



August 31, 2010

FRANK NERI
MANAGER, PROCESSING OPERATIONS

SUBJECT: Audit Report – Internal Controls over Powered Industrial Vehicles at Sites
Without the Powered Industrial Vehicle Management System
(Report Number NO-AR-10-009)

This report presents the results of our audit focusing on powered industrial vehicles (PIV) at two sites without the Powered Industrial Vehicle Management System (PIVMS) (Project Number 10XG039NO000). The objective of this self-initiated audit was to determine whether internal controls over PIVs were in place at the Tulsa, OK and Portland, OR Processing and Distribution Centers (P&DCs). See [Appendix A](#) for additional information about this audit.

As of October 2009, the Postal Service had installed PIVMS in 66 P&DCs. The PIVMS consists of intelligent wireless devices installed on PIV and client-server software for access control, utilization analysis, real-time location tracking, and many other functions. The Postal Service intended the PIVMS to provide automated measurement, control, and compliance reporting of PIV operations within a plant, resulting in optimal PIV safety conditions, operations, supervision, and associated savings. The Postal Service funded over \$35 million for PIVMS. Over 160 P&DCs did not have this system, and managed PIV operations through other means.¹

Conclusion

We found Tulsa and Portland P&DCs ensured internal controls over workhours, safety, and security, and maintenance were in place. Specifically, the Tulsa and Portland P&DCs:

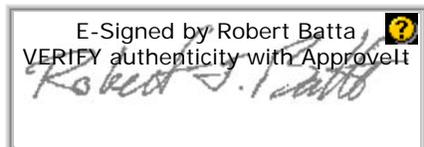
- Properly managed equipment operator overtime and workhours by using a smaller percentage of workhours than national averages.
- Ensured that internal controls over safety and security were in place.
- Used the internal electronic Maintenance Activity Reporting and Scheduling System (eMARS) to schedule maintenance and ensure its completion.

¹ We will further address this issue in our capping report.

- Adequately controlled battery use.

We are not making any recommendations in this report. See [Appendix B](#) for our detailed analysis of this topic. The Postal Service reviewed a draft of this report and had no comments or concerns.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact James L. Ballard, director Network Processing, or me at 703-248-2100.



Robert J. Batta
Deputy Assistant Inspector General
for Mission Operations

Attachment

cc: Patrick R. Donahoe
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APPENDIX A: ADDITIONAL INFORMATION

BACKGROUND

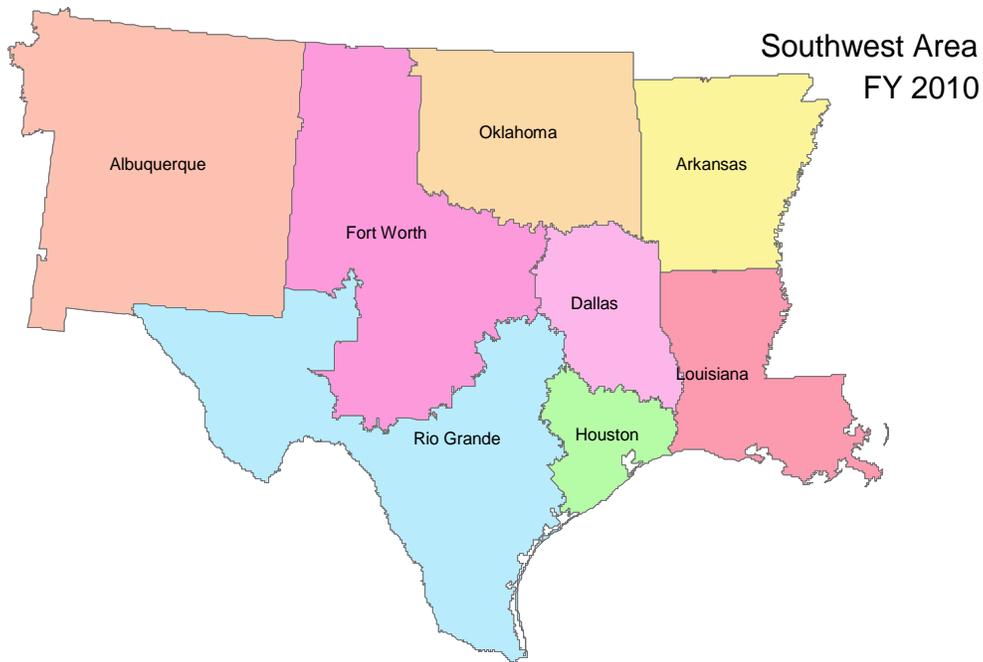
The U.S. Postal Service justified the purchase of the PIVMS at certain facilities, stating it would:

- Eliminate unauthorized use of PIVs.
- Reduce injuries resulting from unsafe operation of PIVs.
- Reduce damage to mail and equipment resulting from unsafe operation of PIVs.
- Reduce the number of workhours used to transport mail and equipment throughout the plant.
- Reduce the number of pieces of equipment needed to perform this work.
- Reduce the number of workhours needed to maintain the fleet of PIVs.

This implementation was part of a national contract the Postal Service awarded to I.D. Systems, Inc., of Hackensack, NJ, in January 2005 to produce and deploy the PIVMS. The Postal Service started the program essentially as a pilot when it signed a \$3.6 million contract with I.D. Systems to implement a wireless asset management system at 10 bulk mailing and distribution facilities across the country. As of October 2009, the Postal Service placed orders for PIVMS deployment at 114 facilities. The total amount funded for the PIVMS as of October 2009 was over \$35 million.

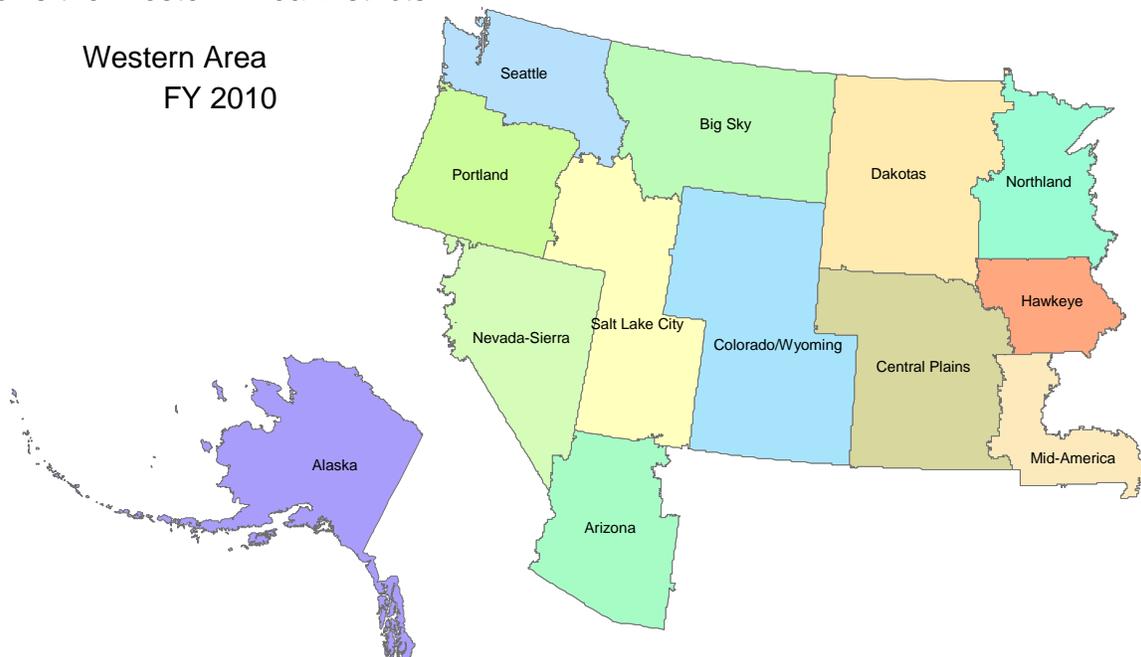
We reviewed internal controls over PIV at two sites without the PIVMS: the Tulsa P&DC and the Portland P&DC. These two sites are not scheduled to implement the PIVMS.

The Tulsa P&DC is located in the Southwest Area, Oklahoma District. The map below shows the Southwest Area Districts.



The Tulsa P&DC processed 808,254,396 first handling pieces (FHP) and used 780,582 Function 1² workhours in fiscal year (FY) 2009. The Postal Service owns the facility.

The Portland P&DC is located in the Western Area, Portland District. The map below shows the Western Area Districts.



² The Postal Service records mail processing hours in a category referred to as Function 1.

The Portland P&DC processed 1,044,610,590 FHP and used 1,252,820 Function 1 workhours in FY 2009. The Postal Service owns the facility.

In their July 31, 2003 report the President's Commission on the U.S. Postal Service, recommends that the Postal Service's mission be ". . . to provide high-quality, essential postal services to all persons and communities by the most cost-effective and efficient means possible at affordable and, where appropriate, uniform rates." Title 39 U.S.C. Part 1, Chapter 4, § 403, states, "The Postal Service shall plan, develop, promote, and provide adequate and efficient postal services at fair and reasonable rates and fees."

The Postal Accountability Enhancement Act of December 2006, P.L. 109-435, Title II dated December 20, 2006, indicates ". . . the need for the Postal Service to increase its efficiency and reduce its costs, including infrastructure costs, to help maintain high quality, affordable postal services. . . ."

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to determine whether internal controls over PIV were in place at two sites without PIVMS. We judgmentally selected and visited two non-PIVMS P&DCs (Tulsa and Portland) to determine how they manage internal controls (such as OSHA checklists) and how they control workhours and vehicles.³

To accomplish this objective, we analyzed volume and workhour trends for two sites from FY 2007 through June 2010. To conduct this audit, we relied on computer-processed data maintained by Postal Service Operational Systems, which included the Web-Based Complement Information System, the Enterprise Data Warehouse system, and the eMARS. We did not test the validity of controls over these systems. However, we checked the accuracy of the data by confirming our analysis and results with Postal Service managers and found that the data was sufficiently reliable.

We conducted this performance audit from May through August 2010 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management officials on July 29, 2010, and included their comments where appropriate.

³ The report makes conclusions regarding two non-PIVMS sites, which may not be representative of all non-PIVMS sites.

PRIOR AUDIT COVERAGE

We conducted seven prior reviews at sites with the PIVMS. The sites we reviewed did not always use the PIVMS as intended and consequently did not fully realize efficiency improvements. Management agreed with our recommendations in these prior reports.

Report Title	Report Number	Final Report Date	Monetary Impact
<i>Powered Industrial Vehicle Management System at the Raleigh Processing and Distribution Center</i>	NO-AR-08-007	9/15/2008	\$3,345,456
<i>Powered Industrial Vehicle Management System at the Providence Processing and Distribution Center</i>	NO-AR-08-010	9/23/2008	\$1,576,086
<i>Powered Industrial Vehicle Management System at the Louisville Processing and Distribution Center</i>	NO-AR-09-001	12/3/2008	\$1,981,643
<i>Powered Industrial Vehicle Management System at the Oakland Processing and Distribution Center</i>	NO-AR-09-007	7/23/2009	\$14,598,866
<i>Powered Industrial Vehicle Management System at the Washington Network and Distribution Center</i>	NO-AR-09-010	9/22/2009	\$0
<i>Powered Industrial Vehicle Management System at the Tampa Processing and Distribution Center</i>	NO-AR-10-001	12/14/2009	\$0
<i>Powered Industrial Vehicle Management System at the Indianapolis Processing and Distribution Center</i>	NO-AR-10-004	3/29/2010	\$7,913,246

APPENDIX B: DETAILED ANALYSIS

Tow and Forklift Workhour Trends

The Tulsa and Portland P&DCs were able to effectively manage workhours in tow and forklift operations without the PIVMS. We analyzed FHP productivity, overtime trends in mail processing operations (Function 1) and in tow and forklift operations, and the percentage of Function 1 workhours used in tow and forklift operations for FY 2007 through June 2010. We found that the Tulsa and Portland P&DCs properly managed tow and fork workhours including overtime. For example, in FY 2009, Tulsa and Portland P&DCs used 6.11 percent and 5.44 percent, respectively, as a percent of Function 1 workhours in tow and forklift operations compared to the national average of 6.86 percent. Similarly, the Tulsa and Portland P&DCs used 2.07 percent and 3.79 percent, respectively, in tow and forklift overtime compared to the national average of 6.74 percent.

Management at the Tulsa and Portland P&DCs controlled workhours used in tow and forklift operations by evaluating equipment operator staffing levels and productivity.

- Tulsa P&DC management gave consideration to mail flows when they developed the floor layout of the Tulsa P&DC with the intent to minimize transporting distance and deadheading within the plant. Tulsa P&DC management also used a low-cost tray sorter (LCTS)⁴ and the tray management system (TMS)⁵ which reduced the number of PIVs needed for operations. See Illustration 1.



Illustration 1: TMS tray Induction unit on the South Dock, Tulsa P&DC, June 3, 2010.

⁴ A LCTS has also helped to reduce the tow and forklift workhours.

⁵ The Tulsa P&DC has a TMS, which has also helped to reduce tow and forklift workhours as incoming mail trays are inducted directly from the docks to the TMS.

- Management at the Portland P&DC used a Six Sigma “Close the Gap Initiative”⁶ and closely reviewed workhour reports to reduce tow and forklift workhours. Management did not automatically backfill for absent drivers and as powered equipment operator jobs become vacant, management reviewed PIV routes before reposting positions. Portland management stated that observing employees on the job was the primary method used to evaluate equipment operator staffing levels and productivity.

Internal Controls Over PIVs at the Tulsa and Portland P&DCs

We reviewed controls over security, safety, and vehicle maintenance at the Tulsa and Portland P&DCs and found that these controls were functioning as intended.

Security

Based on our review of training records, both the Tulsa and Portland P&DCs ensured that only certified drivers operated PIVs. Management at the Tulsa P&DC ensured their PIV drivers completed classroom training and on the job training with a certified operator. Management at the Portland P&DC required drivers to complete a PIV refresher-training course every 3 years. Management at both sites had PIV drivers carry locally created proof of certification when operating vehicles.

The *Strategic Transformation Plan 2006 to 2010* states, “Perhaps the greatest investment the Postal Service can make for employees is maintaining a safe work environment — making sure they return home to their families each day the same way they came in to work.” In addition, the plan says, “The Postal Service is subject to the reporting requirements of the Occupational Safety and Health Administration and follows the required criteria and reporting methodology. Providing a safe workplace is a demonstration of the commitment the Postal Service has to its employees.”

Safety

Management at both sites ensured that OSHA checklists were completed. During our one-week site visits, we observed the PIV drivers at the Tulsa and Portland P&DCs on each tour physically examine the PIV at the beginning of their tour and then complete a manual checklist. We also randomly tested the files for the past year and found that the manager of Distribution Operations at each site maintained copies of the completed checklists.

Management at the Portland and Tulsa P&DCs also investigated accidents by talking to the employees involved and had standard procedures in place to revoke the PIV

⁶ The “close the gap” initiative used in Portland is part of the Six Sigma performance improvement process that helps management compare actual performance to potential performance.

operator license when an accident occurred. During our review at the Tulsa and Portland P&DCs, we did not observe unsafe driving practices or accidents.

Maintenance

Management at the two sites used eMARS to schedule preventive maintenance and ensure maintenance was completed.⁷ For example, when there were vehicle problems noted on the daily OSHA checklists at the Portland P&DC, a work order was prepared and the problem resolved. Both sites controlled battery use. See Illustration 2 to see the locked battery room at the Portland P&DC.



Illustration 2: Locked battery room door at the Portland P&DC, June 16, 2010.

⁷ We found that at the PIVMS sites we visited, eMARS was also used to schedule preventive maintenance and ensure that it was completed. We plan to address the use of eMARs instead of PIVMS in our capping report.