Report² initiatives. In one initiative, DOD has identified specific programs to reduce transportation costs, such as (1) expanding guaranteed traffic,³ (2) prepayment auditing of freight bills, (3) downgrading of shipping priorities, and (4) forming regional freight consolidation centers. Another initiative that directly affects transportation involves providing the capability to implement Electronic Data Interchange (EDI)⁴ in DOD systems and procedures.

DOD centralized its transportation organization by establishing the U.S. Transportation Command as the single manager for DOD transportation for wartime and peacetime, as of February 14, 1992. Domestic transportation is managed by the Military Traffic Management Command (MTMC), a major component under the U.S. Transportation Command. MTMC manages DOD's efforts in obtaining reliable and quality motor freight transportation.

We recently reported on several deficiencies in DOD's transportation management.⁵ These deficiencies included the low rate of reporting and recovery of in-transit losses; carriers that are allowed to exceed loss and damage limits without penalty; and the lack of coordination among the services, contributing to ineffective oversight programs. DOD stated at that time that the large number of carriers and shrinking resources contributed to its inability to assess the performance of every carrier and that it would re-emphasize the need for installations to participate in its carrier performance efforts.

Objectives, Scope, and Methodology

We conducted this review to assist DOD in its efforts to re-evaluate its carrier performance program and improve its shipment tracking. To obtain information on improving transportation practices, we identified (1) trends in the commercial sector to reduce costs and increase efficiencies in transportation, (2) the status of DOD's efforts to improve

²Defense Management Report initiatives resulted from an analysis requested by President Bush in 1989 to improve DOD management. The initiatives, which focus on all management aspects of DOD, recommend actions for streamlining DOD's operations at a cost savings while maintaining essential combat capability.

³Guaranteed traffic is a system for selecting carriers to transport volume DOD freight to, from, or between certain installations at a predetermined rate and route for a standard period.

⁴Electronic Data Interchange is the computer-to-computer exchange of business information.

⁵Defense Transportation: Ineffective Oversight Contributes to Freight Losses (GAO/NSIAD-92-96, June 18, 1992).

transportation management, and (3) commercial practices that could result in more efficient and effective DOD transportation practices.

To compare DOD's transportation practices with those of the commercial sector, we selected shippers with attributes similar to DOD, such as a national scope of operations, a reliance on commercial motor carriers (as opposed to private or in-house motor carriers), a large sales volume (based on their rankings in the Fortune 500), and a large number of high-volume shipments of multiple product lines. In addition, the companies we selected had been singled out by transportation periodicals, transportation industry experts, and academicians as having excellent carrier management programs. These companies were American Telephone & Telegraph (AT&T), Greensboro, North Carolina; Corning, Incorporated, Corning, New York; E.I. DuPont de Nemours & Company, Wilmington, Delaware; Eastman Kodak Company, Rochester, New York; Johnson & Johnson Hospital Services, New Brunswick, New Jersey; Reynolds Metals Company, Richmond, Virginia; Wal-Mart Stores, Bentonville, Arkansas; and Westinghouse Electric Corporation, Pittsburgh, Pennsylvania. We interviewed officials from each of these companies about their transportation practices.

In addition, we obtained information from four private sector firms that performed third-party logistics services for various clients. The services included logistics operations, freight bill payment, and data base management for carrier performance activities. We also discussed transportation issues with three major carriers.

We reviewed DOD's policy, procedures, and reporting requirements pertaining to carrier qualification, carrier performance, and carrier management information systems with the Military Traffic Management Command in Falls Church, Virginia. To obtain information about DOD's transportation initiatives, we met with officials from DOD, the Army, Navy, Air Force, Marine Corps, Defense Logistics Agency, and U.S. Transportation Command, all in Washington, D.C.

We visited the Defense Finance and Accounting Service in Indianapolis, Indiana, and its headquarters in Arlington, Virginia, to learn about the freight bill payment process. We also discussed transportation issues with officials representing the Logistics Management Institute, Bethesda, Maryland; A.T. Kearney, Alexandria, Virginia; and the American Trucking Association, Alexandria, Virginia.

Chapter 1
Introduction

We conducted our review from July 1992 to June 1993 in accordance with generally accepted government auditing standards.

Commercial Practices in Transportation Management Focus on Reducing Costs and Improving Service

Corporate shippers committed to improving their transportation practices share common elements in their management strategies. Commercial shippers recognize that top management commitment and support to improve transportation management are important. Shippers are taking a number of actions to reduce costs and achieve efficiencies, such as integrating transportation functions with the entire logistics chain, reducing the number of carriers they use and focusing on the highest performing carriers to promote stability and enhance leverage, and using information technology to aid in transportation decision-making. In addition, shippers are increasingly contracting out certain transportation functions to take advantage of lower costs and attain flexibility during market swings.

Top Management Commitment Drives Quality Transportation Management Efforts

Many corporate transportation managers stated that the transportation function is an integral part of the effort to produce quality products or services and that transportation goals should be consistent with corporate goals and objectives. Many of these goals emphasize quality and continuous improvement.

AT&T's manager of transportation states that the transportation quality initiative reflects the overall quality objectives of the company chairman. The manager sees transportation quality playing a key role in AT&T's quality direction and believes quality in the organization can be achieved, at least in part, by the way assignments are approached. The manager also stated that doing things right the first time; finding newer, better methods for the next time; and helping others with transportation issues would achieve quality and meet client commitments and business needs.

Integrating Transportation Into Logistics Chain Promotes Process Efficiencies

Many large commercial shippers have created centralized, integrated logistics functions that incorporate transportation to maximize efficiencies. Many shippers are moving away from the traditional approach of locating transportation offices at each shipping point and/or within each division. Integration of transportation activities enables the development of consistent purchasing, inventory control, and transportation strategies supporting multiple divisions. Integration also aids in enhancing communication between order processing, inventory management, and manufacturing for better forecasting of shipments.

Wal-Mart, for example, has focused on reducing cycle times and balancing inventories through an integrated transportation management strategy.

Benefits from Wal-Mart's transportation management efforts include lead time reduction, double order elimination, improved merchandise flow, and improved stocking of the replenishment system. Also, Reynolds' purchasing and transportation groups both report to the vice president of material management to foster cooperative efforts between the two groups.

Using a Smaller Number of Carriers Achieves Quality and Cost Benefits

Many commercial shippers have reduced the number of carriers in the last several years. Since 1986, AT&T went from 3,000 motor carriers to 51. Since 1985, Reynolds went from 1,400 motor carriers to 90. Industry officials stated that these reductions were in response to new freedoms in negotiating tailored services with carriers. Shippers are establishing "core carrier" or "preferred carrier" bases to reduce costs while improving service. Shippers that we talked to believed fewer carriers improved their ability to monitor and provide the stability and leverage needed for better carrier relations.

Focus Is on Quality

Commercial shippers' carrier performance programs involve a small number of high-performing carriers instead of all carriers they utilize. Carriers are selected and evaluated on quality factors and not just price. For example, many of the commercial shippers we talked to require that carriers meet on-time delivery percentages of 95 percent or better, allow lost or damaged freight on no more than 5 percent of shipments, and submit accurate freight bills 95 percent of the time or better. Measures such as these form the basis of weighted carrier performance ratings, which are used to evaluate individual carrier performance and reward top-performing carriers.

AT&T's primary strategy for managing relations with transportation suppliers is to balance the cost/service tradeoff. That is, AT&T establishes weighted measures for carrier performance and defines performance standards for preferred carriers. The weighted measures used by AT&T are based on a mathematical formula and the results of carrier and client discussions. These two measures result in one performance profile for all the carriers used at an AT&T location.

AT&T's mathematical formula has three components: transit interval monitoring, freight invoice auditing, and loss and damage claims. Transit interval monitoring, assigned a weight of 70, compares discrepancies between actual transit times with standards established between AT&T and

the carriers. Freight invoice auditing, assigned a weight of 15, shows the comparison between the amount of audited freight invoice inaccuracies and a carrier's total freight invoices. Loss and damage claims, assigned a weight of 15, shows the comparisons between the number of claims filed and a carrier's total shipments. From these measures, AT&T establishes performance standards: the "marginal" standard is 84.8 percent, the "exceed" standard is 93.1 percent, and the "overall excellence" standard is 97.6 percent. AT&T uses these standards to annually recognize its best-performing carriers. AT&T emphasizes that the standards are not used for punishment purposes but as a means to help carriers become better AT&T suppliers.

Carrier Performance Data Is Supplied by Carriers

Some commercial shippers use data on transit time supplied by the carriers to monitor the carrier's performance. Wal-Mart, for example, develops on-time percentage goals with carriers by comparing the carrier-supplied transit time data with its own transit time standards. To verify the integrity of the carrier's data, Wal-Mart audits a specified amount of carrier shipments per month at a carrier's location. The audits are performed on a random, unannounced basis. Wal-Mart credits its monitoring efforts in improving on-time percentages by 15 to 20 percent.

On-Site Inspections Support Carrier Qualification Efforts

An important part of a shipper's qualification efforts involves the use of on-site inspections. These inspections form the basis of measures used in rating carrier performance and qualification.

Corning and DuPont perform on-site inspections as part of their process for measuring carrier performance. Corning officials stated that on-site inspections are important because they give carriers the opportunity to sell their services to suppliers. The inspections also help shippers determine whether a carrier values its business.

DuPont uses on-site inspections as part of its qualification process. DuPont's qualification process is based on selecting carriers that emphasize many of its own core attributes. Since DuPont places its highest emphasis on safety, it demands that carriers emphasize safety as well. Prospective DuPont carriers are initially surveyed on safety before they are considered for its approved carrier list. The safety audit includes an assessment of the carrier's equipment and facilities. On the basis of the information provided, a determination is made whether to gather additional information on site or by telephone. (If the carrier is to

transport bulk liquids and hazardous waste, on-site inspections are required.) If Dupont determines that an on-site inspection needs to be conducted, a carrier must consent to the inspection to continue further qualification activities. The inspection's purpose is not only to verify equipment and facility information but also to talk to the organization's drivers and maintenance people to determine whether a proper concern for safety and quality exists. Finally, carriers are given one of three ratings—satisfactory, unsatisfactory, or pending—and carriers with a satisfactory rating can be included on the approved carrier list.

Shippers Use Contractual Arrangements to Gain Stability and Leverage

Commercial shippers are simplifying the carrier selection process through the use of contractual arrangements, which can promote cost efficiencies for carriers and shippers. An example of such efficiencies involves the use of simplified rate structures. The basis of a contract between Westinghouse and its less-than-truckload carriers is a uniform pricing schedule, which established a national, or standard, rate structure for carriers. Adherence to these rate standards is the first requirement in becoming a Westinghouse carrier. The rate structure effectively eliminated price as a factor in the carrier selection decision and reduced the administrative burden of accessorial charges¹ in the freight payment process.

Another example is a 5-year contract with 19 core truckload carriers that Reynolds employs. An important element of the contract is the ability to move all freight under freight-all-kinds² rates. The rates avoid the complexities involved in the freight classification system. These carrier contracts provide Reynolds the rate stability they believe is essential for efficient carrier management.

Commercial shippers recognize the need for stable carrier relationships to promote efficiencies and foster better carrier relations. For example, Corning found that changing and retraining carriers was expensive and lowered transportation quality. Expenses that Corning associates with carrier turnover include the cost of retraining new carriers and the loss of goodwill from customers that are used to dealing with certain carriers.

¹Accessorial charges are surcharges added by carriers for services in addition to the initial charge for transporting freight, such as for diverting, switching, sorting, or packing.

²Freight-all-kinds rates are commodity rates that allow for the combined shipment of articles with different freight classifications at the same rate. These rates are usually restricted to exclude bulk freight, livestock, and household goods.

Reynolds has also found that changing carriers is expensive and thus is working to strengthen commitments and build alliances. These efforts include providing software training and procedure manuals and sharing basic information. In addition, some shippers look for ways to reduce the carrier's costs, which include adjusting pickup and delivery times, consolidating delivery points, making sure information on the bill of lading (a document authorizing the shipment of cargo) is correct, and adjusting packaging techniques to make material handling easier for the carrier.

Corning believes its carriers also benefit from stable relationships because a carrier assured of business from a shipper would likely perform in a more responsive manner. Carriers assured of business are also more likely to be frank and cooperative about problems when they are dealing with a shipper that does not threaten to withhold the business when problems arise. Corning has established a relationship with its carriers in which costs and other concerns are freely discussed.

According to industry experts, when the number of carriers is lower, larger shares of volume can be placed with remaining high-quality carriers. Thus, commercial shippers can achieve the leverage needed to make substantive improvements in service and sharp reductions in transportation costs. Reynolds and Johnson & Johnson found that they had the negotiating leverage needed to gain loyalty from their carriers. Reynolds believes it is in a better position to offer incentives to work closer on rate and service issues. Johnson & Johnson officials stated that it can better manage or control service quality from carriers that list Johnson & Johnson on its priority board of customers.

Using Information Technology Aids in Transportation Decision-Making

Commercial shippers identified information technology as fundamental in managing transportation activities. Automating functions such as pre-auditing, rating, and shipment tracking improves operations and reduces costs.

Reynolds' automated central dispatch system, for example, is designed to track shipments from initial order to final delivery. The system controls all truckload freight for 120 Reynolds shipping locations, including plants, warehouses and suppliers, and 2,000 receiving locations. It relies on a sophisticated software system to select carriers, assign loads, and accumulate and store large volumes of carrier performance data. The system has boosted productivity and enabled Reynolds to change

processes to reduce its transportation staff and shift its focus from clerical to strategic.

An important application of information technology is the introduction of EDI. Conceptually, EDI promotes efficiencies through paperwork reduction, working capital reduction, and error elimination. Commercial shippers are incorporating or actively utilizing some applications of EDI in its transportation activities.

Westinghouse uses EDI to process domestic bills of lading, freight invoices, and status messages. Corning uses EDI to receive bill of lading information and matches this information with freight invoices to authorize carrier payments. Reynolds uses EDI to tender freight to the carriers and track freight from pickup to delivery. Reynolds also uses an EDI notice of delivery to trigger the process of paying the carriers for services rendered, thus eliminating the need for carriers to invoice for their services. Reynolds thinks the administrative cost savings for both the shipper and carrier is substantial.

Commercial shippers are not using EDI for every possible application or with all carriers. For example, not all shippers believe it is beneficial to pay carriers electronically. Corning officials stated that benefits to shippers are generated only if a carrier offers incentives for paying them quickly.

In addition, EDI has yet to reach its full potential. According to a freight bill payment firm, only 14 percent of its clients are submitting bills of lading through EDI. Industry experts have stated that the slowness of EDI's acceptance may be attributed to the fact that doing business electronically forces companies to make fundamental changes in the way they work. However, these same experts predict that the number of EDI users will continue to increase as deterrents diminish and new incentives emerge.

Outsourcing and Benchmarking Can Reduce Costs and Improve Service

Many commercial shippers are looking to contract out, or outsource, logistics and transportation functions to save money. Commercial shippers have outsourced functions from freight bill payments and carrier performance analysis to entire logistics operations. Outsourcing provides the following benefits: savings from not investing in an internal transportation staff; savings from not investing in fixed assets, allowing the flexibility for getting in and out of markets; a ready source of expertise, capability, and technology; and the ability to gain cost

Chapter 2
Commercial Practices in Transportation
Management Focus on Reducing Costs and
Improving Service

advantages from an outsourcer's business volume. Many experts predict that U.S. manufacturers will begin to contract out more of their logistics functions, since they are under increased pressure to reduce costs and keep inventories to a minimum.

In addition, some commercial shippers are using benchmarking³ as a technique to improve logistics practices. We previously identified benchmarking as a technique used in the commercial sector to improve logistics efficiency.⁴ Eastman Kodak recently credited benchmarking with helping it pursue new transportation activities, which included developing a simplified rating system for its motor carriers, reassessing its freight bill payment operation, and streamlining its motor carrier base.⁵

Commercial shippers are also actively using third-party logistics firms for performing particular transportation functions. Westinghouse is utilizing the services of a private logistics firm that specializes in the payment of freight bills. The firm pays 80 to 85 percent of Westinghouse's bills. The firm also performs all associated freight payment duties along with EDI functions.

³Benchmarking is defined as measuring performance against "best in class" companies; determining how those companies achieve high performance levels; and using the information as a basis for a company's targets, strategies, and implementation.

⁴Defense Logistics: Observations on Private Sector Efforts to Improve Operations (GAO/NSIAD-91-210, June 13, 1991).

⁵Scholz, John D. "Benchmarking Worth The Effort, According to Kodak Transport Chief." Traffic World, September 21, 1992.

Commercial Practices Offer DOD Opportunities for Improving Transportation Management

DOD's efforts to improve transportation management are complicated by its use of a large number of carriers to move defense freight and the lack of integration or standardization among its independently developed automated systems. MTMC, which used over 1,800 motor carriers in fiscal year 1992, cannot effectively manage such a large carrier base, thereby limiting DOD's ability to ensure reliable and high-quality transportation. Furthermore, the development of redundant traffic management systems among the services and commands without consideration of the benefits of joint efforts is contrary to DOD transportation policies concerning systems development. Although the U.S. Transportation Command has been tasked to control systems development, funding decisions for this effort have not been finalized.

Even though DOD has recently made progress in reducing the number of carriers it utilizes and is exploring ways to select high-quality carriers, DOD can also take advantage of strategies similar to those used by the commercial sector to improve transportation management. In the commercial sector, many shippers have significantly reduced the number of motor carriers utilized and emphasized quality service in addition to cost, which has led to improved efficiencies in their carrier management activities. Also, the commercial sector has focused automation efforts on standard systems that promote efficiencies and eliminate redundancies.

In addition, outsourcing and benchmarking certain DOD transportation processes and costs may offer opportunities for streamlining transportation management and reducing costs. These processes include freight payment services, carrier management data collection, and bill consolidation.

Quality Carrier Management Is Constrained Under Present Operating Conditions

Improving DOD transportation management is constrained by existing management practices, including (1) infrequent on-site inspections to verify a carrier's qualification; (2) the use of carrier performance standards that are lenient compared with those of the commercial sector; and (3) a lack of enforcement, monitoring, and compliance with existing standards. Moreover, in fiscal year 1992,¹ DOD used over 1,800 motor carriers (more than half of which moved less than six shipments), which greatly hindered DOD's efforts to ensure reliable and high-quality transportation. However, DOD is attempting to improve its carrier management practices by creating a program to ensure that it is procuring best-value transportation services

¹MTMC officials stated that the number of carriers utilized in fiscal year 1992 covered the period from August 1991 to July 1992.

and expanding a program to guarantee freight to carriers in exchange for reduced rates.

Carriers Are Qualified Without On-Site Inspections

The Carrier Qualification Program is designed to ensure that carriers transporting DOD freight are qualified to provide service that meets DOD standards. The carriers must meet certain qualification standards, which include a performance bond, cargo insurance, public liability insurance, a good safety record, adequate equipment, and appropriately trained personnel. One of the ways commercial shippers verify a carrier's qualification is to visit the terminal. Although not specified in program regulations, MTMC recently initiated on-site inspections of carrier terminals to verify the information submitted by carriers requesting to move DOD freight. However, very few inspections have been done. From October 1992 to March 1993, only 20 of 1,147 carriers awaiting qualification had been inspected.

Findings from these inspections demonstrate the value and necessity of on-site visits. The inspections uncovered unreliable and unsatisfactory carriers. For example, DOD inspectors discovered carriers working out of a horse farm and a personal residence rather than a carrier terminal. Another carrier was operating under an alias.

As of May 1993, DOD had qualified 267 carriers of the 1,608 carriers that submitted offers at the initiation of the qualification program in January 1991. Of the top 100 revenue motor carriers in fiscal year 1992 (which received about 76 percent of DOD freight revenue), 59 are currently qualified. Although the process of qualifying carriers has been slow, MTMC recently added 622 carriers to the non-use list because the carriers either did not return delivered qualification packages, did not receive any DOD revenue during fiscal year 1992, or failed to supply MTMC with a proper mailing address. A carrier placed in non-use status cannot be utilized by field transportation officials and is ineligible for routings until its qualification package is returned. MTMC plans to enforce a 60-day limit on the return of qualification packages. Since as many as 1,147 carriers are awaiting qualification, DOD shippers remain vulnerable to carriers that may not satisfy qualification standards.

Carrier Performance Standards Are Lenient

The Carrier Performance Program is designed to ensure that DOD's transportation needs are met by the best available commercial carriers. The Defense Traffic Management Regulation specifies (1) key elements for

monitoring carrier performance; (2) minimum levels of satisfactory performance, such as loss and damage limits, transit times, and overcharge limits; and (3) procedures to disqualify any carrier that fails to maintain a minimum level of satisfactory performance. However, the performance standards are lenient compared with those of commercial shippers. For example, DOD's loss and damage threshold is 2 percent per total annual revenue and 5 percent per total annual shipments and its transit time threshold is no less than 85 percent below standard, whereas the commercial shippers we talked to usually have no loss and damage thresholds and 95 percent or greater transit time thresholds.

Lenient standards send a message of tolerance for loss and damage and slow service that is unacceptable to quality shippers in the commercial sector. One of the shippers we interviewed said that minimum loss and damage standards did not encourage carriers to perform better; rather, they implied that the carriers could lose or damage freight up to the standard. Lenient standards weaken incentives for carriers to improve service and for shippers to aggressively monitor a carrier's performance.

Carrier Performance Monitoring Is Limited

DOD officials told us that they have used many carriers in large part to fulfill socioeconomic responsibilities to diversify the carrier base and give qualified carriers, including small and disadvantaged companies, an equal opportunity to participate in DOD business. DOD officials also stated its carrier base is needed to accommodate its large and varied missions, take advantage of specialized equipment, and prepare for surge requirements on short notice. As a result, DOD has to be selective in its carrier performance monitoring activities. MTMC stated that it did not have the resources to conduct an in-depth analysis of every carrier's performance. Thus, MTMC has been conducting these evaluations on an exception basis.

The evaluations MTMC has been conducting include assessments on performance elements such as loss and damage. However, despite these evaluations, some carriers are continuing to exceed loss and damage limits. For example, DOD identified 58 carriers that had repair or replacement costs of claims exceeding 2 percent of DOD revenue received in fiscal year 1992 (and had received at least \$10,000 of DOD revenue). DOD sent letters to 36 of the 58 carriers whose repair and replacement costs of claims were over \$10,000. Most of the carriers disputed DOD's claims calculations. MTMC had not taken further actions as of June 1993 to continue monitoring these carriers or disqualify them.

In addition, in fiscal year 1992, 20 carriers were disqualified by MTMC headquarters for unsatisfactory performance; however, only 1 carrier was disqualified for losing or damaging freight. Of the remaining 19 carriers, 11 were suspended for security violations, and 8 were disqualified for violations such as improper trip leasing, late deliveries, and driving under the influence of drugs or alcohol.

DOD Is Trying to Improve Carrier Management

Two MTMC programs could result in using fewer and higher performing carriers: implementation of the "best value" program and increased utilization of carriers in the guaranteed traffic program. MTMC has proposed creating a best value program to define and quantify quality-oriented criteria to ensure that DOD is procuring transportation services that result in the overall best value for its shippers. The program may focus on a few performance measures, such as claims-to-revenue ratios and on-time pickup and delivery, and these measures would be integrated into one overall performance rate that would be compared with the carrier's charges to help managers select high-performing carriers. However, MTMC has not been able to implement the program because it cannot obtain reliable data on these measures. MTMC must obtain the data from service failure reports, which have a history of varying greatly in reliability, consistency, and completeness. For example, MTMC has little or no information on how well carriers are doing in meeting its 85 percent transit time limit because the data is either unavailable or lacks consistency from various installations. Thus, the best value program cannot be implemented without reliable data from installations, which is necessary for valid performance measurements.

In addition to the best value program, MTMC plans to increase the number of carriers in its guaranteed traffic program, which was designed to award carriers a substantial volume of freight in exchange for reduced shipping rates. Carriers selected for the program obtain the right to exclusively handle all traffic between two designated points for a specified period of time (usually 12 to 18 months) at a fixed rate, provided that they maintain responsible and responsive service. According to MTMC, this program allows the carrier to become more familiar with an installation's operation, resulting in better service for the shipper. Program participation at DOD has grown from 29 percent of motor carrier shipments of guaranteed traffic eligible cargo in fiscal year 1988 to 51 percent in fiscal year 1991. Even though the program has resulted in cost savings, DOD officials stated that additional efficiencies could be achieved by expanding the concept to include multiple shipping points and round-trip routings. Offering a

shipment to a carrier already moving freight to the shipping location or nearby points benefits both the carrier and the shipper. The carrier can earn additional revenue while the shipper can lower its costs through increased volume to a carrier.

MTMC is also considering awarding higher volumes of traffic to carriers that move DOD munitions. MTMC would identify and analyze traffic flows, service requirements, and carrier capability. The goal is a process that benefits both the shipper and carrier and allows for traffic awards based on high-quality service and not necessarily the lowest cost.

In its comments on a draft of this report, DOD pointed out that another approach it was using to improve carrier management was the establishment of "user groups" to assess the performance of some guaranteed traffic carriers. The groups are composed of various service representatives that use the same carrier. User groups ensure that consistent performance data is collected and used to take appropriate actions.

Current Automation Efforts Do Not Solve Transportation Management Problems

As in the commercial sector, a key to solving transportation management problems involves the development of information technology. MTMC's automation efforts have focused on the development of its Continental United States Freight Management System (CFM). Although the system will centralize transportation information, the services and commands have developed independent automated transportation systems that duplicate many of CFM's intended functions. DOD recognizes that centralization and standardization of automated transportation systems are needed. The U.S. Transportation Command has been tasked to control system development activities, but funding decisions for this effort have not been finalized.

CFM Will Face Implementation Problems

In the mid-1980s, MTMC recognized the need for an enhanced automated transportation management system. MTMC and the Department of Transportation's Volpe National Transportation Systems Center agreed to initiate the CFM system concept in 1985. CFM, which is scheduled to be fully operational by 1996, is an automated freight management data base with more flexibility and up-to-date information than DOD's current data base. CFM will provide the capability for automated rate evaluations, low-cost carrier selection, and electronic exchange of transportation documentation. CFM will also be capable of exchanging shipment data with

other DOD information systems and payment data with the Defense Finance and Accounting Service.

However, CFM will face some implementation problems. CFM's traffic management selection criteria are not primarily focused on selecting quality carriers. The CFM field module currently focuses first on selecting lowest cost carriers without regard to carrier performance. CFM officials recognize the current weakness and intend to incorporate weighted carrier performance data from best value criteria used in carrier selection. In addition, DOD's expansion of guaranteed traffic shipments will reduce the utility of CFM's rating and routing functions because they will not be needed to rate and route predetermined guaranteed traffic shipments.

EDI is a critical component to the success of CFM and other defense transportation systems. However, according to the Logistics Management Institute, DOD's current method of buying transportation services is not conducive for an EDI environment.² Implementing EDI with each carrier requires strong and stable carrier relations, but the Logistics Management Institute concluded these relationships are not fostered by DOD's approach of awarding traffic to carriers that have submitted lower offers of service. This approach encourages intermittent business relationships with numerous carriers that are subject to rapid change (guaranteed traffic is an exception to this practice). Also, although EDI may save money in data processing, administrative costs required to implement it should not be overlooked. For example, many of DOD's business methods, operating procedures, and control systems will need to be modified as it substitutes the electronic flow of business information for the paper flow.³

Development of Independent Transportation Systems Continues

The services and the Defense Logistics Agency have, or are developing, independent transportation systems that perform, or will perform, functions similar or identical to CFM. These systems include the Defense Logistics Agency's Transportation Automated Management System and Warehousing and Shipping Procedures, the Air Force's Cargo Movements Operation System, the Marine Corps' Transportation Management System,

²The Logistics Management Institute is a federally funded research and development center that performs specific studies for DOD. Its finding was contained in a study, "Electronic Data Interchange in Defense Transportation," which was published in October 1987.

³As of July 1993, the Deputy Under Secretary of Defense for Acquisition and the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence were developing joint plans to provide necessary policy direction and technical support for EDI to DOD business managers such as MTMC. A program management office within the Defense Information Services Agency is working to ensure a standard approach for implementing EDI throughout DOD.

and the Army's Standard Depot System. The services and the Defense Logistics Agency created their systems with little coordination or cooperation.

Even though the services and the Defense Logistics Agency believed that their efforts to develop independent systems were justified, these actions were contrary to DOD policies and directives pertaining to transportation system development. For example, DOD Directive 4500.9 directs that, when beneficial, services should jointly develop automated transportation systems. The services' independent efforts were initially driven by differing requirements, automated systems development policies, funding levels and priorities, and systems hardware. However, the services' independent systems have led to duplicative efforts. For example, the services' systems and CFM will all have the capability to automatically create and produce government bills of lading.

DOD stated that potential economies in transportation systems development were not realized and that duplicative efforts resulted in sunk costs that could not be recouped. DOD estimated that the development costs of these automated systems amounted to \$42 million (as of March 1992) and that additional development costs were at least \$68.5 million, excluding the costs to operate and maintain the systems once they are developed.

DOD recognizes the need to eliminate redundant systems and encourage standardization. The Assistant Secretary of Defense for Production and Logistics has assigned the U.S. Transportation Command the responsibility for implementing the Corporate Information Management (CIM) initiative for the transportation functional area. (See app. I for more information on the initiative.) This effort includes the establishment of a Joint Transportation CIM Center. Ongoing systems development and future funding of automated systems are to be centrally controlled by the center, which would be responsible for integrating DOD functional requirements and managing the development and implementation of the transportation systems process. The center would be designed to closely coordinate its efforts with other logistics-related systems to ensure consistency in development and implementation and eliminate redundant systems.

However, no progress has been made in eliminating redundancy and curtailing unnecessary development in DOD's transportation system in part because funding decisions for the center have not been finalized. Even though the U.S. Transportation Command has allocated \$2.3 million in

start-up costs for the center in fiscal year 1993, authorizations for staffing the center have been delayed until fiscal year 1994. Decisions have not been finalized on which organization will budget the \$10.4 million of the center's annual operating costs.

However, funding continues for the U.S. Transportation Command's and the services' traffic management systems. The U.S. Transportation Command's system, Global Transportation Network, will be a transportation data base that contains information from selected systems from the services. This system, which is estimated to cost \$92.2 million, will provide the Command with management information not available from individual sources. The Command, which had invested \$15 million in the system as of fiscal year 1992, believes the system will enhance command, control, communication, and in-transit visibility goals. However, CIM officials believe the system would "overpopulate the transportation system with redundant data." DOD officials stated that they recognized that efforts to modify systems were underway but that these efforts were long term in nature. DOD officials also stated that Global Transportation Network was an important capability needed to meet short-term requirements.

DOD Has Additional Opportunities to Lower Transportation Costs

In addition to limiting the number of carriers and expanding automation efforts, implementing practices similar to those used by the commercial sector may assist DOD in its efforts to reduce costs and generate efficiencies in transportation. We did not identify any significant impediments to improving DOD's transportation management by the implementation of commercial practices.

Benchmarking may help DOD improve transportation management. In 1992, the Air Force conducted a benchmarking-type study of its dedicated air transport system, which resulted in the transport system's elimination. The Air Force found that commercial modes of shipping would result in an estimated \$80 million in annual savings.

The Navy and the Defense Logistics Agency also conducted a benchmarking-type study of its contracted transportation system. The test, conducted from December 1992 to February 1993, compared the cost and service of the Navy's contracted system for high-priority shipments to a similar Defense Logistics Agency system. The results of the test showed that the Navy's contracted transportation system generated a 23-percent savings compared with the Defense Logistics Agency's system.

Other areas within DOD that would benefit from benchmarking are freight payment services, carrier management services, and bill consolidation.

Freight Payment Services

A number of firms provide third-party logistics transportation services that are competitive to government operations. We obtained proposals from two firms that perform freight payment services (freight bill processing, pre-auditing, verifying, and generating management reports with payment). The firms proposed to perform these services for DOD at a cost ranging from \$0.75 to \$1.25 per government bill of lading, depending on whether freight bills were transmitted by paper or electronically. The unit cost that the Defense Finance and Accounting Service reports for freight payment services is estimated at \$5.70 per bill. This amount likely understates the cost of freight services because it includes transactions such as paying meal tickets, which finance officials acknowledge as costing less to process than the payment of freight bills. Consideration of third-party payment operations could save DOD \$4.45 to \$4.95 per freight bill.

We did not find any significant legal impediments to prevent DOD from considering this alternative. A contractor may provide administrative services related to the disbursement function as long as a government disbursing officer is responsible for reviewing and overseeing disbursement operations through agency-installed controls designed to ensure accurate and proper disbursements.

In its comments on a draft of this report, DOD stated that it did not believe that third-party firms could provide all of the services for commercial processing of DOD freight bills for \$0.75 to \$1.25 per bill. DOD added that outsourcing freight payments would require further consideration.

Carrier Management Services

Another third-party logistics firm provides an automated carrier management system for three levels. Level 1 collects data on shipment status for tracking and carrier performance. Level 2 concentrates on electronic tendering and dispatching, carrier selection options, traffic patterns, and cost reporting. Level 3 gives the shipper information to make decisions on the carrier's optimal traffic patterns to keep freight moving without interruption, allowing savings in transportation costs. The charges for these levels of service are \$2.50, \$4, and \$7, per shipment, respectively.

In its comments on a draft of this report, DOD stated that such an effort would be cost-prohibitive due to its large carrier base. However, DOD stated that it was planning to collect in-transit data directly from some commercial carriers that have the capability to provide the data.

In response to DOD's concerns about the cost of carrier management systems, the third-party logistics firm stated that it could provide these services through a software package for a one-time cost. The package would provide services without regard to the size of DOD's carrier base.

Bill Consolidation

The Navy consolidates freight bills and creates only one government bill of lading every 2 weeks for truckload and exclusive-use guaranteed traffic carriers. This process reduces the number of bills created and, in turn, the risk of lost and stolen bills and the possibility of duplicate payments. Although this practice is not feasible in most situations, it could save money and time for guaranteed traffic shipments if the commodity, origin, destination, carrier, and carrier services were the same over the specified period of time. The Navy obtained a waiver from the General Services Administration that allows it to consolidate bills, since this is a departure from normal procedures.⁴

In its comments on a draft of this report, DOD stated that it agreed with the advantages of consolidating freight bills but added that its automation efforts would decrease the processing cost. Although we recognize that automation decreases the cost advantages of outsourcing, reducing the number of automatic transmissions would also save costs.

⁴Generally, a government bill of lading is issued to cover the shipment by one carrier from one origin in a single day. Subsequent shipments, even those involving the same characteristics and services, must be covered by a second bill of lading if they move the next day.

Conclusions and Recommendations

Conclusions

DOD has acknowledged that it can benefit from transportation practices performed in the commercial sector. We believe that DOD can balance the government's socioeconomic responsibilities, its business relationships, and the need to protect government property and manage federal funds efficiently and effectively. We also believe that DOD can improve the quality of its transportation management by implementing those commercial practices that have led to higher levels of efficiencies and effectiveness in the private sector.

Recommendations

We recommend that the Secretary of Defense direct the Under Secretary of Defense for Acquisition to limit the number of carriers it uses to those that provide high-quality service to promote stability, enhance leverage, and lessen its administrative burden. This could be accomplished by concentrating larger volumes of freight with fewer carriers through the guaranteed traffic program. Fewer carriers would free up resources for DOD to conduct on-site inspections before qualification, enable enforcement of its carrier performance standards, and eliminate carriers that do not meet performance standards.

We also recommend that the Secretary of Defense direct the Under Secretary of Defense for Acquisition to

- strengthen carrier performance standards, such as requiring 95 percent on-time delivery, rather than the 85 percent currently required by the Defense Traffic Management Regulation;
- modify the Carrier Qualification Program regulation to give DOD the right to permit on-site inspections before qualifying carriers and conduct general follow-up inspections after the carrier has been qualified to ensure compliance with DOD standards (the current regulation allows such inspections for safety and security purposes);
- consider preparing a single government bill of lading to cover similar and repetitive (nonhazardous) shipments during a specified period and, in those instances for which it is advantageous, seek a waiver from the General Services Administration to cover multiple daily shipments under one bill of lading only if paperwork will be reduced, a complete audit trail will be maintained, and follow-on shipments will be nearly identical;
- improve the collection of carrier performance data to more effectively monitor and evaluate carriers by requiring major carriers to provide the data needed to analyze performance and verify the data, utilizing third-party sources that specialize in establishing carrier performance data bases and providing oversight for this function, or ensuring that a DOD

standard transportation system incorporates the collection of all relevant carrier performance data; and

- create a group composed of corporate shippers and other transportation experts to assist the Under Secretary of Defense for Acquisition and the Commanders of the U.S. Transportation Command and MTMC in evaluating opportunities to benchmark and re-engineer DOD transportation practices and coordinate efforts with other DOD supply initiatives to foster global logistics solutions.

Further, we recommend that the Secretary of Defense direct the DOD Comptroller to fund the Joint Transportation CIM Center to control development of current and future automated transportation systems. The Center will allow DOD to identify its data requirements; set priorities for systems development to achieve a standard DOD automated transportation system that is integrated with DOD's supply system, giving DOD the visibility needed to track shipments; and strengthen controls on the development of new transportation systems.

Agency Comments and Our Evaluation

DOD generally agreed with our findings and recommendations, and we incorporated its comments to the report where applicable. DOD stated that the carrier base was too large and that measures should be taken to limit the base to a pool of quality carriers. DOD also stated that it was working with the Small Business Administration and minority carriers to foster the use of a socioeconomically diverse population of carriers. We agree that DOD needs to maintain a sufficient and diverse carrier base and believe that DOD must consider such factors as it limits the base to a pool of quality carriers. DOD added that efforts were underway to strengthen performance standards and improve data collection to help ensure quality carriers move DOD freight.

DOD stated that it had reduced its carrier base by 53 percent. This represents the percent of carriers placed in non-use status as of August 1993 because the carriers did not return delivered qualification packages, did not receive any DOD revenue during fiscal year 1992, or failed to supply DOD with a proper mailing address. However, once these carriers submit the proper documentation, they will be eligible to continue moving DOD freight.

DOD did not state whether it would modify its carrier qualification regulation to give it the right to permit on-site inspections before qualifying carriers and conduct follow-up inspections after qualification.

DOD stated that it would conduct inspections as necessary and place primary emphasis on safety.

DOD agreed that its automated systems for transportation should be fully integrated. However, it could not confirm the funding for the Joint Transportation CIM Center.

DOD stated that it would encourage the use of a single bill of lading for multiple daily shipments. DOD also agreed to use benchmarking and outsourcing whenever possible, although outsourcing functions such as freight bill payment and carrier analysis would require further review. DOD stated that it recognized the benefits of benchmarking and would work with corporate shippers and the transportation industry to improve its traffic management practices.

DOD stated that various initiatives to improve transportation management have been planned and are underway but that resource limitations must also be recognized. DOD also stated that, unlike commercial shippers, it is constrained by requirements to respond to mobilization and contingencies in support of national policies. Within these limitations, DOD is amenable to using commercial practices whenever practicable. However, we believe DOD must focus on quality carriers to achieve cost savings and efficiencies similar to those experienced by the private sector.

Corporate Information Management Initiative

For many years, the military services and other DOD organizations have developed and operated multiple, unique automated information systems, often to do similar jobs. Because so many of these information systems were considered redundant, and because of the need to improve information management, the Deputy Secretary of Defense established the CIM initiative in October 1989. The initiative supports DOD's efforts to improve operations and cut costs, as outlined in the July 1989 Defense Management Report to the President.

CIM's long-term goals are to (1) implement new or improved business methods, such as the way DOD pays civilian personnel or tracks government property, and create more uniform business processes for common functions and (2) improve the standardization, quality, and consistency of data from DOD's management information systems and develop standard information systems to meet common functional requirements. In the shorter term, CIM is intended to reduce and eliminate information systems that perform the same functions.

To achieve these goals, CIM has the following three principles that guide its efforts:

- The customer (the function with business process authority and performance accountability) defines systems requirements, manages implementation, and measures results. The information technology organization becomes a fee-for-service staff.
- The business process must be simplified before it is computerized. Effectiveness is gained and cost is reduced by changing how people work. Technology should be applied only after it is determined that organizations can implement the changes.
- Organizations learn best by experiencing frequent success. DOD said that, to implement the CIM program successfully, it created a Business Process Improvement Program to encourage a consistent application of process improvement principles across its services and agencies.

The CIM initiative has a central fund of \$112 million for fiscal year 1993 to support functional process improvement efforts throughout DOD. For DOD transportation, CIM is sponsoring a process model in coordination with the U.S. Transportation Command. To date, the U.S. Transportation Command has generated Phase I and Phase II modeling workshops with groups composed of DOD organization functionals, who are the intended users and managers of the system.

In November 1992, the Defense Information Service Agency became the central manager of the defense information systems infrastructure. The infrastructure is defined as all DOD communications support networks requiring systems integration managed under the CIM initiative. Central management encompasses (1) implementation of information system security; (2) development, specification, certification, and enforcement of information technology standards; (3) network management, engineering, design, and control of long haul and regional communications; (4) management and work load control of data processing instruments; (5) central design activities for support systems activities; and (6) acquisition of information technology components and services that require integration.

Comments From the Department of Defense

Note: GAO comment supplementing those in the report text appears at the end of this appendix.



OFFICE OF THE UNDER SECRETARY OF DEFENSE
WASHINGTON, DC 20301

October 1, 1993

ACQUISITION
(L/TP)

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "DEFENSE TRANSPORTATION: Commercial Practices Offer Improvement Opportunities," dated August 9, 1993 (GAO Code 398130), OSD Case 9456. The DoD generally concurs with the report.

The DoD agrees that its carrier base is too large and that measures should be taken to limit the base to a pool of quality carriers. Efforts are underway to refine the carrier qualification and performance programs and improve the quality of the carriers participating in DoD traffic. Since its formal inception in 1990, the Carrier Qualification Program has already reduced the carrier base by 53 percent.

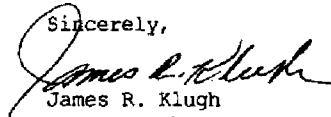
The Department also agrees to the use of benchmarking and outsourcing whenever possible. The DoD visited commercial shippers to exchange ideas and discuss opportunities to improve business practices.

While various initiatives are planned and underway, resource limitations facing the Department must also be recognized. The DoD must give priority to in-depth evaluations of those carriers that most impact the safety and security of DoD cargo and passengers and the morale and welfare of the troops. Additionally, unlike commercial shippers, the DoD is constrained by requirements to respond to mobilization and contingencies in support of national policies. Within those limitations, the DoD is amenable to using commercial practices whenever practicable.

Appendix II
Comments From the Department of Defense

The detailed DoD comments addressing the report findings and recommendations are provided in the enclosure. The DoD appreciates the opportunity to comment on the GAO draft report.

Sincerely,



James R. Klugh
Deputy Under Secretary of Defense
(Logistics)

Enclosure

GAO DRAFT REPORT--DATED AUGUST 9, 1993
(GAO CODE 398130) OSD CASE 9456

"DEFENSE TRANSPORTATION: COMMERCIAL PRACTICES
OFFER IMPROVEMENT OPPORTUNITIES"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

- o **FINDING A: Defense Transportation.** The GAO noted that, in February 1992, the DoD established the U.S. Transportation Command as the single manager of transportation for wartime and peacetime. The GAO pointed out that the Military Traffic Management Command, a component of the Transportation Command, is primarily responsible for the management of the DoD domestic motor freight transportation. The GAO referenced a prior report (OSD Case 8913), in which it had identified deficiencies in managing defense transportation resulting in (1) excessive freight losses, (2) a carrier performance program that allows carriers to exceed loss and damage limits without penalty, and (3) the lack of coordination among the services--contributing to ineffective oversight programs. The GAO noted that, in commenting on those findings, the DoD asserted that the large number of carriers and shipments it handles contributed to the DoD inability to assess the performance of every carrier and cited the need for an overhaul of the carrier performance program. (p. 1, pp. 7-10/GAO Draft Report)

DoD RESPONSE: Concur. The DoD is taking action to correct the deficiencies identified in OSD Case 8913. Specific DoD actions are discussed in the DoD response to Finding D regarding number of carriers, and the DoD response to Finding G regarding the carrier performance program.

- o **FINDING B: Top Management Commitment.** The GAO observed that many corporate transportation managers define the transportation function as an integral part of the effort to produce quality products or services and that transportation goals should be consistent with corporate goals and objectives. The GAO concluded that transportation is important in the process, since the cost of transporting

Now on pp. 2, 8-11.

Appendix II
Comments From the Department of Defense

Now on pp. 3 and 12.

ENCLOSURE
supplies or shipping goods to market can mean the difference between success or failure. (p. 2, pp. 13-14/GAO Draft Report)

DOD RESPONSE: Concur. The DoD transportation goals and quality performance are consistent with the DoD worldwide mission requirements. The Department of Defense recognizes the significant impact transportation has on its worldwide mission. While commercial shippers equate transportation problems with product failure in a particular market, the DoD equates such problems with situations that could result in a lack of preparedness, and inability to meet mobility requirements.

- o **FINDING C: Integration of Transportation Into Logistics Chain.** The GAO noted that, according to many commercial shippers, to maximize efficiencies transportation functions need to be integrated with the total logistics chain (i.e., from source to customer). The GAO concluded that transportation should not be considered a discrete, functional activity. The GAO further concluded that integration of the transportation activities enables the development of consistent purchasing, inventory control, and transportation strategies supporting multiple divisions. The GAO also concluded that, in addition, integration aids in enhancing communication between order processing, inventory management, and manufacturing--for better forecasting of shipments. (p. 2, pp. 14-15/GAO Draft Report)

Now on pp. 3, 12-13.

DOD RESPONSE: Concur. The DoD recognizes the importance of integrating transportation into the logistics chain. The DoD has organized agencies, such as the Defense Logistics Agency and the Strategic Logistics Agency, which address transportation issues and their impact on the entire logistics system. In addition, the DoD has organized the Joint Logistics System Center which will interface with the Joint Transportation Corporate Information Center to manage and integrate transportation systems and distribution and logistics automated systems. At the Service level, transportation functions have been integrated with the Logistics Directorates for some time. As a result, the transportation functional area is virtually co-located with the supply, maintenance, and purchasing functions, allowing for interchange of information and resulting in consistent efforts.

- o **FINDING D: Using a Smaller Number of Carriers Achieves Quality and Cost Benefits.** The GAO found that, in the last

several years, many commercial shippers have reduced the number of carriers. The GAO noted that the reductions are in response to new freedoms in negotiating tailored services with carriers. According to the GAO, shippers are establishing "core carrier" or "preferred carrier" bases in an effort to reduce costs while, at the same time, improving service. The GAO concluded that carrier reduction activities have (1) improved carrier performance programs and shipper monitoring efforts and (2) provided the stability and leverage needed for better carrier relations.

- Focus Is On Quality--The GAO explained that commercial shippers' carrier performance programs involve a small number of high-performing carriers instead of all carriers used. The GAO found that carriers are selected and evaluated on quality factors and not just price--and many commercial shippers (1) require that carriers meet on-time delivery percentages of 95 percent or better, (2) expect no freight loss and damage, and (3) accurate computations of bills. The GAO noted that such measures form the basis of weighted carrier performance ratings, which are used to evaluate individual carrier performance and reward top-performing carriers.
- Carrier Performance Data Is Supplied by Carriers--The GAO found that some commercial shippers use data on transit time supplied by the carriers to monitor performance. The GAO explained that shippers periodically verify the quality of the data received from carriers by sampling shipments and meet to discuss data inconsistencies.
- On-Site Inspections Support Carrier Qualification Efforts--The GAO found that an important part of a shipper's qualification efforts involves the use of on-site inspections, which form the basis of measures used in rating carrier performance and qualification.
- Shippers Are Using Contractual Arrangements to Gain Stability and Leverage. The GAO found commercial shippers are simplifying the carrier selection process through the use of contractual arrangements that encourage shippers and carriers to pool resources needed to generate cost efficiencies. The GAO observed that, when the number of carriers is lower, larger shares of volume can be placed with remaining high-quality carriers--thus, commercial shippers can achieve the leverage needed to make substantive improvements in service and sharp reductions in transportation costs. (p. 2, pp. 15-22/GAO Draft Report)

Now on pp. 3, 13-17.

Appendix II
Comments From the Department of Defense

DOD RESPONSE: Concur. The DoD agrees that the key to better service is the use of highly qualified and performing carriers. Currently that is being done in a variety of ways. The philosophy was manifested in the reorganization of the Military Traffic Management Command, effective in February 1993.

For additional information on carrier performance, qualification and on-site inspections see DoD response to Finding G.

FINDING E: Information Technology Aids in Transportation Decision Making. The GAO found that commercial shippers identified information technology as fundamental in managing transportation activities. The GAO concluded that automating functions--such as pre-auditing, rating, and shipment tracking--improves operations and reduces costs.

The GAO emphasized that an important application of information technology is the introduction of electronic data interchange. The GAO concluded that, conceptually, electronic data interchange promotes efficiencies through (1) paperwork reduction, (2) working capital reduction, and (3) error elimination. The GAO found that commercial shippers are incorporating or actively using some applications of electronic data interchange in transportation activities--but are not using electronic data interchange for every possible application or with all carriers. The GAO pointed out that, in some companies, benefits to shippers are generated only if a carrier offers incentives for paying them quickly, while others find that carriers vary in the level of technology or financial investment. The GAO also pointed out that, for many smaller carriers, investments in electronic data interchange from a financial or technological aspect is not feasible. The GAO further concluded that electronic data interchange had yet to reach its full potential--with only 25,000 to 30,000 U.S. firms having electronic links with each other. (p. 2, pp. 22-24/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD agrees that information technology is fundamental in managing transportation activities. DoD does not, however, agree that the size of a carrier or incentives limit the use of electronic data interchange. Electronic data interchange capability is rapidly becoming essential to doing business in the distribution arena. The DoD has electronic data interchange systems in place for filing tenders, ordering material from vendors, for making bookings with ocean

Now on pp. 3, 16-17.

See comment 1.

carriers, and is in the process of implementing electronic data interchange for the documentation, billing, payment and auditing for all DoD shipments. Experience has shown that small carriers can easily function in an electronic data interchange environment by using third-party firms. The DoD is making electronic data interchange a mandatory requirement for doing business with the Department.

- o **FINDING F: Outsourcing and Benchmarking Can Reduce Costs and Improve Service.** The GAO reported that commercial shippers are looking to contract out, or outsource, transportation functions to save money. The GAO explained that outsourced functions have varied from freight bill payments and carrier performance analysis to the entire logistics operation. According to the GAO, benefits from outsourcing include (1) savings in labor, employee benefits, and fixed asset investment, (2) the ability to keep abreast with rapidly changing technology, (3) a dedicated focus to solving customer problems, and (4) the opportunity to gain from scale economies and from not having to accommodate for volume fluctuations. The GAO pointed out many experts predict that U.S. manufacturers, under increased pressure to reduce costs and keep inventories to a minimum, will begin to contract out more logistics functions--including transportation. The GAO also found that commercial shippers are using (1) benchmarking techniques to improve transportation practices and (2) third-party logistics firms for performing particular transportation functions. (p. 2, pp. 24-25/GAO Draft Report)

DoD RESPONSE: Partially concur. The DoD agrees that benchmarking and outsourcing should be evaluated and used whenever possible. It should be noted, however, that such actions are limited by the need to maintain a combat support preparedness posture. While both benchmarking and outsourcing can be beneficial, outsourcing functions such as freight bill payment and carrier analysis require further review.

More specifically, there are many more tasks associated with freight bill payment than just paying the bills. The Defense Finance and Accounting Service provides multi-faceted bill payment functions which include processing bills for payment, providing voucher examination, accounting, disbursing, claims adjudication, micro-filming, and file maintenance services. Because of those additional services, the cost to process a government bill of lading is about \$7. The DoD questions the dollar amounts cited by the GAO. It does not appear that third-party firms could provide all of the services cited for commercial processing

Now on pp. 3-4, 17-18.

of DoD freight bills, for the amounts indicated. The firms also lack the on-line capability to update the Transportation Disbursing and Reporting System. In addition, only an authorized Government disbursing office can perform the disbursing function. The maintenance of a carrier performance database seems better served by a DoD system. Outsourcing that task has been considered, but due to the large carrier base, has been deemed cost-prohibitive. The Continental U.S. Freight Management system will serve as a carrier performance database for the DoD. Currently, in-transit visibility and transit-time data from commercial carriers is being collected in the Continental U.S. Freight Management System.

The DoD plans on taking advantage of benchmarking and outsourcing whenever they are beneficial. Benchmarking and outsourcing goals can often be met by meeting with industry on an as-needed basis.

- o **FINDING G: Quality Carrier Management Is Constrained Under Present Operating Conditions.** The GAO determined that improving DoD transportation management is constrained by existing management practices, including (1) infrequent on-site inspections to verify a carrier's qualification, (2) the use of lenient carrier performance standards as compared with those of the commercial sector, and (3) a lack of enforcement and monitoring compliance with existing standards. The GAO explained, for example, that in FY 1992, the DoD was responsible for monitoring over 1,800 carriers (half of which moved less than six shipments), which greatly hindered the DoD efforts to ensure reliable and high-quality transportation. The GAO observed, however, that the DoD is attempting to improve its carrier management practices by creating programs to ensure the Department is procuring best value transportation services and expanding a program to guarantee freight to carriers in exchange for reduced rates.

- **Carriers Are Qualified Without on-Site Inspections**
The GAO explained that the Carrier Qualification Program is designed to ensure that the DoD transportation needs are met by safe, secure, reliable, and quality carriers. The GAO found that carriers must meet certain qualification standards, which include (1) a performance bond or letter from a surety company, (2) a minimum of \$150,000 of cargo insurance and \$750,000 of public liability insurance, (3) a good safety record, (4) appropriate equipment, and (5) appropriately trained personnel. The GAO also observed that one of the important ways commercial shippers verify a carrier's qualification is to visit

Appendix II
Comments From the Department of Defense

the terminal. The GAO reported that such inspections have uncovered unreliable and unsatisfactory carriers. The GAO noted that, since as many as 1,147 carriers are awaiting qualification, DoD shippers remain vulnerable to carriers that may not satisfy qualification standards.

- Carrier Performance Standards Are Lenient--The GAO reported that the Carrier Performance Program is designed to ensure that the DoD transportation needs are met by the best available commercial carriers. The GAO found that the Defense Traffic Management Regulation specifies (1) key elements for monitoring carrier performance, (2) minimum levels of satisfactory performance, such as loss and damage limits, transit times, and overcharge limits, and (3) procedures to disqualify any carrier that fails to maintain a minimum level of satisfactory performance. The GAO concluded, however, that the DoD performance standards are lenient compared with those of commercial shippers. The GAO further concluded that such lenient standards send a message of tolerance for loss and damage and slow service that is unacceptable to quality shippers in the commercial sector and weaken incentives for carriers to improve service and for shippers to monitor a carrier's performance aggressively.

- Carrier Performance Monitoring Is Limited--The GAO found that the DoD used over 1,800 carriers in FY 1992--in large part to fulfill socio-economic responsibilities to diversify the carrier base and give qualified carriers, including small and disadvantaged companies, an equal opportunity to participate in DoD business. The GAO concluded that, as a result, the DoD has had to be selective in its carrier performance monitoring activities. The GAO reported that, according to the Military Traffic Management Command, it does not have the resources to conduct an in-depth analysis of every carrier's performance--thus, the evaluations are being conducted on the exceptionally poor-performing carriers.

- The DoD Is Trying to Improve Carrier Management--The GAO explained that the Military Traffic Management Command had proposed creating a "best value" program to define and quantify quality-oriented criteria to ensure that the DoD is procuring transportation services that result in the overall best value for shippers. The DoD explained that the DoD plans to select a few performance measures, such as claims-to-

Appendix II
Comments From the Department of Defense

revenue ratios, on-time pickup and delivery, and billing accuracy--and then integrate those measures into one overall performance rate (which would be compared to the carrier's charges) to help managers select high-performing carriers. The GAO noted, however, that the program had not been implemented because reliable data on the measures was not available. The GAO indicated that the DoD also plans to continue to expand the guaranteed traffic program, which was designed to award carriers a substantial volume of freight in exchange for reduced shipping rates. (pp. 2-3, pp. 27-33/GAO Draft Report)

Now on pp. 3-4, 19-23.

DOD RESPONSE: Concur. Carrier performance monitoring within the DoD is selective, due to manpower and other resource limitations. The DoD uses its resources to monitor certain carrier performance and qualification standards that most efficiently guarantee the safety and security of the most sensitive and hazardous shipments and the safety, morale, and welfare of troops. One new approach the DoD has used is the establishment of "user groups" to facilitate the performance data collection process for the purpose of carrier performance evaluation. Those groups are composed of various service representatives for a designated region who assess carrier performance of guaranteed traffic carriers who participate in movements in their areas. User groups ensure consistent performance data and consistent DoD actions.

The Military Traffic Management Command performs on-site inspections of carriers transporting munitions and other hazardous cargoes, passenger transportation companies, household goods warehouses, and general commodity guaranteed traffic carriers prior to the award of traffic. Since inspections are labor and dollar-intensive, the DoD must prioritize their use. There are provisions in the Carrier Qualification Program that allow for expanded use of on-site inspections, as necessary.

The performance standards utilized by the DoD are under review. On-time performance standards for guaranteed traffic carriers are 95 percent, and the compliance standard for carriers providing transportation protective services is 100 percent compliance. While the DoD agrees that standards such as on-time performance are important, there are other aspects of performance which must be taken into account. The DoD is in the process of developing a best value initiative which will aid in the procurement of quality transportation services to meet the DoD requirements. Performance elements to be examined include claims ratios, on-time pickup and delivery, and billing accuracy. Those

elements will be weighted and integrated into a performance measure that will, in essence, reward quality carriers and penalize those carriers who do not perform. Both the best value and guaranteed traffic initiatives (which awards large repetitive shipments of freight to qualified carriers in exchange for reduced rates) provide incentives to quality carriers.

- o **FINDING E: Current Automation Efforts Do Not Solve Transportation Management Problems.** The GAO observed that, as in the commercial sector, a key to solving transportation management problems involves the development of information technology. The GAO noted that the Military Traffic Management Command automation efforts have focused on the development of the Continental United States Freight Management System. Although the system will centralize transportation information, the GAO contended that many delays in System development have caused the Services and commands to develop independent automated transportation systems that duplicate many of the intended functions. The GAO did acknowledge, however, that the DoD recognizes centralization and standardization of automated transportation systems are needed.

The GAO reported that, although the Military Traffic Management Command began developing the system in the early 1980s, it has undergone several modifications since then and is scheduled for full implementation in 1996. The GAO explained that the automated freight management database--with more flexibility and up-to-date information than the DoD current data base--is being maintained at the Military Traffic Management Command headquarters and it will provide the capability for (1) automated rate evaluations, (2) low cost carrier selection, and (3) electronic exchange of transportation documentation. The GAO further explained that the system will also be capable of exchanging shipment data with other DoD information systems and payment data with the Defense Finance and Accounting Service. The GAO concluded, however, that the system will face some implementation problems, because the system traffic management selection criteria is not focused primarily on selecting quality carriers.

The GAO also found that, while waiting for the Continental United States Freight Management System development and implementation, the Military Services and the Defense Logistics Agency have initiated independent transportation systems development efforts. The GAO indicated that the systems, which are either currently operational or are under development, include (1) the Defense Logistics Agency

Transportation Automated Management System and Warehousing and Shipping Procedures, (2) the Air Force Cargo Movements Operation System, (3) the Marine Corps Transportation Management System, and (4) the Army Standard Depot System. The GAO concluded that the Military Services and the Defense Logistics Agency created the systems with little coordination or cooperation. The GAO further concluded the systems perform or will perform functions that are similar to or identical to those performed by the Continental United States Freight Management System. The GAO reported the DoD acknowledged that potential economies in transportation systems development were not realized and that duplicative efforts represent sunk costs, which cannot be recouped. The GAO noted that, according to DoD estimates, the development costs of the various automated systems amounted to \$42 million (as of March 1992)--and that additional development costs will be at least \$68.5 million, excluding the costs to operate and maintain the systems once they are developed. The GAO indicated that the DoD recognizes the need to eliminate redundant systems and encourage standardization. (p. 3, pp. 33-39/GAO Draft Report)

Now on pp. 4, 23-26.

DOD RESPONSE: Concur. The DoD has chartered and is establishing a Joint Transportation Corporate Information Management Center to manage all of the DoD transportation system efforts. The center will be the focal point for system coordination and management in an effort to rid the DoD of duplicative systems and integrate existing useful systems.

While the DoD recognizes the need for a centralized, standardized, automated transportation system, it should be noted that other systems were not pursued, due to delays in the development of the Continental U.S. Freight Management System. Such systems were developed to meet service specific needs. Additionally, the Continental U.S. Freight Management System encompasses many more functions than the base level automated systems. The System is an open system that will interface with the base level systems.

With regard to system redundancy, the Joint Transportation Corporate Information Management Center initiatives will address those issues.

- o **FINDING I: The DoD Has Additional Opportunities to Lower Transportation Costs.** The GAO reported that, in addition to reducing the number of carriers and expanding automation efforts, implementing practices similar to those used by the commercial sector could assist the DoD in its efforts to reduce costs and generate efficiencies in transportation.

Appendix II
Comments From the Department of Defense

The GAO pointed out that benchmarking--a technique used to identify and study best practices and support decisions to contract out certain functions to third parties--might help the DoD improve transportation management. The GAO observed a number of firms provide third-party logistics transportation services that are competitive to Government operations.

The GAO obtained proposals from two firms that perform freight payment services--freight bill processing, pre-auditing, verifying, and generating management reports with payment. According to the GAO, one firm proposed to perform the services for the DoD at a cost of from \$0.75 to \$0.95 per Government bill of lading--depending on whether freight bills are transmitted by (1) paper, (2) electronic data interchange, or (3) magnetic tape. The GAO pointed out that, on the other hand, the unit cost the Defense Finance and Accounting Service is reporting for freight payment services, minus pre-auditing, is estimated at \$5.70 per bill. The GAO noted that the amount likely understates the cost of freight services, because it includes transactions, such as paying travel and meal tickets, which are acknowledged by finance officials as costing less to process than the payment of freight bills. In addition, the GAO pointed out that the current cost for pre-auditing services, which are performed for the Defense Finance and Accounting Service by contractors, is \$0.83 per freight bill. The GAO concluded that consideration of third-party payment operations could potentially save the DoD \$5.58 to \$5.78 per freight bill. The GAO concluded that there is no significant legal impediment to the DoD considering such an alternative.

The GAO explained that another third-party logistics firm provides an automated carrier management system for three levels. According to the GAO, level 1 collects data on shipment status for tracking and carrier performance, level 2 concentrates on electronic tendering and dispatching, carrier selection options, traffic patterns, and cost reporting, and level 3 gives the shipper information to make decisions on the carrier's optimal traffic patterns to keep freight moving without interruption. The GAO found that the charges for the three levels of service are \$2.50, \$4.00, and \$7.00 per shipment, respectively. According to the GAO, the firm projected savings of 5 to 10 percent resulting from employing its services.

The GAO reported that the Navy consolidates freight bills and creates only one Government bill of lading every 2 weeks for truckload and exclusive-use guaranteed traffic carriers. The GAO pointed out that process reduces the number of bills

Appendix II
Comments From the Department of Defense

created--thus, reducing the risk of lost and stolen bills and the possibility of duplicate payments. The GAO concluded that, although such practice is not feasible in most situations, it could save money and time for guaranteed traffic shipments of the same commodity from the same origin to the same destination by the same carrier using the same services over the specified period of time. The GAO found that the Navy obtained a waiver from the General Services Administration, since the consolidation is a departure from normal procedures. (p. 3, pp. 39-42/GAO Draft Report)

Now on pp. 4-5, 26-28.

DOD RESPONSE: Partially concur. The DoD addresses the use of third party firms for payment of freight bills in response to Finding F. The DoD does agree with the advantages to be gained by consolidating freight bills and using a single bill of lading. The Military Traffic Management Command received approval from the General Services Administration for all the Services and DoD agencies to use that method on guaranteed traffic shipments of like commodities. It should, however, be noted that as automation decreases the costs of producing Government bills of lading, the cost advantages to be gained from consolidating freight bills decreases.

* * * * *

RECOMMENDATIONS

- o **RECOMMENDATION 1:** The GAO recommended that the Under Secretary of Defense for Acquisition limit the number of carriers used to those high-performing carriers (1) to promote stability, (2) to enhance leverage, and (3) to lessen its administrative burden. (p. 43/GAO Draft Report)

Now on p. 29.

DOD RESPONSE: Concur. The Department of Defense agrees that the number of carriers used should be limited to promote stability, enhance leverage, and lessen administrative burden. That is being accomplished in a number of ways. The Carrier Qualification Program, formally established in 1990, has already reduced the population of DoD carriers by 53 percent by requiring adherence to strict financial requirements, requiring performance bonds, and examining management structure, equipment availability, operating authority and insurance carried, as set forth in 32 Code of Federal Regulations, Part 619. That program also purges any carrier that has not done business with the DoD

Appendix II
Comments From the Department of Defense

within the last year. The Carrier Qualification Program also requires that carriers that transport the most hazardous commodities must pass on-site inspections before being approved. Additionally, the Carrier Performance Program limits the number of DoD carriers by placing carriers that do not meet carrier performance standards in a nonuse status. Carriers placed in nonuse must be requalified under the Carrier Qualification Program before being reinstated to do business with the DoD. Another program that promotes the use of a smaller number of carriers is Guaranteed Traffic, which offers large volumes of traffic over an extended period of time to a few carriers in exchange for discounted rates. The Office of the Under Secretary of Defense for Acquisition will ensure that the DoD continues to use only high-performing carriers whenever possible.

However, due to the large and varied missions of the DoD, the Department must maintain a sufficient support base of carriers, even though some with specialized equipment are only rarely used. The DoD must be prepared for surge requirements on a no-notice basis and must have the capability to respond based on national strategies and contingency plans. In addition, the DoD is also limited by the Armed Services Procurement Act (10 United States Code 2304) which requires the DoD to obtain "full and open competition from all responsible sources." The DoD also works with the Small Business Administration and minority carriers to foster use of a socioeconomically diverse population of carriers.

- o **RECOMMENDATION 2:** The GAO recommended that the Under Secretary of Defense for Acquisition strengthen carrier performance standards, such as requiring 95 percent on-time delivery, rather than 85 percent currently in the Defense Traffic Management Regulation. (pp. 43-44/GAO Draft Report)

DOD RESPONSE: Concur. The Department of Defense concurs with the strengthening of performance standards. The Military Traffic Management Command is currently analyzing performance criteria for all modes of transportation to bring standardization and consistency to the carrier performance programs. Results should be available by the first quarter of FY 1995. Throughout that process, the Military Traffic Management Command will also validate current standards to determine if changes are necessary. The Office of the Under Secretary of Defense for Acquisition will ensure that identified needed changes are made.

Additionally, the Military Traffic Management Command

Now on p. 29.

Appendix II
Comments From the Department of Defense

currently, has a formal program in place for monitoring freight carriers' performance. The program establishes standards and procedures for shippers, the Military Traffic Management Command area commands, and Headquarters Military Traffic Management Command, to follow if carriers fail to comply. If necessary, the Military Traffic Management Command conducts Carrier Review Boards, administrative proceedings to review carriers' performance history, and takes necessary remedial action to protect the interests of the Government. Freight Carrier performance program procedures are outlined in Army Regulation 55-355 and the Military Traffic Management Command Regulation 15-1.

Currently, Guaranteed Traffic carriers are subject to a 95 percent on-time standard. Carriers that provide transportation protective service shipments are subject to a 100 percent compliance standard. There are many other aspects of a carrier's performance that also must be monitored. For example, the Military Traffic Management Command is working a Best Value initiative which will evaluate other aspects of carrier performance, including loss and damage ratios, billing accuracy as well as on-time pickup and delivery.

- o **RECOMMENDATION 3:** The GAO recommended that the Under Secretary of Defense for Acquisition modify the Carrier Qualification Program regulation to give the DoD the right to permit on-site inspections before qualifying carriers and to conduct follow-up inspections after the carrier is qualified to ensure compliance with the DoD standards. (pp. 43-44/GAO Draft Report)

DoD RESPONSE: Partially concur. While the DoD recognizes the value of on-site inspections, due to resource limitations, the highest priority for inspections are operations where safety and security are of greatest concern. The Military Traffic Management Command conducts on-site inspections and follow-up inspections of carriers that transport munitions and passengers, conducts pre-award inspections of carriers for Guaranteed Traffic, and periodically inspects household goods warehouses. Those inspections are conducted to maintain safety, security of DoD cargoes, and the welfare of troops. The Carrier Qualification Program includes provisions (as set forth in 32 Code of Federal Regulations Part 619) allowing the DoD to perform on-site inspections on carriers as necessary. The Military Traffic Management Command is currently conducting inspections of motor carriers as a part of the qualification process and is taking steps to inspect each new carrier prior to approval. The Office of the Under Secretary of

Now on p. 29.

Appendix II
Comments From the Department of Defense

Defense for Acquisition will ensure that on-site inspections continue within resource limitations.

- o **RECOMMENDATION 4:** The GAO recommended that the Under Secretary of Defense for Acquisition consider preparing a single Government bill of lading to cover similar and repetitive (nonhazardous) shipments during a specified period. The GAO noted that, in instances where it is advantageous, the DoD should seek a waiver from the General Services Administration to cover multiple daily shipments under one bill of lading--but only if (1) paper work will be reduced, (2) a complete audit trail will be maintained, and (3) follow-on shipments will be nearly identical. (pp. 43-44/GAO Draft Report)

Now on p. 29.

DOD RESPONSE: Concur. The Military Traffic Management Command acquired a waiver from the General Services Administration in 1988 which allows the use of a single bill of lading. The waiver allows for single bills of lading to be used by all the Services and Defense Logistics Agency for large volumes of similar, repetitive non-hazardous Guaranteed Traffic movements. The Under Secretary of Defense for Acquisition will ensure that the Military Traffic Management Command will reiterate the waiver policy to the shipper services before the end of the first quarter of FY 1994. Ultimately, the Continental U.S. Freight Management System, electronic data interchange, and electronic funds transfer will eliminate the paper Government bills of lading.

- o **RECOMMENDATION 5:** The GAO recommended that the Under Secretary of Defense for Acquisition improve the collection of carrier performance data to monitor and evaluate carriers more effectively--by (1) requiring major carriers to provide the data needed for performance analysis and verifying the data--utilizing third-party sources that specialize in establishing carrier performance data bases and (2) providing oversight for the function--or ensuring that a DoD standard transportation system incorporates the collection of all relevant carrier performance data. (pp. 43-44/GAO Draft Report)

Now on pp. 29-30.

DOD RESPONSE: Concur. The Under Secretary of Defense will ensure that the collection and monitoring of performance data is improved. The Continental U.S. Freight Management System captures refusal data and the program management office is working with commercial carriers to obtain in-transit visibility and transit-time data directly from commercial carriers. A large number of commercial carriers

Appendix II
Comments From the Department of Defense

are using an established electronic data interchange transaction set to provide shipment status data. The Continental U.S. Freight Management Office will be testing the concept with the Air Force by the end of FY 1994. The DoD has also established "Users Groups," which are multi-service regional groups that manage Guaranteed Traffic carrier performance data and ensure consistent DoD performance actions are taken in response to that data.

The DoD has explored the possibility of using a third party (Westinghouse) to manage a carrier performance database. Due to the size of the carrier population necessary to support the DoD, in both peacetime and time of contingency, it is cost-prohibitive to have a commercial source manage such a vast amount of data. The Continental U.S. Freight Management System will interface traffic management systems with other DoD automated systems which will provide a conduit for collecting and utilizing such data. Interface actions should begin by second quarter FY 1994.

- o **RECOMMENDATION 6:** The GAO recommended that the Comptroller, DoD, fund the Joint Transportation Corporate Information Management Center to control development of current and future automated transportation systems. (p. 45/GAO Draft Report)

DoD RESPONSE: Partially concur. The DoD agrees that the Joint Transportation Corporate Information Management Center is important to the future of fully integrated Defense automated systems. Currently, however, the DoD is unable to confirm that funds will be provided to the Corporate Information Management Center effort. The Office of the Under Secretary of Defense for Acquisition has made the effort a high-priority program for FY 1994 and the funding is being pursued through appropriate programming and budget channels. The Joint Transportation Corporate Information Management Center charter was approved on August 11, 1993. The U.S. Transportation Command will facilitate the use of corporate business process improvements and the application of automated information systems and related technologies to maximize operational effectiveness. The Center has received \$2.3 million dollars for partial initial startup costs and additional funding has been requested for other startup and operational costs.

- o **RECOMMENDATION 7:** The GAO recommended that the Under Secretary of Defense for Acquisition create a group composed of corporate shippers and other transportation experts to assist the Under Secretary of Defense for Acquisition, the

Now on p. 30.

Appendix II
Comments From the Department of Defense

Now on p. 30.

Commander, U.S. Transportation Command, and the Commander, Military Traffic Management Command, in evaluating opportunities to benchmark and re-engineer its transportation practices--and to coordinate its efforts with other DoD supply initiatives to foster global logistics solutions. (p. 45/GAO Draft Report)

DoD RESPONSE: Concur. The DoD agrees to evaluate benchmarking and outsourcing whenever possible to determine if it is advantageous. In addition to working closely with the National Defense Transportation Association, DoD personnel regularly attend industry conferences and meetings to ensure improved working relationships and closer association with its partners in the commercial transportation industry.

One of the initiatives of the Military Traffic Management Command is the creation of Industry Partnership Councils, the purpose of which is to provide a medium for free and open discussion between the DoD and its carriers to exchange ideas and discuss opportunities to improve business practices. Two such councils--one with household goods carriers and one with munitions carriers--have been established and held their first meetings in August 1993. The councils are informal in nature and are limited in size in order to be conducive to discussion and decision making. Additionally, the DoD intends to increase participation with other elements of the transportation industry. The DoD recognizes the benefits to be derived from benchmarking and has already visited several commercial companies and Government agencies, (i.e. Corning, Monsanto, the Department of Energy and the General Services Administration) to evaluate their qualification and evaluation programs. The DoD intends to continue those efforts to improve traffic management activities.

The following is GAO's comment on DOD's letter dated October 1, 1993.

GAO Comment

1. DOD does not agree that the size of a carrier or incentives limit the use of EDI. We did not state that EDI was limited by the size of a carrier. Rather, we pointed out that some companies were slower to accept EDI because it forced them to make fundamental changes in their business processes. In addition, one company told us that it expected something in return for the ability to pay carriers faster through EDI.

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