

May 17, 2000

JOHN A. RAPP
VICE PRESIDENT, DELIVERY

SUBJECT: Audit of the United States Postal Service Warranty Repair of Tractors
(Report Number CA-AR-00-001)

This report presents the results of the audit of the United States Postal Service warranty repair of tractors (Project Number 99RA010CA000). The audit was a self initiated review that was included in our fiscal year (FY) 2000 audit workload plan. We engaged the accounting firm of Grant Thornton LLP to conduct the audit.

As a result of the audit, we concluded that the program for acquiring tractors ensured that vehicle warranty provisions were comparable to those offered by other manufacturers. However, the audit disclosed that the Postal Service had not been reimbursed between \$977,598 and \$1,879,104 in costs incurred for warranty repair work performed by Vehicle Maintenance Facilities on tractors. Unless Postal Service management implements a system to obtain reimbursements, the Postal Service may continue to incur unreimbursed warranty repair costs of about \$400,000 over the next two years. Also, the audit identified an issue related to truck specifications that may warrant further review by Postal Service management. Management agreed with our recommendations and has initiatives in process, completed or planned addressing the issues in this report. Management's corrective actions will be implemented by the end of FY 2001. Management's comments and our evaluation of these comments are attached to the report.

We appreciate the cooperation and courtesies proved by your staff during the review. If you have any questions, please contact Kim H. Stroud, director, Contracts Review Team, or me at (703) 248-2300.

Sylvia L. Owens
Assistant Inspector General
for Business Protection

Attachment

cc: Keith Strange
Mike Spates
John R. Gunnels

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Executive Summary

At the request of the United States Postal Service (Postal Service), Office of Inspector General, Grant Thornton LLP completed an audit of the implementation of policies, procedures, and controls over warranty repair of Postal Service tractors. The audit focused on tractors purchased under three contracts with a major truck manufacturer and received during the period July 1, 1996, to November 30, 1999. The audit was a self initiated review that was included in the Office of Inspector General fiscal year 2000 audit workload plan.

As a result of the audit, we concluded that the program for acquiring the tractors ensured that vehicle warranty provisions were comparable to those offered by other manufacturers. However, the audit disclosed the Postal Service had not been reimbursed between \$977,598 and \$1,879,104 in warranty repair work performed by Vehicle Maintenance Facilities on tractors, as allowed by the three tractor contracts. Postal Service officials stated that this occurred because a Postal Service-wide claims processing system had not been implemented due to design problems with the Vehicle Maintenance Accounting System, coupled with Year 2000 computer implementation issues. Unless a reimbursement system is established with the contractor, the Postal Service may continue to incur unreimbursed costs - calculated at \$400,000 over the next two years.

During the audit, Postal Service officials advised us of an issue that may warrant further review. More specifically, 19 of 27 Vehicle Maintenance Facility managers provided testimonial evidence that certain manufacturer options specified by the Postal Service may have contributed to delays in obtaining tractor parts, increased operating costs and tractor down time.

We recommend that the Vice President, Delivery:

1. Implement a warranty repair cost reimbursement process with the contractor to ensure that the Postal Service does not incur additional unreimbursed warranty repair costs.

We recommend that the Vice President, Delivery coordinate with the Vice President, Purchasing and Materials to:

2. Recover any unreimbursed warranty repair costs from the contractor.

The Vice President, Delivery agreed with the recommendations contained in this report. Management stated their intention is to deploy the new system in early fiscal year 2001. In the interim, management will provide a non-electronic

method to the field to collect on past claims not yet processed. We summarized management's response in the report and included the full text of the response in Appendix B.

Management's planned actions are responsive and address the issues identified in the report.

Introduction

Background:

The Postal Service has over 300 processing plants where mail is sorted and shipped by air or transported by ground. The Postal Service currently has a fleet of approximately 200,000 vehicles, whose purpose is to pick up, transport, and deliver mail. Of this fleet, tractors play an integral role in meeting scheduled delivery times and improving the efficiency of transportation.

The Postal Service solicited bids to purchase 932 1996-model year tractors and 416 1998-model year tractors. In response to the solicitations, the Postal Service awarded three contracts to one manufacturer to produce and deliver 1,233 tractors to predetermined Vehicle Maintenance Facilities. Repairs and maintenance were performed at both manufacturer dealers and Vehicle Maintenance Facilities. Postal management officials informed us at an exit conference that the manufacturer has reimbursed its dealers \$2.4 million for warranty repair work performed at dealer facilities.

Objectives, Scope, and Methodology:

The audit was performed to review the implementation of policies, procedures, and internal controls over warranty repair of tractors in the Postal Service.

Specifically, we performed the audit to determine whether:

- The program for acquiring tractors ensured the acquisition of vehicles with warranty provisions comparable to those offered by other truck manufacturers.
- Policies and procedures ensured that the Postal Service was reimbursed for repair work under warranty.
- Policies and procedures for acquiring and operating tractors ensured timely warranty repairs.

To conduct the audit, we reviewed Postal Service contracting policies and procedures, reviewed the three truck manufacturing contracts and Postal Service procurement records, as well as conducted interviews with Postal Service contracting and purchasing personnel. In evaluating the adequacy of Postal Service contract terms, we conducted interviews with truck manufacturers, Vehicle Maintenance Facility managers, and maintenance supervisors.

Furthermore, we reviewed vehicle maintenance records at statistically selected Vehicle Maintenance Facilities to document costs associated with completing warranty repairs and the time spent to repair tractors. Finally, we obtained testimonial evidence from Vehicle Maintenance Facility personnel on an observation regarding tractor performance and parts delays.

The audit was conducted from July 1999, through May 2000, in accordance with generally accepted government auditing standards. Tests of internal controls, deemed necessary to support findings, were conducted.

Audit Results

Adequate Contract Warranty Terms

The audit disclosed that the program for acquiring tractors ensured that vehicle warranty provisions were comparable to those offered by other comparable truck manufacturers. Specifically, the Postal Service required that there be warranty coverage for a period of not less than three years from the date of acceptance or 150,000 miles, whichever occurs first. We assessed the reasonableness of the warranty from the tractor manufacturer by comparing it to warranties of its competitors. The information obtained included duration of coverage, component coverage, and policies and procedures for obtaining warranty repairs.

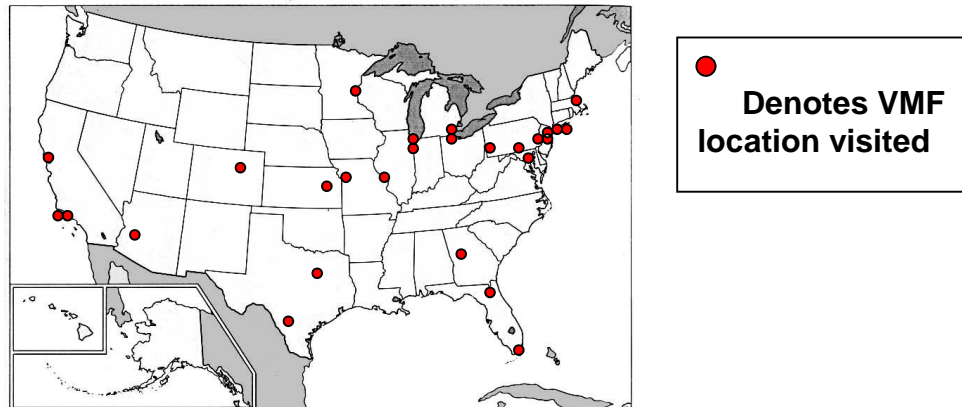
Unreimbursed Warranty Expenses Incurred

We concluded that while the tractor warranty was comparable to its competitors, we found an issue related to reimbursement of warranty repair costs. The audit disclosed that those warranty repair expenses have not been reimbursed to the Postal Service. Specifically, all three of the tractor manufacturing contracts required an electronic claims processing system for reimbursable warranty repairs performed at Vehicle Maintenance Facilities. The contracts included the following language: "Claims submittal will be performed through an electronic data transfer from the (Vehicle Maintenance Facilities) to the contractor and/or the contractor's first tier subcontractors . . . All software and any necessary hardware must be compatible with USPS equipment." However, 24 of the 27 Vehicle Maintenance Facilities we visited had not received the claim processing software. The three Vehicle Maintenance Facilities that had received the claims processing software from the contractor were not using the software because it was incompatible with Postal Service computer systems. In addition, in 1996 Postal Service headquarters management instructed Vehicle Maintenance Facilities not to seek reimbursement of claims until the automated process was in place. Postal Service management expected redesigns to the Vehicle Maintenance Accounting System but postponements due to Year 2000 remediation issues delayed implementing the electronic claims reimbursement system.

Postal Service attempts at implementing the claim processing software were not successful and neither the Postal Service nor the tractor manufacturer had taken further action to resolve this issue. According to Postal Service management, impediments to implementing the warranty process included: corporate Year

2000 computer compliance activity and newly implemented software quality control measures. In addition; they stated that information systems had to exert total control over all internal systems controls and changes; and the Vehicle Management Accounting System was and remains incapable of providing the level of support necessary to successfully submit electronic warranty claims.

To estimate the impact of the lack of a claims processing system for the tractors, we first determined that 108 Vehicle Maintenance Facilities, as of August 30, 1999, received the 1,233 tractors under three contracts issued in 1996 and 1998. Using statistical sampling techniques, we identified, visited, and reviewed records at 27 Vehicle Maintenance Facilities responsible for maintaining 669 of the tractors. Following is a map of the United States showing the Vehicle Maintenance Facilities we visited.



We applied statistical sampling techniques to repair and cost data covering the period July 1, 1996, to November 30, 1999, to estimate unreimbursed warranty repairs costs at Postal Service Vehicle Maintenance Facilities. More specifically, we reviewed over 3800 records and identified unreimbursed warranty-related repair costs for parts and labor. Labor costs were calculated using the Postal Service labor rate and repair time as indicated on repair work orders. Based on the sample, we projected that the absence of a claim processing system for work performed at Vehicle Maintenance Facilities resulted in the Postal Service incurring between \$977,598 and \$1,879,104¹ in unreimbursed warranty repair costs, including parts and labor costs on 1996 and 1999 tractors. Unless an operating reimbursement system is established with the contractor, the Postal Service may incur an estimated \$400,000 in unreimbursed costs for warranty repairs² over the next two years -- the remaining warranty on the tractors.

¹ See Statistical Appendix

² This is calculated from the ratio between the remaining tractors under warranty and the tractors associated with the lower bound. This is probably conservative because labor rates have risen markedly from those used in the projection.

Recommendations

The Vice President, Delivery should:

1. Implement a warranty repair cost reimbursement process with the contractor to ensure that the Postal Service does not incur additional unreimbursed warranty repair costs.

The Vice President, Delivery should coordinate with the Vice President, Purchasing and Materials to:

2. Recover any unreimbursed warranty repair costs from the contractor.

Management's Comments

The Vice President, Delivery agreed with the recommendations. Management stated their intention is to deploy the new system in early fiscal year 2001. In the interim, management will provide a non-electronic method to the field to collect on past claims not yet processed.

Evaluation of Management Comments

Management's comments are responsive to our recommendations.

Observation: Truck Specifications

During the audit, the Vehicle Maintenance Facility managers provided testimonial evidence regarding optional specifications on tractors, which may warrant further review by Postal Service management. Specifically, managers at 19 of the 27 Vehicle Maintenance Facility managers we visited raised an issue that certain tractor components have resulted in problems, including delays in obtaining tractor parts and the inability of the contractor's dealers to repair tractors. It was the perception of the Vehicle Maintenance Facility managers that the delays due to optional specifications for tractors have contributed to increased operating costs and extended tractor down time. Vehicle Maintenance Facility Managers provided examples of optional specifications, such as: the air starter system and trailer skid plate.

The managers provided examples of increased operating costs such as, expenses to maintain idle tractors and leasing costs to replace out of service tractors. In this regard, the managers asserted that the Postal Service incurred additional costs associated with priority shipping of parts. Vehicle Maintenance Facility Officials did not provide written support for this issue, and did not document waiting periods for backordered part or costs associated with tractor down times.

Postal Service Vehicle Maintenance Facility managers advised us that specifications for the tractors were determined by the Postal Service Operations organization. Postal Service Operations officials stated that they requested certain vehicle options based on operating experiences and tractor operating requirements described in the contract. According to management, the equipment options are consistent with those offered by the majority of vehicle and component manufacturers in the industry, including the Postal Service truck manufacturer.

Because our support is primarily testimonial evidence, we are only presenting this issue an observation for Postal Service management to consider whether to review it further.

Appendix A: Statistical Methodology

A statistical sample was taken to demonstrate and quantify the magnitude of forgone warranty repair reimbursements and obtain testimonial documentation from Postal Service Vehicle Maintenance personnel regarding the performance surrounding the Mack Truck contract. Vehicle Maintenance Facilities were statistically selected using a probability proportion to size (PPS) methodology, where the measure of size was the total number of trucks delivered as of August 30, 1999. To do the analysis we used standard formulas for PPS found in, Sampling Techniques by William G. Cochran, 3rd Edition; Wiley Publishing Co., 1973, to achieve the projection and margin for error. We project an unbiased point estimate of \$1,428,351 in unreimbursed warranty repair costs. We also report a precision of plus or minus \$450,753 at a 95 percent confidence level, resulting in a range of \$977,598 to \$1,879,104 of unreimbursed warranty repair costs.

Appendix B: Management's Comments

JOHN A. RAPP
VICE PRESIDENT, DELIVERY



May 16, 2000

SYLVIA L. OWENS
ASSISTANT INSPECTOR GENERAL
FOR REVENUE AND COST CONTAINMENT

SUBJECT: Audit Report – Audit of the United States Postal Service Warranty Repair of Tractors
(Report Number CA-AR-00 DRAFT)

Delivery Vehicle Operations has completed its review of the subject report. This response will address each of the findings and recommendations in the report.

There is concern within Delivery about observations regarding vehicle specifications that were based on "testimonial evidence," rather than on supportable data. We recommend future audits attempt to rely on available data to support observations.

Listed below are Delivery's responses to the specific findings and recommendations of the report contained within the Executive Summary.

1. Implement a warranty repair cost reimbursement process with the contractor to ensure that the Postal Service does not incur additional non-reimbursed warranty repair costs.

Delivery agrees with the findings and agrees with the recommendation.

Delivery Vehicle Operations (DVO) has continued to budget funds in our FY 2000 and 2001 budgets to acquire the necessary hardware/software to electronically process warranty claims at all Vehicle Maintenance Facilities (VMFs). In conjunction with Headquarters Purchasing, new commercial software packages have been reviewed, pre-qualified, and a request for proposals will be issued shortly. One of the pre-qualification factors was the inclusion of universal electronic warranty software. The target is to begin deployment of the new system in early FY 2001. Once that takes place, the VMFs will be capable of processing all vehicle warranty claims electronically. In the interim, DVO will also provide a non-electronic method to the field to collect on past claims not yet processed.

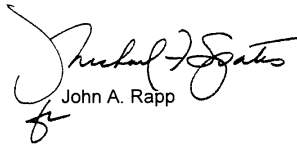
2. Recover any non-reimbursed warranty repair costs from the contractor.

Delivery agrees with the findings and agrees with the recommendation.

As previously mentioned, Delivery Vehicle Operations agrees to develop a process for the VMFs to submit valid outstanding claims to Mack using the method(s) described above.

I have attached an article copied from a current trade publication. The article profiles a utility company fleet, their warranty program and the challenges the utility company deals with balancing their operational requirements and making sure they receive adequate warranty support. Many of the issues confronting the utility company are parallel to those facing the Postal Service. We had discussions with your staff regarding the same points highlighted in the article prior to the article even being published. The major point: it may be less expensive and/or better from a service standpoint to perform the warranty work in-house. The Postal Service has done this many times on a case-by-case basis. I'm confident you will find the article insightful.

Delivery would like to acknowledge the efforts of your staff in reviewing the audit and for working with us to finalize the recommendations and findings.



John A. Rapp

Attachment

cc: Mr. Potter w/ attachment
Mr. Strange w/ attachment
Mr. Spates w/ attachment
Mr. Clark w/o attachment
Mr. Gunnels w/o attachment