

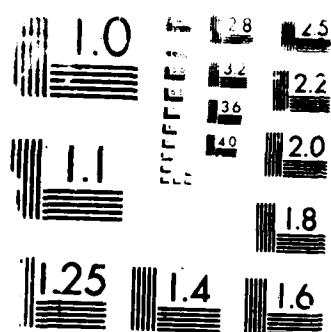
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PROCEDURES FOR AND ANALYSIS OF
LOST AND DAMAGED CARGO
WITHIN THE DEPARTMENT OF DEFENSE

by

Joseph T. Lapp

December 1987

Thesis Advisor:

Dan C. Boger

Approved for public release; distribution is unlimited

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Procedures for and Analysis of
Lost and Damaged Cargo
within the Department of Defense

by

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Lieutenant, United States Navy
B.A., Fairfield University, 1972

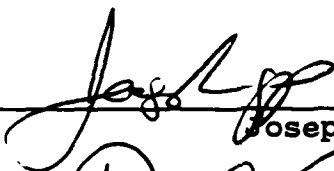
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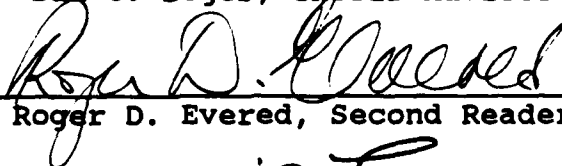


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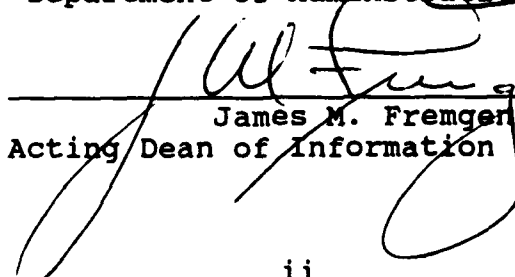
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ABSTRACT

DOD moves a tremendous amount of cargo each year via commercial carriers--rail, water, truck, and air. In the process, a portion of the cargo is lost or damaged. This thesis examines the legal basis for transportation claims, and the DOD system used to report and account for transportation claims. The thesis contains a statistical analysis of the number and dollar value of DOD claims submitted by each service. The analysis consisted of an interservice comparison and a comparison with commercial carriers. The results showed there is a significant difference among the services in how lost and damaged cargo is managed. Additional research is required to fully explain these differences, especially in the area of ocean carrier transportation.

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TABLE OF CONTENTS

I.	INTRODUCTION -----	1
	A. BACKGROUND -----	1
	B. RESEARCH QUESTIONS -----	3
	C. METHODOLOGY -----	4
	D. SCOPE AND LIMITATIONS -----	4
II.	BACKGROUND -----	6
	A. GENERAL DISCUSSION -----	6
	B. COMMON LAW -----	7
	C. BILL OF LADING -----	10
	D. STATUTORY -----	13
	E. MEASURING DAMAGES -----	15
	F. EFFECTS OF RAILROAD AND TRUCKING DEREGULATION -----	16
	G. AIR FREIGHT TRANSPORTATION AND DEREGULATION -----	17
	H. WATER CARRIERS -----	19
	I. GOVERNMENT TRANSPORTATION CLAIMS -----	26
	J. SUMMARY -----	27
III.	DEPARTMENT OF DEFENSE LOSS AND DAMAGE CLAIM SYSTEM -----	29
	A. INTRODUCTION -----	29
	B. CURRENT PROCEDURES -----	31
	C. PROBLEMS IN CURRENT PROCEDURES -----	40
	D. SUMMARY -----	50

IV.	METHODOLOGY AND DATA ANALYSIS -----	51
A.	INTRODUCTION -----	51
B.	INTERSERVICE COMPARISON -----	53
C.	DOD AND COMMERCIAL CARRIER COMPARISON -----	63
D.	SUMMARY -----	67
V.	RECOMMENDATIONS AND CONCLUSIONS -----	69
A.	INTRODUCTION -----	69
B.	RESEARCH QUESTIONS ONE AND TWO -----	69
C.	RESEARCH QUESTION THREE -----	72
D.	RESEARCH QUESTION FOUR -----	74
E.	RESEARCH QUESTION FIVE -----	75
	APPENDIX: LOSS AND DAMAGE DATA -----	78
	LIST OF REFERENCES -----	81
	INITIAL DISTRIBUTION LIST -----	85

I. INTRODUCTION

A. BACKGROUND

The United States commercial transportation industry moves a major portion of Department of Defense cargo. The use of the private carriers is necessary to maintain the base required to respond to emergency situations. In fiscal year 1986 domestic commercial carriers moved 11.4 billion ton miles of DOD cargo at a cost of \$659 million dollars [Ref. 1]. While in transit, cargo may become lost or damaged for many reasons. The responsibility for the discrepancy may lie with either the carrier or the shipper or both. It is unrealistic to expect discrepancy-free shipments. However, the Department of Defense should ensure the government receives fair and just compensation for the loss or damage.

The purpose of this thesis is to analyze the procedures used in reporting and settling lost and damaged cargo claims within the Department of Defense. The motive in studying this area is the suspicion that the Department of Defense is paying transportation charges for material which either never arrives or is damaged enroute. If the material is actually lost or damaged by the carrier, the consignee may not report the problem. If claims are not filed for these transportation discrepancies, the result is the loss of

material and transportation funds. A portion of DOD cargo is unique and not easily replaced or repaired. Therefore the loss or damage of such material could mean the loss of a critical mission capability for a ship or aircraft. Other problems are evident when discussing transportation discrepancies.

In some cases transportation claims are settled for a fraction of the original value. For example, a DOD audit report of 1984 showed MSCLANT in 1982 settled loss and damage claims originally valued at \$1.6 million for \$988,567 or 62% of the original claim amount [Ref. 2]. In fiscal year 1986 alone 4,011 claims valued at over 12 million dollars were filed for CONUS shipments of DOD cargo [Ref. 3].

Although the dollar value of these claims is significant, the larger issues may be released valuation rates and non-reporting of transportation discrepancies. In the first case the shipper pays a lower transportation charge in exchange for a lower liability coverage by the carrier. If under a released valuation rate a loss or damage occurs the shipper can file for an amount determined by the weight of the cargo instead of the actual repair or replacement cost. In many cases the DOD shipper has no option to choose full liability coverage since the carrier rates were negotiated to include a released valuation clause.

The second major issue is non-reporting of the transportation discrepancy as required by various joint services regulations. The problem of nonreporting is particularly difficult to quantify and Chapter III will attempt to provide alternative means of measurement. The liability aspects of lost and damaged cargo has changed over the last several/two years due primarily to transportation deregulation. Therefore, Chapter II will review the legal aspects of carrier liability including the peculiar aspects for military shipments.

B. RESEARCH QUESTIONS

The basic research questions under investigation include the following:

1. Do the transportation discrepancies reporting system and procedures adequately reflect the actual loss and damage picture within DOD?
2. Are lost and damaged claims filed in all cases when they should be? Is there confusion whether to file a Transportation Discrepancy Report (TDR) or a Report of Discrepancy (ROD)?
3. Is the information collected at Military Traffic Management Command (MTMC) and Navy Material Transportation Office (NAVMTO) used by the services to pinpoint problem areas in transportation and take corrective action?
4. How do the individual services compare to each other and to the private sector in filing for lost and damaged cargo?
5. What are the legal bases for filing the loss and damage claims?

C. METHODOLOGY

The methodology used in this study is an empirical analysis of the legal aspects, procedures, and reporting system used within DOD. Transportation discrepancy reports and data were collected from Military Traffic Management Command Headquarters (HQMTMC) and Western Area (MTMCWA), Military Sealift Command (MSC) and the Navy Material Transportation Office (NAVMTO) Norfolk. Numerous interviews were conducted with individuals both within and outside of DOD. Transportation associations provided detailed information on industry standards. A statistical analysis was used to compare individual services and DOD with the private sector.

D. SCOPE AND LIMITATIONS

The scope of this research includes loss and damage statistics for the last five years or more when available. This study addresses the commonality between the Transportation Discrepancy Report (TDR) and the Report of Discrepancy (ROD). The study provides a review of the legal aspects of carrier liability, the effects of deregulation, and the responsibilities of various activities within DOD.

There are number of limitations concerning the available data. First, information concerning ocean carriers is not readily available. Unlike the other modes of transportation, there are only a handful of U.S. ocean carriers still in service today. Therefore competition for

DOD cargo is intense and the ocean carriers are very reluctant to discuss the specifics on loss and damage claims. Additionally, trade associations for ocean carriers do not maintain this information. Secondly, the information collected from the various military activities may not be all inclusive. The perception is that many discrepancies are not reported for various reasons as will be discussed in Chapter III.

II. BACKGROUND

A. GENERAL DISCUSSION

In the continental United States during fiscal year 1986 DOD moved 2.3 million tons of freight by rail and 6.5 million tons by truck. The freight was segregated into 23,000 rail shipments and 1.1 million truck shipments at a cost of \$121 and \$440 million respectively [Ref. 1]. Also during fiscal year 1987 DOD filed 4011 claims lost or damaged cargo with commercial carriers valued at \$12 million [Ref. 3].

Respected claims managers in the commercial world believe the key to a good claims program is communication with top management in profit terms [Ref. 4:p. 40]. To understand the transportation claims picture the manager must first comprehend the complex legal issues. Only then can he assess the carrier's liability and determine the amount of damages. Since the companies that make up the bulk of the common carriers are better organized than most shippers, they have been particularly successful in lobbying for legislation favoring their interest.

With this frame of reference, one should start a review of how carrier liability is formed. There are six legal sources of carrier liability:

1. the contract of carriage to transport goods to their destination. The contract of carriage is embodied in

the bill of lading or, in the government's case, a government bill of lading.

2. common or case law normally found in the decisions of various federal courts.
3. federal and state statutes which may codify some common law.
4. the rules of liability contained in tariffs or schedules. By publishing tariffs, these rules are deemed part of the contract even though not specifically spelled out in the bill of lading. The shipper is presumed to know the rules exist and therefore agrees to them.
5. government regulation, if any.
6. international treaties concerning international transport. [Ref. 5:p 14]

This chapter provides a detailed review of the above legal aspects of loss and damage claims. The peculiar aspects of loss and damage as applied to the major transportation modes are addressed. Railroads, air cargo and trucking have very similar legal underpinnings. Water carrier liability on the other hand is based on an entirely different set of legal principles and therefore will be discussed separately. Also the particular aspects affecting government transportation claims are discussed.

B. COMMON LAW

According to Miller's Law of Freight Loss and Damage Claims

Basically, the common law is a mass of principles determined from innumerable judicial decisions, learned treatises, and even from common usage of peoples in daily life, tempered by common sense and interpreted in light of judicial concepts of fairness and public policy. [Ref. 5:p. 5]

Our common law was inherited from the English and includes many of the same rules governing common carriers. A common carrier is a company which in the normal course of business offers its transportation services openly to all takers. Common law makes the common carrier liable for the actual loss or damage unless it is clearly shown that the loss or damage occurred as the result of an:

1. Act or default of the shipper;
2. Act of God;
3. Act of a public enemy;
4. Act of a public authority;
5. The nature or inherent vice of the cargo. [Ref. 6]

Carriers include in the first of the above defenses improper packaging, packing, loading, or bracing. The carrier must prove the sole reason for the loss or damage was caused by the shipper's action and not the carrier's negligence. The burden of proof is on the carrier. If the carrier is found negligent in handling the material, he can be found liable even if the shipper's action contributed to the result. Three elements must be present before this defense can be used by a carrier: (1) the shipper performed the loading, (2) there was a defect in the loading, and (3) the defect was concealed from ordinary observation. [Ref. 5:pp 94-95; Ref. 7:para 2-14]

An Act of God is defined as an event not caused by an act of man or preventable by human skill or foresight [Ref.

6:p. 126]. This includes most unusual natural conditions such as lightning, earthquakes, and hurricanes. However strong winds, snow, or rain storms are not in the legal sense Acts of God. The carrier must prove all prudent steps were taken to avoid the Act of God.

Military forces of a country at war are public enemies and may relieve the carrier from liability for loss or damage. The carrier defense of an act of a public authority arises when the loss or damage was caused by the carrier following the orders of a government official. If, for example, cargo is lost or damaged because it was impounded as evidence in a police investigation, the carrier can seek relief from liability. As with any of the common law defenses the carrier must prove his negligence was not the cause of the problem.

The inherent vice of the cargo was clearly defined in the landmark decision of the U.S. Supreme Court in *Missouri Pacific Railroad Company v. Elmore and Stahl* of 1964. The court stated inherent vice is "any existing defects, diseases, decay or the inherent nature of the commodity which will cause it to deteriorate with a lapse of time" [Ref. 8:p. 136]. The presumption is the carrier is at fault once the shipper has established prima facie evidence.

If the carrier uses any of the above defenses, he must also prove the absence of negligence on his part. For example it is not enough to say that damage to a shipment of

oranges occurred because of the natural tendency of fruits to deteriorate over time. Since the carrier has possession of the material and is in the position to take prudent steps to protect the cargo, the carrier has the burden of proof to show it is free of negligence [Ref. 8:p. 143]. This is the principle of "strict accountability" which puts the burden of proof upon the carrier. Also the Supreme Court held in the Elmore & Stahl case:

The general rule of carrier liability is based upon the sound premise that the carrier has peculiarly within its knowledge "(a)ll the facts and circumstances upon which (it) may rely to relieve (it) of (its) duty. . . . In consequence, the law casts upon (it) cannot explain or, explaining, bring within the exceptional case in which (it) is relieved from liability." Schnell v. The Valliscura, 293 U.S. 296,304. We are not persuaded that the carrier lacks adequate means to inform itself of the condition of goods at the time it receives them from the shipper, and it cannot be doubted that while the carrier has possession, it is the only one in a position to acquire the knowledge of what actually damaged a shipment entrusted to its care. [Ref. 8:p 144]

C. BILL OF LADING

The terms of the contract of carriage are contained in the bill of lading. The purposes of the bill of lading are:

1. to set forth the terms and conditions of the contract,
2. to serve as a receipt for the quantity and condition of the goods to be transported, and
3. to serve as a document of title or ownership and to whom the goods are entitled. [Ref. 5:p. 20]

Bills of lading routinely incorporate "by reference" the provisions of carriers' governing tariffs. In law, that means the pertinent tariff provisions are as much a part of the bill of lading as if they were actually copied out word by word. [Ref. 9:p.91]

The ICC mandated in 1946 that every motor common carrier issue a bill of lading for material received for transportation. Federal courts have decided that all common carriers must provide bills of lading. The form used for bills of lading are contained in the rate classifications for each mode. The classification and tariff for trucks are contained in the National Motor Freight Classification, the Rocky Mountain, or the tariff on file with MTMC Headquarters. The rail classifications are contained in the Uniform Freight Classification .

The bill of lading is prima facie evidence that the goods were delivered to the carrier in good order. Prima facie evidence is defined as the cargo being in apparent good order. In accepting the bill of lading the carrier is providing prima facie evidence of delivery in good order for those parts of the shipment which are visible and open for inspection [Ref. 6:p. 78]. This does not prevent the carrier from annotating the receipt document with explanations which may contradict the prima facie evidence in the bill of lading.

Common carrier liability begins when the shipper completes delivery and the shipment is accepted by the carrier. No formal acceptance by the carrier is necessary; however transfer of possession and control of the material also transfers liability to the carrier. The carrier can not avoid liability just because he did not provide a

receipt or bill of lading. If the carrier provides the shipper with a vehicle for the shipper to load cargo, this alone will not in and of itself constitute carrier receipt. The shipper must also provide the carrier with shipping instructions or the carrier liability may be that of a warehouseman and not a common carrier.

The receipt of goods by the consignee is an extremely important part of the legal process. Problems arise when the carrier gets clear delivery receipt from the consignee and subsequently damages are discovered. An affidavit from receiving personnel is a form of evidence that is necessary to contradict the clear delivery receipt [Ref. 7:para. 2-8]. Therefore receiving personnel must exercise due care and thoroughly examine material before signing a delivery receipt. Concealed damages are one of the most difficult to prove. They require the utmost undeniable proof that the damage occurred while in the possession of the carrier. In these cases the government must overcome the evidence of clear delivery receipt provided to the carrier. Generally carriers will refuse to pay claims for concealed damaged. They can claim the damage occurred while in the possession of the government or manufacturer; especially since the material is usually moved from the receiving area to another area before the damage is discovered.

If on the other hand the carrier has lost or damaged some of the cargo then the shipper first establishes his

prima facie evidence when he shows delivery to the carrier in good order. The shipper completes his prima facie evidence when it is established the material arrived damaged or lost and the amount of damage or loss. Then the burden of proof shifts to the carrier to show the loss or damage was not due to his negligence but rather one of the causes noted above [Ref. 8].

D. STATUTORY

The basis for rail and truck liability for lost and damaged lies in the Carmack Amendment to the Interstate Commerce Act. The Carmack Amendment codified the common law rules in stating the common carrier is liable for the "full actual loss or injury" to property received for transportation [Ref. 10]. The 1980 revision to the Interstate Commerce Act expanded the scope of the Carmack Amendment to also cover rail, rail-water, pipeline, and motor carrier as well as freight forwarders.

The Carmack Amendment was originally enacted in 1906 to resolve the confusion resulting from conflicting state court decisions. However through the use of a loophole in the original amendment, the carriers began to unreasonably limit their liability. The Supreme Court held the carriers could:

by fair, open, just and reasonable agreement limit the amount recoverable by a shipper in case of loss or damage to an agreed value made for the purpose of obtaining the lower of two or more rates or charges proportioned to the amount of risk. . . . [Ref. 6:p. 54]

Carriers, especially railroads, published low rates with the released valuation and exorbitantly high rates for full valuation coverage. The unsuspecting shipper had no real choice but to choose the released valuation rate with very low liability coverage. The Carmack Amendment, as updated by two Cummins amendments, provided a uniform standard of liability governing interstate transportation. Through various Supreme Court decisions the common law stipulated carriers could not limit their liability unless the tariff schedule was on file with the Interstate Commerce Commission (ICC). The purpose was to ensure the shipper made a deliberate, well informed choice before carrier liability was limited [Ref. 6:p. 175]. The shipper had the choice of rates and the amount of risk he wished to assume. The Carmack Amendment established a national policy which would not permit the carriers to evade liability due to their own negligence or the traditional common law defenses. The courts, in most situations, have held that the publication of released valuation in a tariff or schedule may be construed as constructive notice to shippers, even if the shippers were unaware of the provision.

Additionally shippers prior to the Carmack Amendment had to submit claims with all carriers in the chain of custody. The Carmack Amendment also provided for some particular procedures in filing loss and damage claims. For example the claimant would file the claim with the originating

carrier even if the loss or damage occurred on an intervening carrier. [Ref. 6:p. 58]

E. MEASURING DAMAGES

The law provides that the measure of damages for material lost, damaged, or delayed in transit should be the difference between the value of the material in its present state and the fair market value at its destination without damage or delay [Ref. 7:para 3-2]. For damaged cargo that can be repaired the government is entitled to recover the cost of repairs including cost to transport the material to the repair facility. Since there is normally no "market value" for government property, the measure is its value to the government. The consolidated Management Data List is the recognized source in determining replacement value [Ref. 7:para. 3-1]. If the material is not available in the stock system then the market value may be the cost to manufacture the item. As will be discussed in Chapter III, the determination of repair cost within DOD is a serious weak point in recovering for lost or damaged cargo.

When the material is moving under a released valuation rate the process of measuring damages is irrelevant. The maximum amount a shipper can claim is determined by multiplying the weight of the cargo by a dollar amount specified in the tariff or schedule. This ceiling amount is normally so small that the carrier will pay the claim with little or no questioning. The crux of the matter is whether

the shipper made a deliberate, well informed choice in selecting the released rate [Ref. 11:p. 58]. The law requires a written agreement or value declaration before the carrier's liability is limited [Ref. 10].

If a carrier is under contract but is not a common carrier the situation concerning loss and damage liability is unclear at best. Even if the unregulated rate schedule does contain a released valuation, it is unclear whether the provision has the same weight of law as with common carriers [Ref. 11:p. 57]. The impact of contract or unregulated carriers on the movement of DOD cargo has not been researched. Indications are the impact may be negligible; however the subject may warrant further investigation.

F. EFFECTS OF RAILROAD AND TRUCKING DEREGULATION

With the passage of the Staggers Act of 1980 the rail industry commenced deregulation. One of the arguments used to support deregulation was the need to shift some of the risk for loss and damage to shippers [Ref. 6:p. 446]. The principle effect on carrier liability related to the filing of released valuation rates. Prior to 1980 these rates were required to be on file with the ICC. The Staggers Act repealed this requirement. As a result released valuation became an issue of negotiation between the carrier and the shipper.

The revision of the Interstate Commerce Act in 1980 included a provision for the use of deductibles in railroad

rates [Ref. 10]. Deductibles provide the carrier the opportunity to further limit its liability. Just as released rates provide a ceiling on carrier liability, deductibles provide a floor. The carriers were given the opportunity to narrow the window of liability for lost and damaged cargo. Some experts believe:

. . . common carriers may contract to relieve themselves of liability for their own negligence. *Adams Express v. Croninger*, 226 U.S. 491 (1913); *S.W. Sugar & Molasses Co. v. River Terminal Corp*, 360 U.S. 411 (1959). A contract under which a railroad frees itself from liability for all damages up to the amount of the deductible violates that fundamental common law principle. [Ref. 6:p. 448]

With the enactment of the Motor Carrier Act of 1980 the trucking industry became deregulated. As with the rail industry, the main effect of trucking deregulation was that released rates need not be filed with the ICC. However unlike rail, Congress stipulated the motor carriers must maintain a full valuation rate. This requirement ensured the shipper would continue to have a clear choice of full or released valuation rates.

G. AIR FREIGHT TRANSPORTATION AND DEREGULATION

Air freight transportation is subject to two different sets of rules or regulations. If the movement is domestic the Carmack Amendment applies and if the movement is international the Warsaw Agreement applies.

Prior to airline deregulation the burden of proof was on the shipper to prove the carrier was negligent. The carrier was required to verbally inform the shipper that the tariff

or rate contained a released valuation clause. One significant difference between surface and air transportation is the requirement the shipper must specifically elect to declare the full valuation of the cargo to establish the carrier's liability at the higher level. In rail and trucking the shipper receives full valuation coverage in the absence of a released valuation [Ref. 6:p. 358].

In 1976 the Civil Aeronautics Board (CAB), which regulated the air cargo industry, concluded a seven year study of the liability limits placed by the domestic airline industry. The CAB concluded the carriers were unreasonably limiting their liability [Ref. 12:p. 15]. The CAB mandated two significant changes to be effective July 1977. First, liability limits were to be raised from the current levels of 50 cents a pound to \$9.07 a pound, the standard for the Warsaw Convention [Ref. 12:p. 15]. Second, the CAB established the rule of "strict accountability" similar to that of the virtual insurer in surface transportation. This meant the air carriers were liable for loss or damage unless the carrier could prove the defect was due to the same five defenses used for surface carriers and one other--the perils of the air [Ref. 6:p. 359].

With the passage of the Air Cargo Deregulation Act of November 1977, the changes mandated by the CAB were effectively rescinded by the Congress. Most carriers

immediately reduced their liability limits back to 50 cents a pound. They also increased the rates for full valuation coverage.

Air cargo deregulation has changed air carrier claims liability, for example, and air carriers can more or less set their own terms as part of their contract of carriage. . . . As for responsibility for damages, shippers and consignees are required to prove negligence on the part of the air carrier. [Ref. 13:p. 44]

Today there are no industry standard rules for carrier liability. Some carriers added other loopholes to the normal common law exceptions such as "subject to the availability of fuel." Other airlines stipulated they are only liable for the actual negligence of their employees. This is a major departure from the conditions which apply to surface transportation. Where there is no evidence of negligent handling by the airline employees, the carrier can claim a defense and decline to pay the claim. As a result most air freight movement is not subject to strict accountability.

H. WATER CARRIERS

Water carrier liability has its basis in the Carriage of Goods by Sea Act (C.O.G.S.A.) of 1936 and the Harper Act of 1893. C.O.G.S.A. is the United States version of the Hague Rules. The Hague Rules were drawn up by the Comité Maritime International (CMI) and were intended to be voluntarily included in bills of lading. However in 1924 the rules

became mandatory for the nations ratifying the treaty which included the United States [Ref. 14:p. 60]. The only difference between the Hague Rules and C.O.G.S.A. is the latter includes a package limitation for liability and a deviation clause. The C.O.G.S.A. applies to any cargo moving in foreign trade to and from a U.S. port and only while the cargo is actually waterborne. The Harper Act applies to movements from one U.S. port to another and the time between acceptance of the cargo and its loading or unloading. As a practical matter however most bills of lading reference the C.O.G.S.A. and therefore the Harper Act does not apply [Ref. 6:p. 397]. Therefore the Harper Act will not be discussed in detail.

The bias of the C.O.G.S.A. is definitely in favor of the ocean carriers. In the early days of ocean transportation there was little distinction between shipper and carrier [Ref. 15:p. 100]. However with increased specialization shippers and carriers developed into two discrete groups sometimes with conflicting interests. However the carriers continued to aggressively lobby for legislation favoring the owners. Joseph C Sweeney of Fordham Law School states:

It is obvious that shipowners have always been very well organized. . . . It is also obvious that shippers have not been very well organized. This may account for the fact that so many international maritime treaties are tilted in favor of shipowners. Whenever a treaty says 'liability' it is really talking about 'non-liability.' [Ref. 15:p 100]

It is not surprising to note that C.O.G.S.A. does not hold the carrier liable for loss and damage in many situations where they would be held so in another transportation mode.

C.O.G.S.A. lays out the responsibilities and liabilities of the carrier as follows:

- (1) Seaworthiness. The carrier shall be bound, before and at the beginning of the voyage, to exercise due diligence to-
 - (a) Make the ship seaworthy;
 - (b) properly man, equip, and supply the ship;
 - (c) Make the holds, refrigerating and cooling chambers, and all other parts of the ship in which goods are carried, fit and safe for their reception, carriage, and preservation.
- (2) Cargo. The carrier shall properly and carefully load, handle, stow, carry, keep, care for, and discharge the goods carried.
- (3) Limitation of liability for negligence. Any clause, covenant, or agreement in a contract of carriage relieving the carrier or the ship from liability for loss or damage to or in connection with the goods, arising from negligence, fault, or failure in the duties and obligations provided in this section, or lessing such liability otherwise than as provided in this chapter, shall be null and void and of no effect. [Ref. 16:Sec. 1303]

If the law had stopped here the situation would be very different today. However C.O.G.S.A. goes on to provide seventeen defenses which the carrier can chose from. If the carrier can prove the ship was seaworthy he can not be held responsible for loss or damage resulting from:

1. Act, neglect, or default of the master, mariner, pilot, or the servants of the carrier in the navigation or in the management of the ship;
2. Fire, unless caused by the actual fault or privity of the carrier;
3. Perils, dangers, and accidents of the sea or other navigable waters;
4. Act of God;
5. Act of war;
6. Act of public enemies;
7. Arrest or restraint of princes, rulers, or people, or seizure under legal process;
8. Quarantine restriction;
9. Act or omission of the shipper or owner of the goods, his agent or representative;
10. Strikes or lockout or stoppage or restraint of labor from whatever cause, whether partial or general: Provided, That nothing herein contained shall be construed to relieve a carrier from responsibility for the carrier's own acts;
11. Riots and civil commotions;
12. Saving or attempting to save life or property at sea;
13. Wastage in bulk or weight or any other loss or damage arising from inherent defect, quality, or vice of the goods;
14. Insufficiency of packing;
15. Insufficiency or inadequacy of marks;
16. Latent defects not discoverable by due diligence; and
17. Any other cause arising without the actual fault and privity of the carrier and without the fault or neglect of the agents or servants of the carrier, but the burden of proof shall be in the person claiming the benefit of this exception to show that neither the actual fault or privity of the carrier or the fault or neglect of the agents or servants of the carrier

contributed to the loss of damage. [Ref. 16:Sec. 1304(2)]

The courts have interpreted the above defenses and decided the carrier not liable in situations where the loss or damage occurred when:

1. The master negligently decided to cross a river bar without using a pilot during a storm [Ref. Wilbur-Ellis Co. v. M/V Capatayannin "S" 451 F.2d 973 9th Cir, 1971].
2. A negligent anchor watch of the second mate resulted in the vessel being exposed to synchronous rolling, causing the turbine to be torn from its lashings on deck. Damage amounted to \$502,922.00 [Ref. General Electric v. Lady Sophie, 1979 A.M.C. 2554 S.D.N.Y. 1979].
3. The master decided to head into a storm even though the number one hatch cover was damaged and twisted open causing flooding in that hold, and resulting in the sinking of the vessel. Damage amounted to \$1,458,014.00 [Ref. 396 F. Supp. 619, 1975 A.M.C. 1602 S.D.N.Y. 1975].

There are numerous other examples of how the 17 defenses continue to favor the ocean carriers. The only alternative available to the shipper at this time is insurance. It is not difficult to understand that any proposed changes to ocean carrier liability run into severe opposition from the insurance companies [Ref. 17].

The other major factor to consider regarding ocean carrier liability is that of package limitation. C.O.G.S.A. limits carrier liability to \$500 per package or customary freight unit for cargo which is not shipped in packages, i.e., automobiles. Although C.O.G.S.A. discusses liability in terms of packages it does not define what constitutes a

package. Therein lies one of the major drawbacks of this act.

Since the enactment of C.O.G.S.A. ocean freight transportation has undergone a tremendous change. As the result of the introduction of containers to shipping by Malcolm McLean, containerization has become the most popular means of transporting cargo. The intermodal capabilities of containers make them particularly attractive to shippers. Although they have reduced losses due to damage, loss, and pilferage from ten to less than one percent, containers present some unique problems for shippers [Ref. 18:p. 42]. Since containers hold more cargo their loss or damage may mean substantial dollar loss to the shipper. Some experts have noted:

Five hundred dollars is not very much protection for a package these days, when an entire shipping container may be classified as a "package." [Ref. 15:p. 102]

In 1936, when the Carriage of Goods by Sea Act was enacted, the \$500 limitation did not outrage anybody. But with the passing of years and with inflation, \$500 in 1936 money is not worth too much. [Ref. 14:p. 63]

It is obvious that the package limitation and dollar value rules are not geared to today's technology. The shipper can counter this problem by ensuring the bill of lading notes the number of packages within a container. In some cases the courts have ruled in favor of the shipper when this annotation is made. There are a number of proposed changes to C.O.G.S.A., to be discussed later, which have been around for years. One of the objections to these changes has been

that to depart from C.O.G.S.A. would mean abandoning the entirety of case law which has built up around the present rules. This is one of the weakest arguments imaginable.

The concept of deviation, like package limitation, is another peculiarity of C.O.G.S.A. which directly affects lost and damaged cargo. The provision states:

Any deviation in saving or attempting to save life or property at sea, or any reasonable deviation shall not be deemed to be an infringement or breach of this chapter or the contract of carriage, and the carrier shall not be liable for any loss or damage resulting therefrom: Provided, however, That if the deviation is for the purpose of loading or unloading cargo or passengers it shall, prima facie, be regarded as unreasonable [Ref. 16:sec. 1304(4)].

Unreasonable deviation can also include situations where the carrier has deviated from the bill of lading instructions.

There are currently two sets of proposed changes to the Hague Rules and C.O.G.S.A. They are the Visby Amendment of 1967 and the Hamburg Rules. The Visby Amendment raises the dollar value for package limitation from \$500 to \$662 per package. However even this increase has become meaningless in light of inflation. The real problem in determining the value of limitation was how to index the adjustment. In 1968 the Visby Amendment was changed to include an artificial currency called the Special Drawing Right (SDR). Visby leaves the definition of a package up to the shipper who must be fully aware of how it affects his shipments [Ref. 14:p. 63].

The Hamburg Rules were developed by the U.N. Conference on Trade and Development. The Rules include many of the same provisions as contained in the Visby Amendment including the Special Drawing Right (SDR). The dollar limit set for the SDR is \$945 as of May 1982. There are two notable changes incorporated in the Hamburg Rules. First the 17 defenses contained in C.O.G.S.A. and Visby are not included in the Hamburg Rules. Second definition of a package is the same as Visby but with the provision to deprive the carrier from limiting liability caused by his negligence. To date neither the Visby Amendment nor the Hamburg Rules have been adopted by the United States [Ref. 17].

I. GOVERNMENT TRANSPORTATION CLAIMS

The United States government ships material normally on a government bill of lading (GBL). The manner in which cargo is handled is generally similar to that in the commercial world and therefore the same legal principles apply. However the major differences lie in the method of processing claims for loss or damage. These differences are the time frames for filing claims and the offset provision when claims are not settled.

Commercial shippers have up to nine months for rail and truck and one year for ocean carriers to file claims for loss or damage. The federal government has declared that there is no time limit for it to file claims with the

carriers. The GBL provides that "in the case of loss, damage, or shrinkage in transit, the rules and conditions governing commercial shipments shall not apply as to period within which claim therefore shall be made or suit instituted." [Ref. 5:p. 225] This can create a particular problem for those carriers who deal primarily with the government since they could be required to retain records forever.

The second major difference is the power to perform offsets for unsettled claims. After a reasonable period of time usually 180 days, if the claim has not been paid by the carrier, the government can deduct the full amount of the claim from future payments due the carrier. Some carriers complain that the government makes these offsets even if the claim has previously been paid or when the carrier has declined the claim with an appropriate justification [Ref. 19:p. 1]. The number of offsets is a subject for further investigation.

J. SUMMARY

Laws, statutory regulations, and rules governing common carrier liability have developed over many years. The U.S. common law, inherited from England, forms the basis for regulating most transportation modes. Common law requires the establishment of the burden of proof with prima facie evidence.

The bill of lading is the most important document in establishing liability. The bill of lading sets forth the terms and conditions of the contract and its acceptance is prima facie evidence. The Carmack Amendment and subsequent changes have attempted to protect shippers from the actions of unscrupulous carriers. Released valuation rates is one example of the carriers attempt to limit their liability to the detriment of shippers. Released rates can sharply limit the carrier's liability even if the shipper is unaware of their existence.

The deregulation of the railroad, trucking, and airline industries have forced shippers to be even more diligent in understanding carrier's schedules and tariffs. Ocean carrier liability is based on a completely different set of rules--C.O.G.S.A. These rules, heavily weighted in favor of the carriers, contain seventeen broad categories of defenses from which the ocean carrier can choose to decline the shippers claim.

III. DEPARTMENT OF DEFENSE LOSS AND DAMAGE CLAIM SYSTEM

A. INTRODUCTION

The Department of Defense transportation system consists of three separate sections administered by single logistics managers. These managers are the Military Traffic Management Command (MTMC) for land transportation and common user ocean terminals, Military Sealift Command (MSC) for ocean transportation, and Military Airlift Command (MAC) for airlift services. These managers use the organic transportation services within DOD or purchase transportation services from commercial sources to meet DOD requirements [Ref. 20:p. 4].

The purpose of the DOD transportation system is to "assure optimum responsiveness, efficiency, and economy in support of the defense mission" [Ref. 21:para. III.A]. The general policy for selection of a transportation mode is to satisfy the requirements of DOD at the lowest possible cost. In determining the lowest overall cost the single manager considers the following factors:

1. the savings in terms of pipeline and storage cost,
2. shipment preparation cost,
3. lost and damaged cargo,
4. the cost to procure transportation services by the single manager. [Ref. 21:para. III.C.1.a]

Military Traffic Management Command (MTMC) has overall responsibility for managing the DOD worldwide loss and damage reporting and analysis system. MTMC provides output from their analysis of loss and damage to the individual services for "the purposes of determining trends, pinpointing weaknesses, prosecuting claims, and developing programs to prevent loss and damage" [Ref. 22:para. V.H]. To assist MTMC in carrying out its mission the other services provide information on loss and damage as is discussed later in this chapter [Ref. 22:para. VI.D]. Each military branch, including the Defense Logistics Agency (DLA), operates a claims processing office which files the actual claim against the commercial carrier. While any claims office can prepare claims for land or air shipments, only Military Sealift Command can process claims against ocean carriers [Ref. 23:para. 2-13].

The Transportation Officer (TO) is ultimately responsible for ensuring discrepancy reports are submitted properly. A TO is appointed by the Commanding Officer of any activity requiring commercial transportation services. The TO must be familiar with not only the DOD transportation instructions but also the carriers' facilities, services, schedules, fares, etc. [Ref. 24:para. 1-7]. The TO initiates the discrepancy reports, compiles supporting data, and submits the report into the MTMC reporting system [Ref. 24:para 1-8]. In most cases, the discrepancy is discovered

by the receiving personnel working under the TO. However, if a transshipment activity discovers a discrepancy while handling the cargo it initiates the transportation discrepancy report. This interim report is forwarded to the ultimate consignee for possible action.

The purpose of this chapter is to analyze how DOD initiates, files, and processes claims for lost and damaged cargo against common carriers. There are two major sections to the chapter. The first major section discusses the current procedures used in the three phases of pre-claims, claims, and management. Pre-claims begins with the discovery of a discrepancy and ends with the submission of the discrepancy package to the claims office. The claims phase commences with the claims office review of the legal aspects of the claim and concludes with an assertion of the actual claim against the carrier. This stage also includes the negotiation necessary between the claims office and the common carrier for settlement and collection. The final phase encompasses the overall management of the DOD loss and damage system. The second major section of this chapter addresses the problems associated with each of the three phases.

B. CURRENT PROCEDURES

1. Pre-claims

The instruction entitled "Reporting of Transportation Discrepancies in Shipments" [Ref. 24]

explains the worldwide procedures for reporting various transportation discrepancies. The instruction applies to all military services, Defense Logistics Agency (DLA), and the General Services Administration (GSA). If the guidance in the instruction is followed the government should be successful in recovering funds from the common carrier [Ref. 24:para. 1-3].

The Transportation Discrepancy Report (TDR), SF361, is the most common format used to report problems with the DOD transportation system. The TDR is used to:

1. notify carriers that a problem exists with one of their shipments (not used in the case of MAC or ocean carrier);
2. notify a carrier to pick up damaged material and its location (not used in the case of MAC or ocean carrier);
3. request information from an activity to resolve a discrepancy as well as respond to such a request for information (RFI);
4. document problems at a transshipment point for later action by the consignee;
5. document problems in providing the service contracted for by the government such as late delivery of perishable provisions;
6. adjust inventory records and financial records; and
7. support claims against the common carrier. [Ref. 24:para. 1-7]

In the case of ocean carriers the TDR is used as an input to the Cargo Outturn Report (DD Form 470) which is discussed below. In the case of cargo shipments using organic assets the TDR collects data only for statistical purposes.

The major types of transportation discrepancies are:

1. Astray,
2. Shortage,
3. Pilferage,
4. Theft,
5. Damage,
6. Vandalism,
7. Overage,
8. Special contract or carrier services not provided,
9. Entire shipment not received. [Ref. 24:para. 3-2]

The TDR is initiated normally when the consignee receives damaged material or determines the material is lost in shipment. If proper receiving procedures are exercised the discrepancy should be discovered upon delivery. When damaged material is received the receipt document and/or the carrier's delivery papers are annotated with the nature of the damage. Both the carrier's representative and receiving personnel sign the documents. To resolve the discrepancy quickly, the receiving activity contacts the offices of the last line haul carrier. The carrier has seven days to inspect the damaged material. [Ref. 24:para. 3-5] If material is received short but the carrier later locates the missing items, no further action is required. If the material cannot be found or is damaged, the TO then considers the cost of discrepancy before preparing the TDR.

The determination of the cost of the discrepancy or assessment of damages is the next important step in pre-claim process. The government as a shipper is entitled to recover the full value of the lost property or the actual cost of repair for damaged property [Ref. 25:para. 1-1]. The following factors are considered in determining the cost of the discrepancy:

1. replacement cost--the current price of the item or the estimated price if the current price is not available;
2. repair cost--the cost to repair the damaged material; and
3. unearned freight charges--the amount paid to the carrier for moving the cargo. However since he did not deliver the material in the same condition as received, the carrier is not entitled to keep the freight payment. Freight charges for FOB origin shipments are not included. [Ref. 24:para. 1-9]

For stock item material, a Federal Supply Catalog is an "acceptable proof of value" for replacement cost determination [Ref. 25:para. 1-3]. If the item is not stocked, contracts, purchase orders, and invoices are also acceptable proof of value. The item manager is consulted in cases where the value is unknown or there is doubt as to the preshipment value [Ref. 25:para. 1-3].

After preparing the TDR, the receiving activity assembles a package of information to substantiate the government's claim against the carrier. Since it is bound by the same legal rules as any other shipper, the government must provide prima facie evidence establishing the fact the loss or damage occurred while the cargo was in the

possession of the carrier. Evidence of acceptance (i.e., a GBL and proof of damages or non-receipt) is necessary to put the burden of proof on the carrier. Cases involving concealed damages are particularly difficult to sustain. Therefore, receiving procedures must be complete to minimize discovery of damages after delivery.

If the information is not available at the receiving activity the TO sends a Request for Information (RFI) to the activity having the required data. Some of the necessary documents include:

1. copy of the Government bill of lading (GBL) or the commercial bill of lading (CBL);
2. copy of the carrier's delivery receipt with discrepancy notation signed by the carrier's driver and the receiving personnel;
3. copy of the completed government receipt document showing the NSN quantity and condition (usually this is the DD-1348-1);
4. copy of a document stating that supply records have been verified to ensure the material has not already been received (for shortages only);
5. copy of the carrier's paid invoice;
6. copy of the pick-up record, the United Parcel Service tracer, and loss and damage investigation form for UPS shipments;
7. copies of photographs made of the damaged cargo; and/or
8. signed affidavit by the person discovering the shortage or damage. [Ref. 24:Appendix E]

The TO has 60 days (30 days for classified/protected cargo) from the date the discrepancy is discovered to forward the TDR package to the claims processing office.

Additionally, a copy of the TDR without supporting documentation is sent to the MTMC area command and the last line haul carrier.

If an ocean carrier is suspected to be at fault, the format of the report package and subsequent routing is different. The individual TDR package is sent to the port of debarkation (POD) for accumulation with other TDRs of the same voyage. The POD has up to 90 days from the date of cargo discharge to compile discrepancy reports, prepare a Cargo Outturn Report (DD Form 470), and forward the package to the port of embarkation (POE). The POE, in turn, has 120 days from date of cargo discharge to collect all the cargo Outturn Reports for a single voyage before sending the package to MTMC area commands. The MTMC area command performs a final review and submits the package to the Military Sealift Command, Atlantic or Pacific, for claims action.

2. Claims

The claims processing offices for each service asserts the legal version of the transportation claim with the commercial carrier. For example, the Navy Material Transportation Office (NAVMTO) in Norfolk, VA, handles surface and air transportation claims for the entire Navy while the Directorate of Settlement and Adjudication, Freight and Travel Office in Denver, CO, performs the same function for the Air Force. The procedures used by these

offices are in the joint military instruction entitled "Uniform Settlement of Military Freight Loss and Damage Claims" [Ref. 25].

The instruction provides detailed guidance on determining the repair or replacement cost and asserting the claim using the U.S. Government Freight Loss/Damage Claim (SF 362). The second chapter of the instruction details how to complete the SF362. These instructions for SF 362 are rather straightforward and do not require elaboration.

Upon receipt of the TDR package, the claims office makes a determination of carrier liability and the limit of liability in cases of released valuation rates. When the review is completed, the SF 362 is prepared and filed with the carrier. The carrier has 120 days to respond to the claim. If the carrier does not pay the claim or provide evidence to refute the claim, the disbursing officer of the claims office can begin an administrative setoff against any future payments due the carrier. [Ref. 25:para. 2-8] If the claims office is unable to collect the amount due the government, the matter is referred to the General Accounting Office (GAO) or the Department of Justice for action. GAO handles uncollectible claims for international air and ocean shipments, while the Justice Department normally deals with domestic carriers [Ref. 25:para. 2-8]. Funds obtained directly from the carrier or as the result of setoffs are placed in a general account and are not returned to the

activity initiating the TDR. There are two reasons for this. First, the claims process takes so long that the funds would not be returned during the same fiscal year. Second and more important, the carrier has the right to appeal the setoff and therefore recover his funds.

3. Management

In accordance with various DOD instructions, MTMC maintains a management information system on lost and damaged cargo within DOD. The system is built on input from two different documents, SF 361 and SF 362. A copy of all TDRs, SF-361, is sent to the either MTMC Western Area or MTMC Eastern Area as appropriate. The area commands input required information into a computer system linked to MTMC Headquarters. The second source of data is the U.S. Government Freight Loss/Claims form, SF 362. Each DOD claims office provides MTMC with the pertinent information on each SF 362 asserted against the carrier. With data from both forms, a variance analysis can be conducted, such as examining the difference between the initial TDR value and the actual claim amount submitted to the carrier.

MTMC also prepares periodic summary and management reports on a monthly, quarterly, and yearly basis. The distribution of these reports depends on the nature of the report. A summarization of some of these reports is provided below.

1. TDR Activity Detail Report (RIN 610017B) lists all TDRs for an activity with at least 15 TDRS during the

reporting period. An activity is shown as either a shipper or receiver. Detailed information is provided on each TDR. A recap for each activity is provided by responsibility and discrepancy type.

2. CONUS Carrier Report (RIN 610019) lists all commercial CONUS carriers with at least one TDR. Part III summarizes lost and damaged shipments exceeding the number and dollar value limitations.
3. Freight Loss and Damage Claims Summary Parts 2A and 2B (RIN 065465A and 065470A) provides a breakdown of TDRs by commodity group and either mode of transportation or cause of claim for each service and DOD as a whole.

As an adjunct to the loss and damage system, MTMC is also responsible for administering the Carrier Performance Program. The purpose of the program is to "ensure that DOD shippers get the best available service from commercial carriers" [Ref. 26:para. 42-1]. The program establishes minimum standards for specific service elements. At present there are ten elements of service including claims experience. The minimum of satisfactory performance for claims experience are:

1. total number of claims must be less than 5% of the total number of DOD shipments, and
2. total value of all claims must be less than 2% of the revenue received from all DOD shipments. [Ref. 26:para. 42-5]

The responsibility for monitoring and evaluating carrier performance rest with both the TO and MTMC. The TO notifies MTMC when a carrier fails to meet the minimum service standards. MTMC is responsible for evaluating carrier performance on all service elements at least every six months [Ref. 26:para. 42-4]. MTMC Headquarters and area

commands are the only activities which can disqualify a carrier from moving DOD cargo.

C. PROBLEMS IN CURRENT PROCEDURES

1. Pre-claims

Current instructions on lost and damaged cargo do not address some important issues concerning the pre-claim phase. These problem areas include non-receipt of cargo, confusion over which form to use, accurate assessment of damages, availability of supporting documentation, and finally ocean carrier liability determination. Each of these areas are addressed herein.

Non-receipt of material occurs when the receiving activity has firm shipping status but the standard time frames for receipt have passed. Each service has its own procedures for handling material lost in shipment. Navy instructions provide that tracing action be initiated after a specific number of days have elapsed since the shipping date. If tracing results are negative, the receiving activity can make financial and inventory adjustments and classifies the material as "lost in shipment" [Refs. 27,28]. However there are no comparisons of the "lost in shipment" writeoffs and the number or dollar value of material reported in the TDR system. The magnitude of the issue is shown in Table 1.

TABLE 1
TDRS VS LOST IN SHIPMENT
(Fiscal Year 1986)

	NSC Norfolk	NSC Oakland
Dollar value of TDRs submitted	\$130,371	\$78,742
Dollar value of lost in shipment write-offs	\$10.5 million	\$1.9 million

Table 1 clearly shows a substantial disparity between the dollar amount of lost-in-shipment writeoffs and what is reported in the TDR system. An investigation by the author of why so few TDRs were submitted by NSC Oakland showed the main reason to be the lack of understanding and training in the area of TDRs. As a result, the size of the loss and damage problem may be seriously understated. This problem warrants further research which is beyond the scope of this research.

A U.S. Army Material Readiness Support Activity study identified a related problem. The study found there was confusion as to when to use the TDR SF 361 and the Report of Discrepancy (ROD) SF 364 [Ref. 29]. The ROD is used to report variations in quantity because of a discrepancy between the material received and the shipping document. The study found originating commands often used the wrong form or did not report the discrepancy at all. Since the TDR and ROD share much of the same information,

the Army study recommended the two forms be combined into one. [Ref. 29] Although this recommendation could help to identify more loss and damage cases, the complexity resulting from the combined form may precipitate the opposite effect--fewer loss and damage reports.

Even after preparing the correct form, the receiving activity must measure the extent of loss or damage. The two joint services instructions discussed above do not address where to obtain accurate data. If the damaged material is repairable, the instruction provides detailed procedures to compute the dollar value of repair. The repair cost includes civilian and military pay, overhead, direct material, and handling cost. However, these repair data are not readily available to most consignees. If the item is a Depot Level Repairable (DLR), the Designated Overhaul Point (DOP) should provide the estimated repair cost. Also the procedures do not provide for changing the amount of the discrepancy after submission. As a possible solution a copy of the TDR could be routed through the DOP for review. After preparing the correct form and determining the value of the damages, the receiving activity faces the task of assembling the TRD package.

The majority of supporting documents required for the TDR package is readily available to the receiving activity; however, documents such as the GBL or paid invoice may not be. The carrier is not required to present the GBL

when making delivery. However when the material is shipped, the consignor forwards a copy of the GBL to the receiving activity. The material may arrive at its destination before the GBL or the GBL may not be received at all. Since delivery is effected by the carrier's delivery documentation and only later compared with the GBL, a discrepancy may go undiscovered until after the government has given clear delivery. Copies of pick-up records and the carrier's paid invoice are also not normally provided to the receiving activity. The receiving activity is tasked with the monumental job of obtaining the necessary documentation to support a successful claim.

In interviews with commercial carriers, the single biggest problem noted in dealing with government claims is insufficient documentation [Refs. 30,31]. The same point was made by the Navy claims office. In an interview, the head of the claims processing office for the Navy Material Transportation Office said lack of proper documentation was the major problem in successfully processing a claim [Ref. 32]. The findings of a 1984 DOD Audit Report of MSCLANT also support this position. In fiscal year 1982 MSCLANT settled claims originally valued at \$1.6 million for \$988,567, or 62% of the amount claimed. The primary reason cited for the reduced settlement amounts was the lack of proper documentation [Ref. 2]. Also the excessively long

routing chain for ocean carrier claims contributes to excessive delays.

The same DOD Audit, discussed above, also found that MSCLANT took on average 307 days to file a claim with the carrier [Ref. 2]. This fact is not surprising since there are three intermediate DOD activities between the consignee and the claims office, MSCLANT or MSCPAC. Since in many cases the package contains insufficient information, one wonders how the claims package got so far along in the chain if documentation was so poor.

Perhaps the most serious problem in the pre-claims phase relates to ocean shipments. The TDR instruction states: "If a sealift carrier was NOT at fault, the SF 361 will be completed within the 60-day deadline" [Ref. 24:para. 3-8]. How does the consignee know that the sealift carrier is NOT at fault? On what basis does the consignee judge who IS at fault? There may have been several carriers, both commercial and government, in the transportation chain which the consignee is unaware. This requirement for the sealift carrier to be at fault creates confusion for the receiving activity. It is unreasonable for the consignee to make a liability determination.

2. Claims

The process of settling loss and damage claims with the commercial carriers lacks standarization. The procedure for negotiating the settlement of a transportation claim is

not addressed in any joint services instruction or directive. In interviews with claims personnel at NAVMTO Norfolk and MSCPAC Oakland it became readily apparent such an instruction is necessary, at least at the service level. NAVMTO Norfolk uses two of the most well known texts concerning transportation claims, Miller's Law of Freight Loss and Damage Claims by Richard R. Sigmon [Ref. 5] and Freight Claims in Plain English by William J. Augello, Esq [Ref. 6]. Additionally, the General Accounting Office's Transportation Law Manual dated 1978 is also used although it is somewhat dated [Ref. 33]. These three references provide an exhaustive explanation of the legal and historical basis for transportation claims. However, these references are geared to a general commercial audience and therefore would not aid the DOD personnel in daily claims processing. The Air Force has an instruction entitled "Air Force Freight Loss and Damage Claims System," [Ref. 7], which is a valuable tool for the claims personnel. The instruction lays out the determination of liability, development of the government's case, and the legal principles underlining carrier liability. This instruction should become the basis for a joint services instruction for all claims offices. Additionally, personnel in NAVMTO who work transportation claims have had little or no formal training in claims processing. There are various organizations which could provide this training. For

example the Shippers National Freight Claims Council in Huntington, N.Y. conducts seminars and training on claims processing and management.

3. Management

The management of DOD loss and damage rests with MTMC. The various reports prepared by MTMC can provide useful information to the other services and claims offices. However MTMC is tasked with more than just generating reports. MTMC should be conducting analysis of the loss and damage data for the "purpose of determining trends, pinpointing weaknesses, prosecuting claims, and developing programs to prevent loss and damage" [Ref. 22:para. V.H]. There exists a serious deficiency in MTMC's analysis of the problem and coordination in preventing loss and damage.

An example of the problems with the present management system is illustrated by examining the effects of released valuation rates. In October 1986 MTMC Headquarters issued the DOD Standard Tender of Freight Services, MT Form 364-R. The tender includes released rates for freight all kinds (FAK) of \$1.75 or \$2.50 per pound depending in the hazardous nature of the cargo. If cargo is shipped using these rates DOD can only file the freight claim for an amount not to exceed the weight of the material multiplied by \$1.75 or \$2.50. The problem could be particularly severe if DLRs are lost or damaged. DLRs are high value items which are not normally big or bulky. Table 2 shows

the results of using released valuation rates for fiscal years 1982 through 1986.

TABLE 2

LOSSES DUE TO RELEASED VALUATION RATES

FY	Claim value	Total collections	Amount lost due to released rates	% of claims
86	\$12,245,483	\$4,949,653	\$1,762,512	14
85	\$7,899,346	\$6,213,792	\$1,743,070	22
84	\$6,790,012	\$7,213,022	\$710,933	10
83	\$6,468,639	\$5,275,730	\$1,570,875	24
82	\$14,739,669**	\$4,310,333	\$1,456,576	10**

There is no direct correlation between the year the TDR is filed and the year the funds are collected.

** includes one claim for \$9,165,204 for damage to a MK-26 guided missile system. If this one claim is removed the percentage would be 25%.

Source: Freight Loss and Damage Claims, RCS-MTMC-10-R1, FY82, FY 83, FY 84, FY 85, and FY 86.

The data in Table 2 was developed in response to an Air Force Claims Office inquiry on released valuation rates. The question of whether released valuation rates directly impact DLR availability or transportation claims warrants further research. In any case this analysis should have been initiated by MTMC since the claims personnel recognize released valuation rates are causing the government to lose money [Ref. 34].

The most significant shortcoming of the management of loss and damage pertains to ocean carriers. MTMC TDR reports do not include any ocean transportation claims. This may be due to the fact that the information provided by MSC is not broken down by individual carrier or TDR. MSC provides MTMC with the Monthly Cargo Claims Status Report, MSC Form 4365/4. The report is divided into three sections, incomplete, ready, and cargo claims. The incomplete category includes those lost and damaged shipments which have been received but have not commenced processing. The ready category are those shipments which are in processing but not asserted with the carrier. Finally the cargo claims section summarizes those claims currently outstanding with the carriers. Dollar value is provided only for cargo claims. Table 3 shows the ending balance of the December 1986 on MSCPAC Cargo Claims Status Report. The value of the 600 cargo claims outstanding is \$1.8 million.

It is apparent that the situation discovered by the 1984 DOD Audit has not significantly improved. The cause of this situation is a combination of two factors. First, the processing chain for ocean carrier claims is too long. Second, the lack of top management's understanding of the magnitude of the problem. The improvement in the processing of ocean carrier claims should be the subject of further research.

TABLE 3

MSCPAC CARGO CLAIMS

Category	Number of claims by year of sailing					total by category
	1986	1985	1984	1983	1982/prior	
Incomplete	529	20	48	0	0	597
Ready	119	244	0	0	0	363
Cargo claims	225	273	85	13	4	600
Total by year	873	537	133	13	4	1560

Source: MSCPAC Monthly Cargo Claims Status Record, MSCPAC Form 4365/4, dated December 1986.

The final area of management problems concerns the carrier performance program. MTMC is tasked with reviewing carrier performance on all service elements at least every six months [Ref. 26:para. 42-6]. Currently however, the only occasion when MTMC reviews carrier performance is when requested by an activity who is experiencing problems with a carrier. MTMC should review carrier performance from a macro perspective and not rely on the TO to initiate a performance review. Individual activities may not have sufficient information to disqualify a carrier while MTMC area commands or Headquarters monitoring could provide proper justification.

D. SUMMARY

The DOD system for managing loss and damage involves many different activities and individuals, not the least of which is the TO. The report used to start the claims process is the TDR, SF 361. After accumulating supporting documentation and repair/replacement cost, the claims package is normally forwarded to the appropriate claims office for processing and asserting the actual claim with the carrier. Lack of documentation, inaccurate cost estimates, and non-reporting are major problem areas in loss and damage.

MTMC prepares various management reports covering loss and damage. However a significant deficiency in management is the lack of ocean carrier data in the reports. Finally, the process of negotiating and settling the actual claim with the carrier is not addressed in a joint services instruction, and therefore varies from one claims office to the next.

IV. METHODOLOGY AND DATA ANALYSIS

A. INTRODUCTION

The purpose of the loss and damage reporting system within DOD is to (1) ensure that the government recovers for lost and damaged cargo carried by commercial carriers and (2) provide information to the services for use in loss and damage prevention. Therefore the thrust of this analysis is to see how well the services comply with the loss and damage instructions. If all the services follow the same guidance then there should not be any significant statistical difference in the service reports on loss and damage. The initial analysis will focus on whether there exist differences among the services in the number or dollar value of transportation claims submitted. Secondly the chapter will compare DOD claims ratios with commercial carriers claims ratios. Based on the problems noted with DOD's loss and damage system as discussed in Chapter III, there exists a strong possibility that the analysis will show that there is a difference in service claims experience. Just from a procedural standpoint, the Air Force has an instruction specifically outlining the steps necessary in claims processing, while the other services do not.

This chapter is broken down into two main sections. The first section is the interservice comparison of the number

and dollar value of claims submitted. The information used in this section was obtained directly from MTMC reports. The second section deals with the comparison of DOD's and commercial carrier's loss and damage performance. Claims ratios are the measure of effectiveness used in this section. Claims ratios are the ratio of the amount of money paid out in claims divided by the total transportation revenue. These ratios are usually calculated on an annual basis.

Claims ratios for rail, truck, and air carriers are readily available from various transportation associations. However, ocean carrier claim ratios are not accessible because ocean carriers are reluctant to provide any loss and damage data due to the competitive nature of this international industry [Ref. 31]. Developing claims ratios for DOD is an altogether different matter. Since DOD is not a carrier, a comparison of claims ratios between DOD and commercial carriers is not genuinely equivalent. It is a comparison of shipper (DOD) information with that data reported voluntarily by groups of carriers. The data used in calculating the DOD "claims ratios" is obtained from DOD traffic management reports.

The format for each of the two sections is:

1. discuss the sources of the data,
2. list the data limitations and assumptions;

3. discuss the statistical analysis used; and
4. examine the results of the analysis.

The years 1982 through 1986 were examined to ensure the results were not skewed by fluctuations in any one year.

B. INTERSERVICE COMPARISON

1. Background

During the course of the initial research, the author sensed a difference among the services in the manner which claims were processed and managed. This impression developed after visiting NAVMTO Norfolk VA, the Navy claims office, and discussing claims management with the Air Force, MSCPAC, and NSC Oakland. Additionally, commercial carriers complained that claims office procedures varied from one service to the next [Refs. 19,31]. As a outgrowth of these observations, an interservice analysis of claims was considered appropriate and necessary. The basic method utilized was to compare the number and dollar value of transportation claim, filed by the services against various independent variables. The independent variables selected were:

1. year,
2. mode of transportation,
3. number of shipments, and
4. cost of shipping.

The data used in this comparison analysis is not a sample of the information but rather the full range of data

for the period. The only changes made to the data were to combine various categories of transportation modes. Finally, the year a claim is filed does not necessarily correspond directly with the year the material was shipped. Using five years worth of data reduces the impact of the overlap of data from one year to the next.

Because dollar amounts for claims and shipping cost span a five year period, a conversion to constant dollars was necessary. An index developed for each year using the Survey of Current Business, Table 3.10--National Defense Purchases in Constant Dollars [Ref. 35]. The base year was 1986. The indices used to standardized the dollar amounts are 1.026 for 1985, .947 for 1984 and 1983, and .829 for 1982. These indices were also used to standardize the shipping cost figures discussed in the following section.

The data were arranged into 100 observations starting with fiscal year 1986. The service information used in the analysis applied to the Army, Navy, Air Force, Marines, and Defense Logistics Agency (DLA). Within each fiscal year, the observations for each service were arranged into the four categories of rail, truck, air and other modes. Each observation contained the following information: year, mode, number of claims, dollar value of claims filed, number of shipments and shipping cost associated with that particular mode. The data are contained in Appendix A.

2. Source of Transportation Claims Data

Claims data are contained in the report entitled "Freight Loss and Damage Claims Summary" RIN (Report Identification Numbers) 605465A Part-2A. The data are accumulated by MTMC from the SF 362s submitted by the individual service claims offices. The report is prepared yearly and shows the number and dollar value of claims, filed with the carrier, by commodity group and mode of transportation. The data elements used from this report are:

1. year the claim was filed,
2. branch of service,
3. mode of transportation,
4. number of claims filed for a particular year, service, and mode, and
5. dollar value of claims (in thousands) for a particular year, service, and mode.

The mode categories shown in the report are:

1. rail car load (C/L) and less than car load (LCL),
2. truckload,
3. less than truckload,
4. air,
5. surface freight forwarder,
6. all other modes.

In order for the claims data to be compatible with the shipment data described in the following section, the above categories were combined as follows:

1. rail car load and less than car load,
2. truck both truckload and less than truckload,
3. air, and
4. all other modes.

Since data on ocean carriers is not contained in the above report, a complete evaluation of the entire reporting system is not possible. This fact presents a significant but unavoidable drawback to the analysis.

The limitations and assumptions of the claims data are:

1. a transportation discrepancy report (TDR), which starts the claims process, was filed in all situations requiring a discrepancy report;
2. repair or replacement costs are accurate;
3. copies of all claims, asserted with the carrier, were submitted to MTMC as required; and
4. One Navy claim for \$9.1 million in 1982 was not included in the analysis since it was an outlier.

3. Source of Shipment data

The shipment data were obtained from two MTMC sources. First for fiscal years 1985 and 1986, the data are contained in the MTMC "Traffic Management Report" produced quarterly. The information is processed in the Financial Information System (FINS), which is maintained by the Inland Traffic Directorate of MTMC. The subsection of this report used in this analysis is entitled "Inland Traffic DOD CONUS GBL Freight Traffic." Since the quarterly reports for 1982 through 1984 did not segregate the data by service, the

necessary data were obtained from the Quality Control Branch, Freight Traffic Division, Directorate of Inland Traffic, MTMC Headquarters. The format of the 1982-1984 data is the same as the published quarterly reports.

The data elements used from these reports are:

1. year of shipment,
2. branch of service,
3. mode of transportation,
4. number of shipments (in thousands) for a particular year and service, and mode,
5. cost of shipping (in millions of dollars) for a particular year, service, and mode.

For the purpose of this analysis the transportation categories were grouped as follows:

1. Railroad,
2. Motor,
3. Air and air charter, and
4. All others including freight forwarder, water barges and ships, pipeline and bus.

The limitations and assumptions of the shipment data are:

1. The FINS data base is accurate and includes all actual shipments for the year listed;
2. The data does includes only shipments for DOD GBL CONUS Freight. Not included in the data are shipments of household goods, ammunition, or movements through ocean terminals.

4. Statistical Model

The statistical package used in this comparison of services is SPSSX version 2.1. The statistical procedure used is an analysis of covariance (ANCOVA) using the number of claims or the dollar value of claims as the dependent variable. Since the year, service, and mode observations are discrete variables, they were designated as the independent variables. The number of shipments and the cost to ship the material are continuous variables, and therefore were designated as covariates. The use of covariates in the ANCOVA process provides a regression coefficient for each covariate. The regression approach used was one where all effects are assessed simultaneously, with each effect adjusted for all other effects in the model [Ref. 36:para 26.9].

5. Statistical Results

There were two ANCOVA analyses made for this area of research, first using the number of claims as the dependent variable and the second using the dollar value of claims as the dependent variable.

The null hypotheses tested in the first analysis was: there exists no significant difference in the number of TDRs filed due to the fiscal year, service, mode, number of shipments or shipping costs. The results of the analysis are shown in Table 4.

TABLE 4
ANCOVA RESULTS

	Significance of F
Main Effects	
Year	0.267
Service	0.002
Mode	0.490
Two-way Interactions	
Year-Service	0.146
Year-Mode	0.209
Service-Mode	0.000
Covariates	
Shipping Cost	0.021
Number of shipments	0.475
Raw Regression Coefficients	
Shipping Cost	5.458
Number of shipments	0.510

The null hypotheses is rejected because at the 99% confidence level the main effect of service and the two way interaction of service with mode were significant. Although alone not significant, mode, when combined with service, does impact the number of claims submitted. The unadjusted cell means are shown in Table 5. The cell means for Navy and Marine Corps were significantly lower than either the Army or Air Force in the number of claims submitted. DLA cell mean was at least three times higher than the other services in the number of claims submitted. The results can be explained by a number of factors. First the lack of consistent implementation of the TDR and claims instructions by individual services results in a lower number of claims. As shown in Chapter III, major Navy

TABLE 5
CELL MEANS

Grand Mean	208.00				
Year					
	1982	1983	1984	1985	1986
	280.22	162.05	188.25	203.68	210.63
Service					
	Army	Navy	Air Force	Marines	DLA
	187.35	76.35	124.5	16.2	587.65
Mode					
	Rail	Truck	Air	Other	
	42.92	671.24	63.0	18.76	

supply activities write off a significant amount of material as lost in shipment while at the same time reporting a small amount in the TDR system. Secondly, as pointed out in the U.S. Army Material Command Study of the TDR and ROD forms [Ref. 29], the confusion as to which form to use impedes the reporting of transportation discrepancies. Finally, there exists no financial incentive for the receiving command to submit the TDR. Not only must the receiving command report the discrepancy, but they must reorder the material a second time and therefore end up paying for the material twice.

The regression coefficient for shipping cost implies that as the cost of shipping material increases by \$1 million the number of claims will increase by almost 5.5, holding all other variables constant. This can be explained by the fact that as the cost of shipping material increases, holding all other factors constant, the transportation

dollars are reallocated from the less costly transportation mode towards a more expensive mode. That is to say as we shift away from using rail towards air to move cargo, the number of transportation claims increases. The shift is a decreased use of rail to a increased use of air transportation. Since air cargo transportation most frequently is used for small high value items, the receiving activity would be inclined to file claims more often when the material is lost or damaged.

Since the number of claims submitted is related to the service filing those claims, is the dollar value of claims affected by the same independent variables? The null hypotheses tested in the second ANCOVA analysis was: there exists no significant difference in the dollar amount of the claims submitted due to the effects of year, service, mode, the number of shipments and shipping costs.

TABLE 6
ANCOVA RESULTS

	Significance of F
Main Effects	
Year	0.014
Service	0.002
Mode	0.980
Two-way Interactions	
Year-Service	0.256
Year-Mode	0.000
Service-Mode	0.000
Covariates	
Shipping Cost	0.073
Number of Shipments	0.119
Raw Regression Coefficients	
Shipping Cost	9.544
Number of Shipments	2.560

The null hypotheses is again rejected. At the 98% confidence level, year, service, and the two way interactions of year with mode and service with mode play a significant role in the dollar value of claims submitted. Unadjusted cell means are provided in Table 7.

TABLE 7
CELL MEANS

	Grand Mean	428.33			
Year					
	1982	1983	1984	1985	1986
	375.67	359.39	358.42	404.83	644.27
Service					
	Army	Navy	Air Force	Marines	DLA
	528.58	490.27	419.83	56.6	553.45
Mode					
	Rail	Truck	Air	Other	
	116.48	1392.84	97.33	29.67	

The cell means of the Navy, Marine Corp, and DLA are significantly different from one another. The Marine Corp mean is definitely lower than any of the other services, while the Army and Air Force means are approximately the same. As expected, the choice of service plays a significant role in the dollar value of reported claims. Mode of shipment when combined with either year or service has a significant effect. These results can be explained by the same factors as in the first ANCOVA analysis. These factors include lack of consistent application of joint services instructions, confusion as to which form to use, and lack of financial incentive for the receiving activity. At the 92% confidence level the cost of shipping the material remains significant with a corresponding regression coefficient of 9.544. The reallocation of transportation dollars towards the more expensive mode can explain this result.

C. DOD AND COMMERCIAL CARRIER COMPARISON

1. Commercial Carrier Data

Three transportation modes, rail, trucking and air freight, have strong associations which assist their carrier members and lobby for the groups' interests. As a related function these associations collect from their members valuable information such as loss and damage statistics. The reporting of loss and damage statistics is strictly voluntary and in most cases is not identifiable to a

specific carrier. To ensure the data were not dependent on the year of observation a minimum of five years was obtained except for trucking where only four years worth of data were available.

The associations providing loss and damage statistics are as follows:

1. National Freight Claim Council of the American Trucking Association, Inc located in Alexandria, VA.
2. Air Transport Association of America located in Washington, DC.
3. Association of American Railroads located in Washington, DC.

The assumptions and limitations of the carrier data are:

1. Since deregulation, individual trucking companies have become increasingly reluctant to provide any information on loss and damage. 50 to 60 carriers report loss and damage data to the trucking association. Accordingly, the data for years 1984 and 1985 may not be a true representation of the industry. [Ref. 37]
2. The air cargo data is reported voluntarily by the following carriers for 1985 and 1986: Air Cal, Alaska, Aloha, American, Continental, Delta, Eastern, Federal Express, Flying Tigers, Jet America, Midway, Northern Air Cargo, Northwest, PSA, Pan American, Piedmont, Trans World, USAir and Western.
3. Railroad data are contained in a circular prepared by the Freight Claim and Damage Prevention Division of the Association of American Railroads. The report summarizes the freight loss and damage reported by the association members. The members constitute approximately 95% of all U.S., Canadian, and Mexican mileage [Ref. 38]. The report also segregates the ratio of loss and damage charges to the gross freight revenue for U.S. railroads.

2. DOD Claims Ratios

As stated earlier, the DOD claims ratio are developed from claims data reported by the service claims offices and the shipment data collected in the MTMC FINS system. This is contrasted with the carrier data which is reported voluntarily by its members to their respective associations. The numerator in the DOD ratio is the dollar amount of the actual claim filed with the commercial carrier, not the amount actually collected. The denominator is the cost of shipping the material on that particular mode of transportation.

The analysis conducted here is a comparison of a major shipper with carriers. If the carriers are reporting all loss and damage claims, including the administrative setoffs taken by the claims offices, then the DOD data should be a complete subset of the carrier data. If DOD experiences the same loss and damage rate as other shippers then DOD and carrier ratios will be approximately equal. If on the other hand, DOD ratios are higher than the carriers, then this indicates DOD is suffering proportionally more loss and damage than other shippers.

3. The Claim Ratio Data

The claims ratios are presented in Table 8 below.

TABLE 8

CLAIMS RATIO

Mode of transportation	Years	1986	1985	1984	1983	1982
Motor Carriers		N/A	1.55	1.09	1.02	1.14
DOD		N/A	1.78	1.56	1.46	1.29
Rail Carriers		0.47	0.46	0.46	0.53	0.77
DOD		0.80	0.13	0.65	0.49	11.16*
Air Carriers		0.34	0.40	0.38	0.37	0.42
DOD		2.66	2.16	0.86	1.61	0.66

** One Navy claim for \$9.1 million caused this ratio to be higher than expected. Deleting this on claim results in a ratio of 0.82.

In all but two cases, DOD claims ratios are higher than those of the commercial carriers. As shown in Chapter III, there are many situations when a TDR is not filed as required. The result is the number and dollar value of actual claims, used above, may be significantly understated. If claims are understated, the implication is that DOD is experiencing an even greater disproportionate amount of loss and damage than other shippers.

Considering the nature of private sector cargo, commercial shipments should experience higher claims rates. Take for example the manufacturer of finished consumer merchandise. Most consumer manufacturers use the exterior of the shipping container to advertise the contents of the package. As a result, the cargo is easily identifiable from the container, and therefore subject to higher pilferage and

theft rates. DOD shipments, on the other hand, are not easily identifiable. The DOD shipment document normally contains the stock number and/or brief item description, which makes it very difficult to exactly identify the value of the material. As a mitigating circumstance, apathy may contribute to an increased amount of loss and damage experienced by DOD. The DOD carrier or shipper may not care that the material arrives at the correct activity but rather that the material arrives to some governmental activity. Despite this, DOD still experiences a greater amount of loss and damage than commercial shippers.

Additionally, the type of material shipped by DOD in most cases is unique and does not have a commercial equivalent. For example, DLRs are shipped via commercial means throughout the world. Since few corporations move this type of high value material over such a wide area, the higher "claims ratios" for DOD is recognizable.

D. SUMMARY

Although there exists a system to report and process transportation discrepancies within DOD, there are significant statistical differences in the number and dollar amount of TDRs submitted into the system. The choice of service and the cost of shipping the material play a major role in determining the number and dollar amount of discrepancies reported.

DOD claims ratios are substantially higher than corresponding claims ratios for commercial carriers. The implication is that DOD is encountering a proportionally higher amount of lost and damaged cargo than other shippers. Several factors such as material identification, apathy, and value of cargo might explain these results.

V. RECOMMENDATIONS AND CONCLUSIONS

A. INTRODUCTION

The basic aim of this thesis was to examine how DOD manages loss and damage claims asserted on the commercial carriers. The reason for conducting the research was the suspicion that DOD pays for transportation services in cases where the carrier either losses or damages the material. Five research questions were posed at the beginning of this thesis. For each question, conclusions and recommendations are provided below.

B. RESEARCH QUESTIONS ONE AND TWO

The first two questions deal with the transportation discrepancy reporting system. First, do the TDR system and procedures adequately reflect the actual loss and damage situation? Secondly, are TDRs filed when the situation requires and/or is there confusion as to which form to use? The basic reporting procedures are adequate to account for all reported transportation discrepancies. However, the problem lies in reporting. Not all activities report discrepancies when the situation dictates. As shown in Chapter III, the two largest naval supply centers write off a substantial amount of material as lost in shipment without submitting a corresponding TDR. In an interview, the head of the claims processing office at NAVMTO stated NSC Oakland

had not submitted a TDR requiring claims action in almost nine months [Ref. 32]. The question is why. First, the required documentation may be unavailable to the consignee. As a consequence, the consignee requires the full cooperation of other activities. Difficulty in obtaining sufficiently detailed documentation could cause receiving activities to become apathetic in submitting a report. The explanation is lack of incentive. Some form of incentive is necessary to motivate the receiving activity to file the TDR. In cases of RODs, the receiving activity has some reasonable expectation that the issuing activity will take action to either replace the material or provide credit. In cases of transportation discrepancies, the consignee has no such prospect. If the material is still required, the consignee must order the material a second time without receiving credit or replacement for the lost/damaged first shipment.

Confusion over which form to use in reporting a transportation discrepancy also leads to reporting problems. The Army Material Command study discovered that there is a substantial amount of data common to both the TDR and ROD reports [Ref. 29]. Hence, the study recommended consolidating the two reports into one. However this recommendation would result in an extended form which may be significantly more difficult to complete.

Even if the required documentation is obtained and the correct form used, the dollar amount listed in the report may be inaccurate for several reasons. First, an item manager is consulted only when the receiving activity has reason to suspect the price listed in the supply catalog. What happens if the consignee has no reason to suspect the price, listed in the supply catalog, is out of date? In cases of damaged material, the receiving activity in most cases is not near the Designated Overhaul Point (DOP) where accurate estimates can be quickly obtained. In either case, the consignee frequently does not have easy access to accurate repair/replacement cost estimates.

A solution to these problems could be an automated system for filing and tracking transportation discrepancies. Starting up a new automated system could entail a tremendous amount of work, however there is an alternative. Both the Navy and GSA are currently in the midst of developing a automated ROD reporting and tracking system. The purpose of the Navy's program is to improve visibility of ROD processing and control status by automating records processing at the stock points. The program would enable management to focus responsibility and thereby reduce the number of RODs resulting from stock point deficiencies [Ref. 39:para. 2-1]. GSA's program is similar however it also permits system wide analysis of the RODs received for shipments originating in the GSA national supply system.

Additionally, the program will provide information for the investigation of alleged fraud on the part of carriers and vendors [Ref. 40:para. 2.1]. The present system used in the accounting for transportation discrepancies includes manual reports and tedious information gathering. The overall system is slow and unresponsive and contributes directly to the non-reporting problem.

Recommendations:

1. Route copies of all TDRs to the item manager (for losses) or the DOP (for damages) as appropriate. These reviewing activities would advise the claims offices directly of changes to the repair or replacement cost.
2. Incorporate an incentive into the program for the receiving activity to submit the transportation discrepancy reports. The incentive should take some form of a credit or replacement similar to the ROD program.
3. Investigate the possibility of modifying the ROD program under development by the Navy to include an automated TDR tracking system.

C. RESEARCH QUESTION THREE

The third research question posed in this research concerns whether the information collected by MTMC or NAVMTO is used to pinpoint and correct recurring loss and damage problems. As shown in Chapter III, many reports are generated at MTMC, however very little in-depth analysis is performed. For example, MTMC personnel are aware that released valuation rates cause the government to lose valuable transportation dollars [Ref. 34]. However, the impetus to examine the effects of released rates came from

the Air Force claims office not MTMC itself [Ref. 41]. The essence of the problem lies with the fact that MTMC is not coordinating a loss and damage prevention program for all services.

The second management area requiring comment is carrier performance. Carrier performance monitoring is presently limited to occasions when a TO requests a review [Ref. 42]. Even if a review is requested, the minimum level of satisfactory service for loss and damage is not considered since until September 1987 no report provided the reviewing activity with the necessary historical data. MTMC responsibilities as outlined in the Defense Traffic Management Regulation require that carrier performance be evaluated at least on a semi-annual basis [Ref. 26:para 42-6]. Carrier performance should be monitored at both MTMC Headquarters and area commands with reports forwarded to the larger shipping activities for comments.

By far the most significant problem in the management of transportation discrepancies concerns ocean shipments. MTMC reports do not include ocean carrier statistics because they believe this information is monitored by MSC [Ref. 34]. However, MTMC's basic functions include monitoring the worldwide loss and damage problem within DOD, not just the CONUS shipments [Ref. 22:para. V.H]. By not including the ocean carrier claims, MTMC is ignoring a substantial number and dollar amount of claims. In 1986 alone, MSCPAC filed

517 transportation claims valued at \$1.8 million with ocean carriers with an additional 900 claims awaiting processing. During fiscal year 1986, the Navy filed only 387 claims worth \$3.1 million and the Air Force filed 529 claims valued at \$1.9 million. If the number of MSCLANT claims are equivalent to MSCPAC's, total MSC claims would exceed all other DOD activities except DLA. The 1984 DOD Audit Report of transportation claims processing stated the average time to process and settle ocean carrier claims at MSCLANT exceeded 300 days. In view of the MSCPAC reports discussed in Chapter III, the situation has improved little since 1984.

Recommendations:

1. MTMC should assume the leadership role in a DOD loss and damage prevention program and perform detailed analysis of all transportation claims to pinpoint problem areas and suggest corrective action.
2. NAVSUP should direct MSC to report loss and damage statistics to MTMC in a format compatible with other data received.
3. MTMC should actively monitor carrier performance every six months. Additionally carrier performance reports should be distributed to major transportation activities for comments.
4. MTMC should develop and promulgate a joint services instruction concerning claims processing, negotiating, and settlement.

D. RESEARCH QUESTION FOUR

The next research question posed in this research dealt with how well the services compare among themselves and with the private sector in loss and damage claims experience.

Using data in the MTMC data base, the analysis identified a significant statistical difference in the number and dollar amount of claims submitted based on (1) service, (2) shipping costs, (3) the interaction of service with mode and/or (4) the interaction of service with year. All things being equal, there should not be a statistical difference among the services in this area. The Navy and Marine Corp cell means were consistently below the other services.

A comparison between DOD and the private sector was made of how well both do in recovering for loss and damage from the commercial carriers. Claims ratios were used as the measure of effectiveness. The DOD claims ratios were developed from claims and shipping cost data contained in MTMC reports. The results indicate DOD is experiencing a disproportionately higher amount of loss and damage when compared to other shippers. It is significant to point out that many TDRs are not filed and as a result the number and value of claims could be significantly understated.

Recommendations:

1. Conduct further research as to why services are significantly different from the others in the number and dollar value of claims filed.
2. Conduct an in depth analysis of why DOD is suffering more lost and damaged cargo than other shippers.

E. RESEARCH QUESTION FIVE

The final research question dealt with the legal aspects of transportation claims. As shown in Chapter II, the legal

aspects can be very intricate and difficult to fully understand even for an experienced transportation individual. During the course of this research, it became apparent that personnel involved in settling transportation claims lack an in-depth knowledge of claims. At present, training is not required. Carriers on the other hand assign experienced personnel to claims management. If DOD is to be more successful in recovering for loss and damage, the personnel must receive some formal training. This training can easily be provided by private organizations such as the Shippers National Freight Claims Council.

The second conclusion concerning the legal aspects deals with ocean carrier liability rules. The present rules governing ocean carrier liability, C.O.G.S.A., were developed during an age when most cargo moved as break bulk. At the time, the definition of a package was almost universally agreed upon. However, with the introduction of container shipping, the definition has become vague and uncertain. Additionally, the rules of liability have always been heavily weighted in the carrier's favor. As DOD examines ways to save transportation funds, ocean carrier liability should come under intense scrutiny.

Recommendations:

1. Provide training for personnel handling claims processing and settlement. This training should include the practical as well as the legal aspects of transportation claims.

2. Ocean carrier liability rules should be researched in depth to determine which rules, C.O.G.S.A., Visby, or Hamburg, are in the best interests of government and commercial shippers.

In the course of this research, the author has come to appreciate that the process of settling and accounting for transportation claims in DOD is extremely complex. Each service pursues recovery of government funds from the commercial carriers in different manners. As a result, the chance of the recovery differs greatly from one service to the next. Ocean shipping is the least understood mode of transportation. Since the total of ocean shipping claims can exceed all other modes, a detailed analysis of ocean carrier liability and proposed changes should be accomplished as soon as possible.

APPENDIX

LOSS AND DAMAGE DATA

MODE 1 - RAIL
2 - TRUCK
3 - AIR
4 - OTHER

SERVICE 1 - ARMY
2 - NAVY
3 - AIR FORCE
4 - MARINE CORPS
5 - DLA

ID#	FISCAL YEAR	MODE	NUMBER OF CLAIMS	DOLLAR VALUE OF CLAIMS (\$1,000)	NUMBER SHIPMENTS (1,000)	COST TO SHIP CARGO (\$1,000,000)	SERVICE
001	86	1	222	738	12	82	1
002	86	2	575	3177	281	142	1
003	86	3	32	30	34	6	1
004	86	4	19	59	1	0	1
005	86	1	18	54	2	12	3
006	86	2	462	1823	178	71	3
007	86	3	22	133	46	7	3
008	86	4	27	7	3	0	3
009	86	1	11	8	1	7	4
010	86	2	41	275	20	22	4
011	86	3	1	0.6	1	0	4
012	86	4	9	25	-	-	4
013	86	1	10	8.5	1	8	2
014	86	2	333	2663	133	85	2
015	86	3	31	484	28	8	2
016	86	4	13	9	2	4	2
017	86	1	29	186	7	13	5
018	86	2	1940	2481	534	120	5
019	86	3	198	90	53	6	5
020	86	4	18	15	8	65	5
021	85	1	98	82	11	72	1
022	85	2	604	1687	270	122	1
023	85	3	30	15.2	36	7.1	1
024	85	4	33	8.2	2	0.6	1
025	85	1	11	5.7	2	12	3
026	85	2	422	1531	167	62.8	3
027	85	3	32	14.2	37	4.9	3
028	85	4	40	5	5	0.4	3
029	85	1	13	4	2	8.7	4
030	85	2	35	258	19	15.8	4
031	85	3	1	4.4	1	0.4	4
032	85	4	1	3.9	-	0	4
033	85	1	6	6	1	7.4	2
034	85	2	244	1347	134	73	2

035	85	3	17	355	29	6.6	2
036	85	4	8	62	1	3	2
037	85	1	27	50	6	11.6	5
038	85	2	2054	2064	580	114	5
039	85	3	181	179	108	7.1	5
040	85	4	14	14	9	54	5
041	84	1	52	90	8	52.5	1
042	84	2	621	1322	269	121	1
043	84	3	41	107	35	7.6	1
044	84	4	16	6.5	2.4	1.4	1
045	84	1	9	94	1.3	11.4	3
046	84	2	410	1986	179	66	3
047	84	3	58	13.2	37	5.6	3
048	84	4	21	20	5.7	0	3
049	84	1	28	18.7	1.3	6.9	4
050	84	2	37	129	18	13.2	4
051	84	3	2	2.5	1.5	0.3	4
052	84	4	1	1.6	0	0.05	4
053	84	1	14	379	0.9	7.9	2
054	84	2	255	1186	134	70.6	2
055	84	3	12	31	31	7.1	2
056	84	4	10	40	1.8	2.3	2
057	84	1	30	25	9	14.9	5
058	84	2	1894	1581	627	126	5
059	84	3	247	130	141	12	5
060	84	4	7	6	7	51	5
061	83	1	40	196	5	36.6	1
062	83	2	453	1562	276	120	1
063	83	3	16	15.3	26	5	1
064	83	4	6	4.4	1.5	0.7	1
065	83	1	19	84	1	10.8	3
066	83	2	343	1006	179	65	3
067	83	3	13	12.5	36	5	3
068	83	4	35	31	5	0.6	3
069	83	1	18	13.2	1	4	4
070	83	2	29	79	17	12.8	4
071	83	3	2	4	1.2	0	4
072	83	4	-	-	0.3	0.04	4
073	83	1	5	7	1	8.7	2
074	83	2	235	1552	146	77.8	2
075	83	3	12	446	32	6.7	2
076	83	4	8	73	3.6	2.9	2
077	83	1	41	73	4	15.5	5
078	83	2	1594	1534	610	116	5
079	83	3	198	84	174	17.6	5
080	83	4	12	52	10	48.5	5
081	82	1	140	167	7	60	1
082	82	2	676	1198	118	142	1
083	82	3	34	20	21	5	1
084	82	4	39	87	2	1	1
085	82	1	28	129	1.8	14	3
086	82	2	479	1429	174	80	3

087	82	3	23	11	31	5	3
088	82	4	18	8	6.6	1	3
089	82	1	12	12	0.9	5.3	4
090	82	2	12	39	15	12.3	4
091	82	3	-	-	0.8	0.1	4
092	82	4	-	-	0.3	0.1	4
093	82	1	20	145**	0.8	7	2
094	82	2	261	915	92	60	2
095	82	3	17	74	18	4	2
096	82	4	16	23	4	3.3	2
097	82	1	172	337	4.7	19	5
098	82	2	2772	1997	582	137	5
099	82	3	292	80	139	15	5
100	82	4	33	91	11	52.8	5

** One Navy claim for \$9.1 million in 1982 not included in this analysis since it was an outlier.

Indexes for conversion of dollar amounts to base year 1986

are:

1986	1.0
1985	1.026
1984	0.947
1983	0.947
1982	0.829

LIST OF REFERENCES

1. Department of the Army, Military Traffic Management Command, Military Traffic Management Report--First Quarter, FY 87.
2. Department of Defense Audit Report, Department of Defense Transportation Claims against Commercial Carriers, March 9, 1984.
3. Department of the Army, Military Traffic Management Command, Freight Loss and Damage Claims, RCS-MTMC-10-R1, FY 1986.
4. "How Does Claims Fit In?", Distribution, May 1987.
5. Sigmon, Richard R. Millers Law of Freight Loss and Damage Claims, Fourth Edition. Wm. C. Brown Company Publishers Iowa, 1974.
6. Augello, William J., Freight Claims In Plain English (1982 Revision), Shippers National Freight Claim Council, Inc. Publishers, 120 Main Street, Huntington, New York.
7. The Air Force Freight Loss and Damage Claims System, Air Force Regulation 75-35, dated July 1987.
8. Missouri Pacific Railroad Co. v. Elmore & Stahl 377 U.S. 134.
9. Barrett, Colin. "Paying Close Heed to the Bill of Lading," Distribution, November 1985.
10. 49 U.S.C.A. 10730 and 11707, Carmack Amendment.
11. Barrett, Colin. "More Thoughts on Declared Value," Distribution, April 1986.
12. Dempsey, Paul Stephen. "Transportation Deregulation--On A Collision Course," Paper, Univ. of Denver College of Law. 1985.
13. "Common Sense Can Cut Freight Claims," Purchasing World, February 1984.
14. "Of Cargo, Claims and Negligence Ocean Carriage Part One," Distribution, April 1983.

15. Heydt, Bruce. "Of Cargo, Claims and Negligence Ocean Carriage Part Two," Distribution, May 1983.
16. 46 U.S.C. 1300, Carriage of Goods By Sea Act.
17. Augello, William J., Shippers National Freight Claims Council, Huntinton, New York. Personal interview. 29 June 1987.
18. Cook, Thomas A. "Containing Losses On Ocean Shipments," Risk Management, August 1982.
19. Rider, Edward M. "Government Claims Handling Controversy," The Councillor, National Freight Claim & Security Council, American Trucking Association, December 1986.
20. Whitehurst Jr., Clinton H., "The Defense Transportation System Competitor or Complement to the Private Sector?" American Enterprise Institute for Public Policy Research, Washington D.C. 1976.
21. Transportation and Traffic Management, Department of Defense Directive 4500.9, dated June 28, 1976.
22. Single Manager Assignment for Military Traffic, Land Transportation, and Common-User Ocean Terminals, Department of Defense Directive 5160.53, dated March 24, 1967.
23. MILSTAMP Military Standard Transportation And Movement Procedures, Department of Defense 4500.32R Volume 1, dated 1 August 1979.
24. Reporting of Transportation Discrepancies in Shipments (RCS MTMC-54(R2)) Army Regulation 55-38; Change 2, NAVSUP Instruction 4610.33C, Change 2; Air Force Regulation 75-18, Change 2; Marine Corps Order P4610.19D, Change 2; Defense Logistics Agency Regulation 4500.15, Change 2, dated 15 April 1985.
25. Uniform Settlement of Military Freight Loss and Damage Claims, AFR 177-19, AR 735-11-1, NAVSUPINST 4610.34D, MCO P4610.16D, DLAR 4500.12, dated 1 March 1984.
26. Defense Traffic Management Regulation, AR 55-355, NAVSUPINST 4600.70, AFR 75-2, MCO P4600.14B, D:AR 4500.3. 31 July 1986.
27. Shipboard Uniform Automated Data Processing System (207) Support Procedures, NAVSUP Publication 522, Chapter 5.

28. Report of Discrepancy (ROD) Manual, NAVSUP Instruction 4440.179, November 26, 1985.
29. Material Readiness Support Activity, U.S. Army Material Command. Combining Standard Forms (SF) 361, 364, and 368 into One Form and One Publication, dated 15 May 1985.
30. Telephone conversation 21 August 1987 Lt. Lapp and O.D. Morris, Big State Trucklines.
31. Allison, Patrick, American President Line Headquarters, Oakland, CA, Loss and Damage Division, personal interview, 29 September 1987.
32. Burg, Kenneth, NAVMTO Norfolk, VA Claims Processing Division, personal interview, 23 June 1987.
33. Office of the General Counsel, U.S. General Accounting Office, Transportation Law Manual, dated January 1978.
34. Steward, Joseph and Hegan, Lisa, Loss and Damage Division, Freight Traffic Division, MTMC Headquarters, Falls Church, VA, personal interview, 25 June 1987.
35. United States Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, Volume 67 number 7, 1987 Table 3.10 and Volume 64 number 7, 1984 Table 3.10.
36. SPSSX Users Guide edition 2, SPSS Inc. Chicago, Illinois, 1986.
37. Telephone conversation 18 August 1987, Lt. Lapp and Dick Mungo National Freight Claim Council of the American Trucking Association, Alexandria, VA.
38. Association of American Railroads, Operation and Maintenance Department, Freight Claim and Damage Prevention Division, Freight Loss and Damage 1983, Circular No. FCDP-297 dated April 27, 1984.
39. Fleet Material Support Office, Automated Report of Discrepancy (ROD) Processing System Users Manual, dated 15 October. FMSO Document No. Project N0645-029-5189 UM-RR01A.
40. General Services Administration, GSA/FSS Discrepancy Report Center, Automated ROD Resolution System Design Alternatives. dated 5 August 1987.

41. Telephone conversation 15 October 1987 Lt. Lapp and Lisa Hegan, MTMC Headquarters, Loss and Damage Division, Freight Traffic, Falls Church, VA.
42. Mitchell, Roberta. Carrier Services Branch, Traffic Services Division, MTMC Western Area, Oakland, CA, personal interview, 28 August 1987.

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