March 22, 2002

PAUL E. VOGEL
VICE PRESIDENT, NETWORK OPERATIONS MANAGEMENT

SUBJECT: Management Advisory – Trailer Damage
(Report Number-TD-MA-02-002)

This management advisory presents the results of our self-initiated review of the Postal Service trailer fleet (Project Number 00PA032TR003) and is part of a series of reports on this subject. The objective of the review was to determine whether Postal Service initiatives, policies, and procedures were effective in controlling the cost of damage to trailers the Postal Service owns.

The review revealed the Postal Service had several significant and positive initiatives, as well as existing management controls, to reduce trailer damage. However, the Postal Service has an opportunity to save up to $1 million annually, or $5 million over the next 5 years, by reducing unnecessary damage to trailer doors. We recommended that Postal Service managers issue training videos on proper load securing procedures to all areas, and emphasize the importance of using effective management controls like safety posters, checklists, inspection sheets, and irregularity reports. Management commented on the report and agreed with all our findings and recommendations. Management's comments, and our evaluation of these comments, are included in the report.

We appreciate the cooperation and courtesies provided by your staff during the review. If you have any questions or need additional information, please contact Joe Oliva, director, Transportation and Delivery, at (703) 248-2100, or me at (703) 248-2300.

Ronald K. Stith
Assistant Inspector General
for Core Operations

cc: John A. Rapp
Anthony M. Pajunas
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EXECUTIVE SUMMARY

Introduction

Every day, Postal Service and contract drivers transport trailers to and from mail facilities, equipment facilities, and the plants of large customers. The Postal Service operates almost 17,000 trailers at a cost of more than $50 million annually. This management advisory is part of a series of reports on the subject of the Postal Service trailer fleet. This self-initiated review focuses on opportunities to save costs due to damage to trailers the Postal Service owns. We estimated that repairing damage to these trailers costs the Postal Service more than $3 million every year.

Figure 1. Postal Service tractor and trailer at a mail facility.

Results in Brief

Our review revealed the Postal Service had several significant and positive initiatives to reduce trailer damage. However, the Postal Service has an opportunity to save up to a projected $1 million annually, or a forecast of $5 million over the next 5 years, by reducing unnecessary damage to trailer doors. Specifically, we concluded trailer door damage was a significant avoidable cost, caused primarily by cargo that was not properly loaded or secured. Consequently, cargo shifted in transit and caused damage to the trailer doors. Interviews we conducted with Postal Service employees indicated cargo was improperly loaded because necessary equipment was not always available, or available equipment was not always used. This information was reinforced by our observations and inspections during visits to Postal Service facilities. As a result of these and other deficiencies, many trailer doors were unnecessarily damaged—and we projected this damage cost the Postal Service $1 million during fiscal year (FY) 2000.

Although this review revealed the Postal Service could reduce costs, it also revealed the Postal Service had a number of positive initiatives and existing management controls in place to prevent damage to trailers, including training employees and accounting for equipment needed to secure cargo. For example, a training video developed by the Northeast Area entitled "Shoring for Safety," used video technology to explain proper loading procedures. Other initiatives and management controls included safety posters, checklists, inspection sheets, and the Postal Service Irregularity Report, Form 5500 (PS Form 5500), used for reporting deficiencies identified on checklists, so missing or unserviceable equipment could be replaced or repaired.

Summary of Recommendations

We recommended that management issue training videos to all areas, on proper load securing procedures, and emphasize the importance of using effective management controls like safety posters, checklists, inspection sheets, and the PS Form 5500.

Summary of Management's Comments

Management agreed with all of our findings and recommendations. They stated they would distribute the Northeast Area video to all facilities responsible for loading trailers, and would post vehicle restraining and loading procedures on their web page. Further they stated they would advise all areas by memorandum regarding the importance of following loading policies and guidelines, and using safety posters, checklists, inspection sheets, and irregularity reports. Finally they stated that in addition to agreeing with our recommendations, they would implement a web based information management system that would allow identification of originating facilities that did not properly secure loads, and allow management to follow-up with facilities that did not adhere to load restraint procedures. Management stated the information management system would be implemented by September 2002. Management's comments, in their entirety, are included in Appendix E of this report.

Overall Evaluation of Management's Comments

Management's comments are responsive to our findings and recommendations. Management's actions, taken or planned, will effectively address the issues identified in this report.

INTRODUCTION

Background

Transporting by trailer is one of the most cost effective ways to move large volumes of mail and related equipment. Every day, Postal Service employees and contract drivers haul trailers to and from mail processing and distribution centers, airmail facilities, mail transport equipment service centers, bulk mail centers, and the plants of large customers. The Postal Service operates almost 17,000 trailers at a total cost of more than $50 million annually. Most trailers are leased, but more than 5,000 are owned by the Postal Service. In April 2000, we initiated an audit to evaluate the safety and security of the trailer fleet, and to identify opportunities for cost savings. This management advisory is part of a series of reports, and focuses on damage to trailers the Postal Service owns. We projected this damage could cost the Postal Service more than $3 million every year.

Figure 2. Postal Service tractor and trailer arriving at a mail facility.

Objective, Scope, and Methodology

The objective of this report was to determine whether Postal Service initiatives, policies, and procedures were adequate to reduce trailer damage.

To accomplish our objective, we observed operations at Postal Service facilities. We interviewed contractors and Postal Service officials at headquarters and in the field, including officials and employees assigned to vehicle maintenance facilities. We reviewed Postal Service policy documents including Postal Service Handbook PO-701,

Fleet Management, dated March 1991; Postal Service Handbook PO-502, Container Methods, dated September 1992; and Handbook M-22, Dispatch and Routing Procedures, dated October 1994. We analyzed Postal Service vehicle safety procedures, vehicle safety checklists, and Postal Service safety training materials. We used computer assisted assessment techniques to extract fiscal year (FY) 2000 trailer repair cost data from the Postal Service's vehicle maintenance accounting system, and used the data to conduct statistical sampling. To conduct sampling we randomly selected 55 vehicle maintenance facilities and a total of 1,738 trailers assigned to those facilities. Trailers were divided into three separate model year categories. Model years 1984 through 1987 consisted of 1,011 trailers assigned to 69 vehicle maintenance facilities; model years 1991 through 1992 consisted of 1,019 trailers assigned to 74 vehicle maintenance facilities; and model year 1998 consisted of 1,986 trailers assigned to 85 vehicle maintenance facilities. After we identified our sample locations, we visited sites, reviewed maintenance work-orders and related documents, analyzed and coded damage by type, and finally projected our results to a national statistical population. A detailed description of our statistical methodology is contained in Appendix A.

Work associated with this report was conducted from January 2001 until March 2002 in accordance with the President's Council on Integrity and Efficiency, Quality Standards for Inspections. We discussed our conclusions and recommendations with appropriate management officials and included their comments, where appropriate.

Prior Report Coverage

Safety and Security of the Postal Service Leased Trailer Fleet (TR-AR-01-002), dated March 30, 2001**,** concluded the Postal Service could save more than $390,000 annually, or almost $2 million over a 5-year period, by properly administering damage claims on leased trailers. The claim processing deficiencies were caused by the Postal Service not having effective claim processing policies. We recommended the Postal Service revise and update their policies and procedures governing trailer damage claims. The Postal Service agreed and issued Management Instruction, Processing Trailer Damage Claims, dated May 24, 2001.

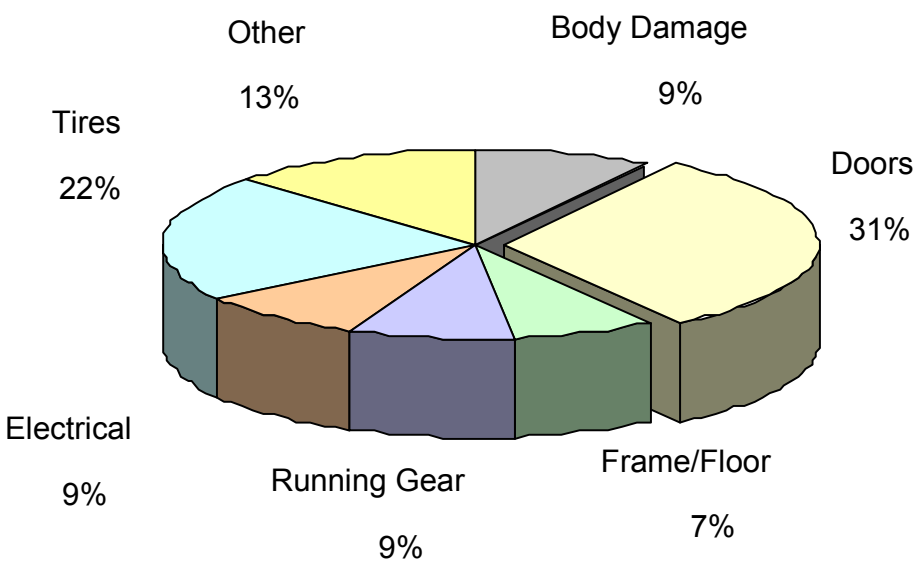
Leased Trailer Deficiencies in the New York Metro Area (TR-MA-01-001), dated March 30, 2001, concluded that certain trailers in the New York Metro Area appeared to be unsafe, in substandard condition, and had a deteriorated appearance that reflected poorly on the Postal Service. We made four recommendations, to which management agreed, in order to address the issues identified in our report.

RESULTS

Trailer Damage

The Postal Service had several significant and positive initiatives to reduce trailer damage. However, the Postal Service has an opportunity to save up to a projected $1 million annually, or a forecast of $5 million over the next 5 years, by reducing unnecessary damage to trailer doors. Based on our statistical sample, we projected the total cost of repairing damage to Postal Service owned trailers during FY 2000 was about $3 million. We then segregated damage costs into categories including trailer doors, tires, body damage, trailer frames, and electrical systems—and identified the most costly categories. Some categories, like tire damage, resulted from operating conditions that were not easily avoided. However, our analysis revealed trailer door damage was by far the most significant avoidable cost. We projected this unnecessary cost accounted for more than 30 percent of all damage, or more than $1 million annually. Figure 3 shows the various types of trailer damage that occurred and the percentage of total estimated costs associated with each type.

Figure 3
Fiscal Year 2000 Projected Cost of Damages to Postal Service Owned Trailers



Unnecessary Damage	Unnecessary damage to trailer doors was caused, in large part, by cargo that was not properly loaded or secured. Consequently, the cargo shifted in transit and resulted in damage. For example, Figure 4 below illustrates how cargo can shift when it is not properly secured. In this case, the load shifted in transit and jammed against the door. As a result, personnel were required to use a forklift to pry the door open.

Figure 4. Example of unsecured load that shifted.

Observations we made at Postal Service vehicle maintenance facilities we visited, and discussions we had with Postal Service employees, indicated cargo was improperly loaded because:

- Necessary equipment was not always available.
- Available equipment was not always used.

Equipment Availability and Use	Postal Service Handbook PO-701, Fleet Management, dated March 1991, Handbook PO-502 Container Methods, dated September 1992, and Postal Service Headquarters memorandum, “Unsafe Loading and Restraining Procedures,” dated February 2, 2001, all require trailers to use load securing equipment. Such equipment includes safety chains, locks, straps, shoring bars, and load restraint systems like “E” tracks, as well as safety posters illustrating

proper loading and securing techniques. Figures 5 and 6, below, illustrate some of this equipment. Figure 5 depicts a loaded trailer arriving at a facility with an unused shoring bar on the trailer floor. The bar would normally fasten to the "E" tracks on the sides of the trailer. Employees explained the Postal Service is moving away from shoring bars to secure equipment, and is focusing on using safety straps instead.

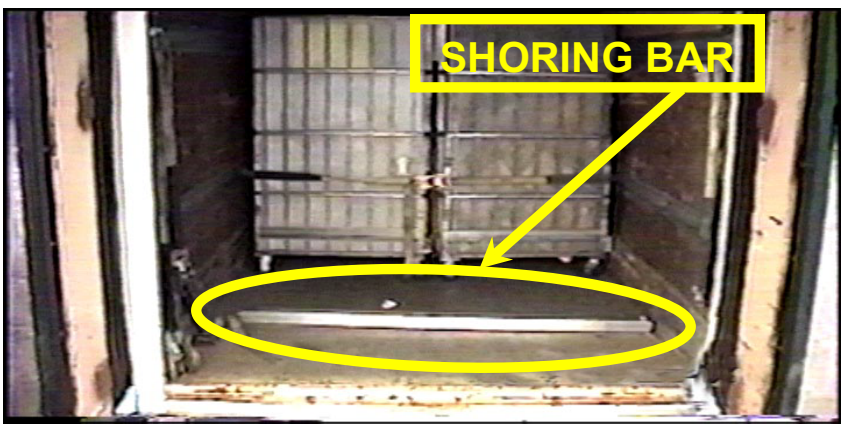


Figure 5. Proper load security requires two restraining devices. In this photograph there is only one strap and the shoring bar is not used.

Figure 6 provides a good view of an "E" track to which straps or shoring bars are normally secured. The employee pictured is in the process of securing mail containers with a safety strap attached to an "E" track.

Figure 6. Employee in process of securing load using strap attached to an "E" track. Proper load security requires two straps.

Our site visits reinforced the statements of Postal Service employees that load securing equipment required by Postal Service policy was not always used. For example, our inspection of the trailer in Figure 4, revealed it was not equipped with straps or shoring bars. In addition, at one Postal Service facility we visited, we noted only 17 of 52 arriving trailers had either a safety chain or a lock as required by Handbook PO-701, Fleet Management, dated March 1, 1991. We also observed that many trailers had only one safety strap or "E" track instead of two as required, and that many trailers did not have the required safety poster. Postal Service Label 62, "Safety Notice," dated August 1993, is a safety poster which explains the proper method for attaching straps to "E" tracks in a typical load configuration. The safety poster should be fastened to the interior trailer wall. We also noted deficiencies were not always recorded on a Postal Service Form 5500 Irregularity Report as required by Postal Service Handbook M-22. Consequently, missing equipment was not properly reported and may not have been replaced. As a result of these and other deficiencies we observed, many trailer doors were damaged. Figure 7 is an example of damage to a trailer door resulting from an improperly secured load.

Figure 7. Trailer door damage resulting from an improperly secured load.

Postal Service Training and Damage Control Initiatives	Although our review revealed the Postal Service had the opportunity to reduce cost, it also revealed the Postal Service had a number of positive initiatives and existing management controls in place to train employees, account for equipment, and consequently prevent damage. Some examples include: • Training Video – A training video developed and used by the Northeast Area entitled "Shoring for Safety" uses video technology to depict and explain proper load securing procedures and techniques. • Safety Posters – Safety posters developed and distributed by the Postal Service, visually depict and explain proper techniques for using restraining straps and "E" tracks to secure mail containers and mail transport equipment in a typical load configuration. (See Appendix B) • Checklists – A checklist developed by the Northeast Area specifies trailer inspection sequence, and documents inspection results. The checklist causes personnel using it to determine and document whether load securing equipment including locks, chains, straps, and "E" tracks, is present and serviceable, and whether trailer doors are damaged. (See Appendix C) • Inspection Sheets – Inspection sheets developed by the Northeast Area Distribution Networks Office are used to inspect vehicles. The sheets cause personnel using them to identify required safety equipment, determine equipment serviceability, and evaluate its proper use. (See Appendix D) • Irregularity Reports –The PS Form 5500 is designed and distributed by the Postal Service for use in reporting deficiencies identified on checklists and vehicle inspection sheets. Consequently, when required equipment is reported as missing, officials can take necessary action to replace it.

Recommendations

We recommend the vice president, Network Operations Management:

1. Issue the Northeast Area video, "Shoring for Safety," to all Postal Service areas, to reinforce proper load securing procedures for Postal Service personnel who load and secure trailers.

2. Emphasize effective management controls, like safety posters, checklists, inspection sheets, and the PS Form 5500.

Management's Comments

Management agreed with all findings and recommendations. They stated:

- They would provide copies of the Northeast Area video to the manager, Delivery Vehicle Operations, for distribution to all vehicle maintenance facilities; to all terminal handling suppliers who support shared and dedicated air networks; and to all distribution network offices for distribution to area facilities. Management also stated they would post vehicle restraining and loading procedures on their web page.

- They would advise all areas by memorandum regarding the importance of following loading policies and guidelines, and using safety posters, checklists, inspections sheets, and the irregularity report, PS Form 5500.

In addition to agreeing with all our recommendations, management stated they were developing a program on the Postal Service Web that would provide management information reports to measure adherence to loading and restraining procedures. Specifically, they said they would implement a web based information management system that would allow identification of originating facilities that did not properly secure loads, and allow management to follow-up with facilities that did not adhere to load restraint procedures. Management stated the information management system would be implemented by September 2002.

Evaluation of Management's Comments	Management's comments are responsive to our findings and recommendations. Management's actions, taken or planned, will effectively address the issues identified in this report.

APPENDIX A

STATISTICAL SAMPLING AND PROJECTIONS FOR TRAILER DAMAGE

Purpose of the Sampling

Our objective of this review was to assess the number and cost of trailer damage repairs. In support of this objective, the team employed a stratified sample design that allowed statistical projection of the number and cost of trailer repairs due to damage not associated with normal wear of the equipment.

Definition of the Audit Universe

All universe data was provided by the Office of Inspector General Computer-Assisted Assessment Techniques team search of the Postal Service Vehicle Maintenance Accounting System database, based on the listing for FY 2000. Trailers were grouped into three categories defined by the model years for the trailers: (1) 1984/1987, (2) 1991/1992, and (3) 1998.

The universe for the 1984/1987 model years consisted of 1,011 trailers in 69 vehicle maintenance facilities and reflected a total value of scheduled maintenance and damage repairs of $1,435,619.

The universe for the 1991/1992 model years consisted of 1,019 trailers in 74 vehicle maintenance facilities with a total value of scheduled maintenance and damage repairs of $1,110,919.

The universe for the 1998 model year consisted of 1,986 trailers in 85 vehicle maintenance facilities with a total value of scheduled maintenance and damage repairs of $1,474,342.

Sample Design and Modifications

The team used a stratified sample design with a two-stage selection of trailers within each stratum. For the stratification, vehicle maintenance facility sites were grouped based on the number of trailers and the grand total of scheduled and unscheduled maintenance and repairs at the vehicle maintenance facility for FY 2000. The original stratification included only the 1984/1987 model year trailers. When the newer trailers were identified, additional strata were included for sites that had the new trailers but none of the older ones.

For the 1984/1987 model year, a total of 32 vehicle maintenance facility locations were randomly selected for review. A sample size of 26 sites was calculated based on an

average of about 15 trailers per site (approximately 1,042 trailers at about 70 sites) and a desired total of about 380 trailers in the sample, to provide a two-sided 95 percent confidence interval with approximately 4 percent precision, based on auditor expectations of approximately a 50 percent level of compliance on one or more attributes.[1] The original stratification of the 26 sites included the allocation of 20 sites to 1 stratum and 6 to another, with 13 sites eliminated from the universe because they had only one trailer each. The third stratum was later re-included, with an additional, 6 sites selected. The sample selection was random within each stratum, with 20 sites from stratum I (N_I=33), 6 sites from stratum II (N_{II}=25), and 6 sites from stratum III (N_{III}=13).

Table 1. Universe Count and First Stage Sample Size for 1984/87 Model Years

	Stratum	Description	Number of Vehicle Maintenance Facilities	First-Stage Sample
	I	AMOUNT ≥ $10,000	33	20
	II	AMOUNT <$10,000 and more than 1 trailer	23	6
	III	AMOUNT <$10,000 and one trailer	13	6
Total			69	32

The stratification as shown ensured that the strata were mutually exclusive and collectively exhaustive, thus covering the entire population of vehicle maintenance facilities having 1984/1987 model year trailers.

At the first stage, vehicle maintenance facilities were selected randomly within each stratum. At the second stage, trailers were selected from those at each vehicle maintenance facility. All trailers were selected if the number of trailers at a vehicle maintenance facility was less than or equal to 50. If there were more than 50 trailers, 50 trailers were randomly selected by the audit team using the Excel “randbetween” function. The resulting 1984/1987 sample included a total of 476 trailers at 32 sites.

The universe of vehicle maintenance facilities having trailers from the 1991/1992 and 1998 model years include locations not in the original stratification. For each of these two later model years, two additional strata were added to the original three strata of locations pertinent to the first model year. The universe size and first-stage sample size are indicated in Tables 2 and 3 for the 1991/1992 and 1998 model years, respectively.

[1] Because we had no prior information regarding the mean and standard deviation, we were not able to calculate a sample size specifically designed for the variables. A 4 percent precision was used in an attribute-based size calculation because we expected to lose some precision when we worked with the variables data.

At the second stage, all trailers were selected if the number of trailers at a vehicle maintenance facility was less than or equal to 50. If there were more than 50 trailers, 50 trailers were randomly selected by the audit team using the Excel ”randbetween” function. The resulting 1991/1992 sample included a total of 450 trailers at 40 sites; the resulting 1998 sample included a total of 812 trailers at 44 sites.

Table 2. Universe Count and First Stage Sample Size for 1991/1992 Model Years

	Stratum	Description	Number of Vehicle Maintenance Facilities	First -Stage Sample
	I	Locations with 1984/1987 trailers having repairs ≥ $10,000	31	17
	II	Locations with 1984/1987 trailers having amount < $10,000 and >one 1984/1987 trailer	14	4
	III	Locations with 1984/1987 trailers having amount < $10,000 and only one 1984/1987 trailer	9	5
	IV	Locations with 1992 trailers having amount ≥ $10,000, no 1984/1987 trailers	6	6
	V	Locations with 1992 trailers having amount < $10,000, no 1984/1987 trailers	14	8
Total			74	40

Table 3. Universe Count and First Stage Sample Size for 1998 Model Year

	Stratum	Range Description	Number of Vehicle Maintenance Facilities	First-Stage Sample
	I	Locations with 1984/1987 trailers having repairs ≥ $10,000	29	15
	II	Locations with 1984/1987 trailers having amount < $10,000 and >one 1984/1987 trailer	17	3
	III	Locations with 1984/1987 trailers having amount < $10,000 and only one 1984/1987 trailer	11	6
	IV	Locations with 1998 trailers having amount ≥ $10,000, no 1984/1987 trailers	11	11
	V	Locations with 1998 trailers having amount < $10,000, no 1984/1987 trailers	17	9
Total			85	44

Statistical Projections of the Sample Data

Methodology

Sample data were projected using the combined formulas for estimation of a population mean and total for a stratified sample, as described in Chapter 5, and a two-stage sample, as described in Chapter 9, of Elementary Survey Sampling, Scheaffer, Mendenhall, and Ott, c.1996.

For this analysis, damage repair costs from Order-invoice for Vehicle Repair, PS Form 4541 were allocated into parts and labor categories according to the proportions observed in the prior review on Trailer Lease Justification: 40 percent to parts and 60 percent to labor for the 1984/1987 model; 41 percent to parts and 59 percent to labor for the 1991/1992 model; and 44 percent to parts and 56 percent to labor for the 1998 model.

Results: 1984/1987 Model Years (Universe = 1,011 Trailers)

1984/1987 Damage Repair Cost
Based on direct projection of the sample results from the 1984/1987 model years, we are 95 percent confident the total cost of trailer damage repair is $1,113,446 to $1,273,748. The resulting projection of the damage repair cost of trailer repair is $1,193,597 (average of $1,181 per trailer).

1984/1987 Number of Repairs
Based on direct projection of the sample results from the 1984/1987 model years, we are 95 percent confident the total number of trailer repairs is 17,208 to 18,908. The resulting projection of the number of damage repairs is 18,058 (average of 18 per trailer).

Results: 1991/1992 Model Years (Universe = 1,019 Trailers)

1991/1992 Trailer Damage Repair Cost
Based on direct projection of the sample results from the 1991/1992 model years, we are 95 percent confident the total cost of trailer damage repair is $709,641 to $931,113. The resulting projection of the trailer damage repairs is $820,377 (average of $805 per trailer).

1991/1992 Number of Repairs
Based on direct projection of the sample results from the 1991/1992 model years, we are 95 percent confident the total number of trailer damage repairs is 14,121 to 17,515. The resulting projection of the number of damage repairs is 15,818 (average of 16 per trailer).

Results: 1998 Model Year (Universe = 1,986 Trailers)

1998 Damage Repair Cost
Based on direct projection of the sample results from the 1998 model year, we are 95 percent confident the total cost of trailer damage repair is $1,047,793 to $1,386,789. The resulting projection of trailer damage repair cost is $1,217,291 (average of $613 per trailer).

1998 Number of Repairs
Based on direct projection of the sample results from the 1998 model year, we are 95 percent confident the total number of trailer damage repairs is 22,149 to 26,791. The resulting projection of the number of damage repairs is 24,470 (average of 12 per trailer).

Overall Results: For All Three Model Years (Universe = 4,016 Trailers)

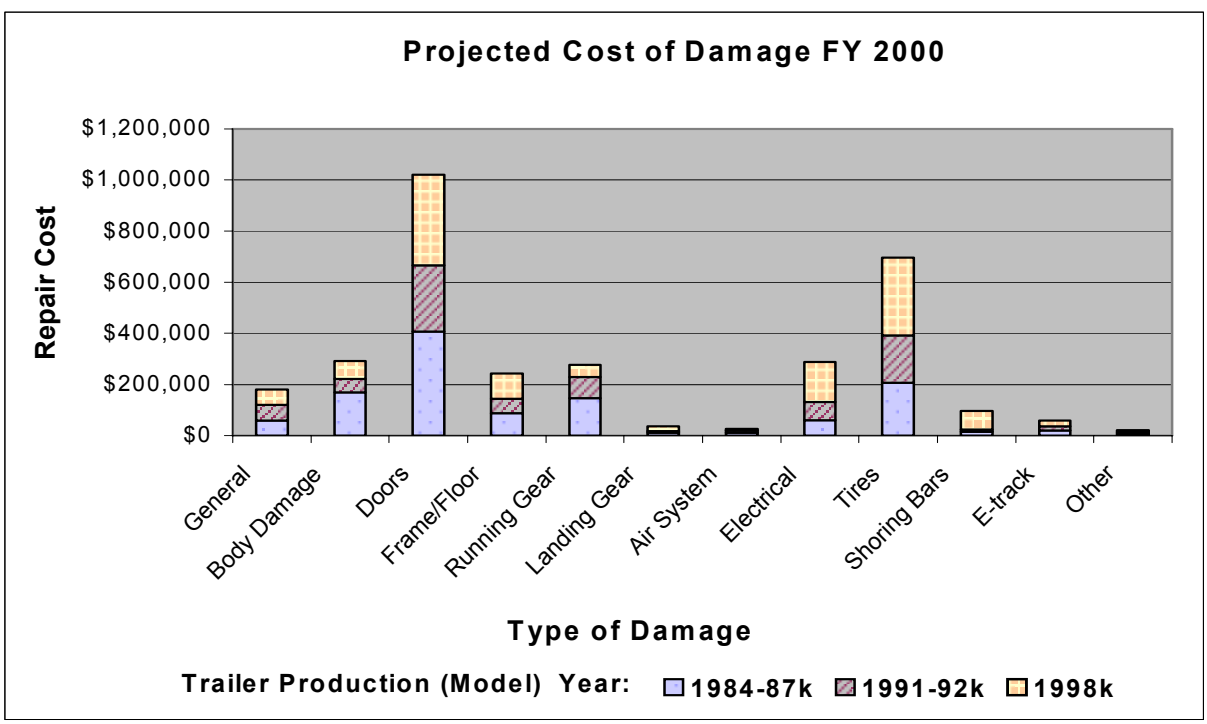
Overall Damage Repair Cost
Based on combination of the projections from all model years and damage types we calculate a projected total cost of trailer damage repair of $3,051,831 to $3,410,699. The resulting calculation of the cost of trailer damage repair is $3,231,265 (average of $822 per trailer). The total cost across all damage categories is presented for illustration only; because a singe trailer may appear in multiple damage categories, the individual damage category projections are not strictly additive.

Overall Number of Damage Repairs
Based on direct projection of the sample results from all model years, we are 95 percent confident the total number of trailer damage repairs is 56,025 to 60,667. The resulting projection of the number of damage repairs is 58,346 (average of 15 per trailer).

Overall Cost of Door Damage Repairs
Because door damage repair appeared to be a major factor in damage repair costs, we provided a separate projection for the cost of door damage repairs. Based on direct projection of the sample results from all model years, we are 95 percent confident the total cost of door damage repairs is $899,168 to $1,140,004 (or 27.8 percent to 35.3 percent of the overall damage repair cost). The resulting projection of the cost of door damage repairs is $1,019,567 (average of $278 per trailer or 31.6 percent of the overall damage repair cost).

Table 4. Damage Repair Cost Projections for All Three Model Years

Work code	Projected Cost of Damage Repair				
	1984-87k	1991-92k	1998k	Total	% of Total
General	$ 58,559	$ 61,916	$ 60,178	$ 180,653	5.8%
Body Damage	$ 168,327	$ 53,035	$ 70,845	$ 292,207	8.9%
Doors	**$ 407,190**	**$ 258,792**	**$ 353,601**	**$ 1,019,583**	**31.6%**
Frame/Floor	$ 88,403	$ 54,963	$ 98,001	$ 241,367	7.9%
Running Gear	$ 146,113	$ 83,078	$ 47,628	$ 276,819	8.8%
Landing Gear	$ 11,506	$ 5,348	$ 20,463	$ 37,317	1.1%
Air System	$ 10,112	$ 8,226	$ 6,527	$ 24,865	0.8%
Electrical	$ 59,054	$ 72,352	$ 155,669	$ 287,075	8.0%
Tires	$ 205,921	$ 186,713	$ 303,078	$ 695,712	22.8%
Shoring Bars	$ 14,483	$ 10,013	$ 72,445	$ 96,941	1.8%
E-track	$ 18,549	$ 18,316	$ 20,823	$ 57,688	1.8%
Other	$ 5,380	$ 7,625	$ 8,033	$ 21,038	0.7%
Total	**$ 1,193,597**	**$ 820,377**	**$ 1,217,291**	**$ 3,231,265**	
Bound (±)	$ 80,151	$ 110,737	$ 169,498	$ 179,434	



APPENDIX B. SAFETY NOTICE

UNITED STATES POSTAL SERVICE

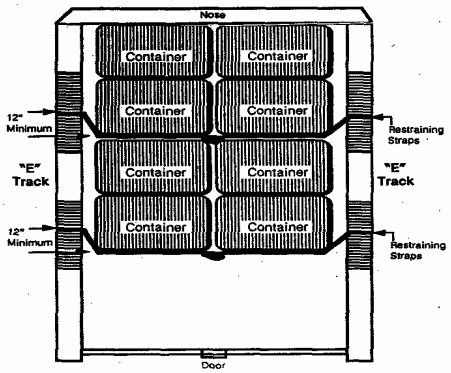
SAFETY NOTICE – PLEASE NOTE

Positioning Restraining Straps in "E" Tracks For Typical Load Configuration

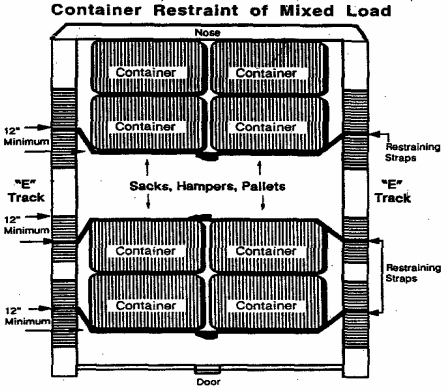
To Position the Straps:

Each end of the restraining strap should be connected into the "E" track at least one foot back of the edge of the container(s) being restrained. Properly position two restraining straps (one for each set of "E" tracks) approximately every 10 feet to prevent fore, aft, and sideways movement of the load. When restraining light loads, such as empty containers, you may use fewer straps. Each load must have two restraining straps (one for each set of "E" tracks) positioned at the end of the load.

Container Restraint of Solid Load



Container Restraint of Mixed Load



To Secure the Load:

Drape the assembly across the face of the load. **DO NOT** attempt to operate ratchet at this time. Hold the buckle at about the same level as the attached end fittings **AND** pull slack webbing through the buckle (Figure 1) until the straps and buckle are **SNUG** against the load. You can now operate the ratchet mechanism because there is **NO EXCESS SLACK** that could, if you wound up on the reel, cause jamming. Operate buckle handle back and forth to take up remaining slack and to set tension. (Figure 2)

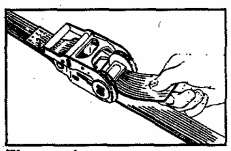


Figure 1

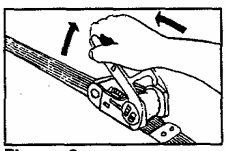


Figure 2

Continue ratcheting until enough tension is applied to hold the load securely. **DO NOT OVER-TIGHTEN** the shoring strap assembly. Too much tension may result in injury to you or damage to the shoring straps or "E" track hardware.

NEVER use tools to operate the buckle handle.

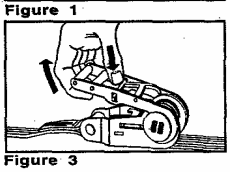


Figure 3

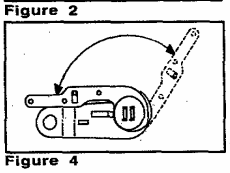


Figure 4

To Release the Buckle:

Depress the release bar with the thumb (Figure 3) and swing handle as far as it will go from the buckle body (Figure 4). With the handle in this position, the spool will turn freely and unwind the webbing.

NO TOOLS are necessary.

Label 62, August 1993

(Source: Label 62, August 1993)

APPENDIX C. VEHICLE SAFETY CHECKLIST

VEHICLE SAFETY CHECKLIST

Highway Contract Route/Trip Number _____
or Postal Vehicle Service Trip Number _____
Trailer or Truck Number _____

OVERHEAD DOORS

Are doors damaged? Yes No If Yes, describe: _____

Do doors close properly? Yes No If No, describe: _____

Are there Door Savers? Yes No (This is a new requirement for most trailers and some trucks. Check contract specs with headout office.)

E TRACKS

Are there single tracks? Yes No
Are there double tracks? Yes No (New requirement for most vehicles.)
Is the bottom row 26 inches from the floor? Yes No
Is the top row 60 inches from the floor? Yes No

SHORING STRAPS/BEAMS

Number of straps _____ Straps are required for every 10 ft of load, top and bottom. For example, a 40 ft trailer would require 8 straps.

Condition of straps Good Poor Good = straps not frayed, mechanisms working

Number of beams _____

Are shoring beams permanently affixed to the interior nose of the vehicle? Yes No

Is the door **SEALED**? Yes No

Is the door **LOCKED**? Yes No

Is there a **SAFETY CHAIN**? Yes No
Is the chain affixed? Yes No

COMMENTS _____

_____

_____

_____

_____ _____ _____
Print name & title of observer Signature of observer Date and Time

_____
Inspected at (location name)

IRREGULARITIES SHOULD BE NOTED ON FORM 5500 FOR NECESSARY ACTION!!

(Source: Northeast Area, TAN manager)

APPENDIX D. VEHICLE SAFETY/LOAD SECURITY REVIEW

DATE: _____

DATE: _____

VEHICLE SAFETY/LOAD SECURITY REVIEW
TOUR NUMBER 0700-1530

TO[2] (Destination)	HCR Number	TRIP	SCHED LV TIME	VEH SIZE	NO. OF STRAPS OR BARS REQ	NO. OF-E TRACKS REQ	SAFETY CHAIN REQ Y/N	DOOR SAVER REQ Y/N	VAN #	LABEL 62 SAFETY NOTICE	PROPERLY SECURED? Y/N	LOCK APPLIED Y/N	COMMENTS	OBSERVED

***Number of straps/bars required by contract**
(Source: Northeast Area, manager, Distribution Networks)

Van = Straight Truck **TT = Tractor Trailer** **CF = Common Fleet Trailer**

[2] Information in the 1st nine columns completed and provided to facilities by the Distribution Networks Office

APPENDIX E. MANAGEMENT'S COMMENTS

PAUL VOGEL
VICE PRESIDENT, NETWORK OPERATIONS MANAGEMENT

UNITED STATES
POSTAL SERVICE

March 13, 2002

RONALD K. STITH
ASSISTANT INSPECTOR GENERAL FOR CORE OPERATIONS

SUBJECT: Transmittal of Draft Management Advisory Report – Trailer Damage
(Report Number-TD-MA-02-DRAFT)

This is in response to your findings and recommendations in your draft audit report (TD-MA-02), dated February 22 concerning trailer damage to the Postal Service trailer fleet.

We agree that more training for our employees in proper loading and restraining procedures will result in a significant reduction in damage claims and expenses. Adherence to loading and restraining procedures will result in a safer environment for our employees and the general public.

We concur with your findings and recommendations and will take actions as follows:

Recommendation 1. Issue the Northeast Area video, "Shoring for Safety," to all Postal Service areas, to reinforce proper load securing procedures for Postal Service personnel who load and secure trailers.

We are in agreement with this recommendation. We will provide copies of the Northeast Area video to all distribution network offices for distribution to area facilities. Copies will also be provided to the Manager, Delivery Vehicle Operations, Headquarters for distribution to Vehicle Maintenance Facilities to ensure that postal vehicles are properly equipped with "E" tracks and safety posters. Additionally, we will provide copies of the video to Terminal Handling Suppliers that support our shared and dedicated air networks. We have also put Vehicle Restraining and Loading Procedures on our web page. They can be reviewed under Surface Operations at internet address http://blue.usps.gov/nom.

Recommendation 2. Emphasize effective management controls, like safety posters, checklists, inspection sheets, and the PS Form 5500.

We agree with this suggestion because of inherent safety concerns and costs associated with trailer damage. We will advise the areas by memorandum on the importance of following loading policies and guidelines. Topics in the memorandum will include inspecting vehicles for safety posters (Label 62), verifying that checklists are maintained to establish responsibility for securing loads and proper completion of the Mail Van Inspection, PS Form 5201, and Contract Route Irregularity Report, PS Form 5500.

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In addition to your recommendations, we are developing a program on the USPS web that will identify origins that fail to properly secure loads with restraining straps. This visibility will allow management to follow-up with facilities that do not adhere to load restraint procedures. Our expectation is to have this program in production by September 6, 2002.

Paul Vogel

cc: Mr. Pajunas