March 28, 2003

KEITH STRANGE VICE PRESIDENT, SUPPLY MANAGEMENT

THOMAS G. DAY VICE PRESIDENT, ENGINEERING

SUBJECT: Audit Report – Inventory Management and Maintenance Repair Operations (Report Number AC-AR-03-004)

This report presents the results of our audit on inventory management of mail processing equipment parts and maintenance repair operations (Project Number 01NR002AC001). Our objectives were to determine whether inventory stock levels for mail processing equipment parts were appropriate and to identify cost savings opportunities in the maintenance repair operations. This audit was initiated as a result of our audit survey of the Postal Service's Logistics System.

Our audit disclosed that approximately \$9 million in mail processing equipment spare parts exceeding the demand were in inventory at the Topeka Material Distribution Center as of April 2002. This inventory was the result of item managers maintaining stock levels that were above demand and because estimates for initial provisioning of depot spare parts were sometimes overstated. As a result, the Postal Service should use the \$9 million in mail processing equipment repairable spare parts prior to making any new spare part purchases. In addition, we identified approximately 47,000 individual parts that were awaiting final disposition at the Topeka Material Distribution Center, some for as long as 4 years. We estimated the value of these parts at about \$13 million, if repaired. We also found that the Topeka Material Distribution Center shipping and receiving department duplicated the receiving operation of the Central Repair Facility. As a result, the Postal Service could potentially save \$1.15 million over a 10-year period, by reassigning staff and eliminating the duplicate receiving department at the Topeka Material Distribution Center.

We made six recommendations to management that included, reevaluating authorized stock levels; developing a systematic process for estimating depot spare parts; identifying and disposing of excess parts for end of life equipment; utilizing spare parts that exceed the normal demand prior to making purchases, and repairing or disposing of broken parts identified as "Not Ready for Issue." We also recommended that management perform a cost benefit analysis of consolidating the receiving function at

the Central Repair Facility and the receiving function at the Topeka Material Distribution Center. If potential savings are identified, we recommended management modify the Central Repair Facility contract to allow the contractor to receive, store, and repair repairable broken parts and ship these repaired items to either the field or distribution centers.

Management agreed with the recommendations. Management has initiatives in progress, completed, or planned addressing the issues in this report. Management disagreed with the value of the excess mail processing spare parts inventory and the cost savings projections for consolidating the receiving function at the Topeka Material Distribution Center. 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 our audit. If you have any questions or need additional information, please contact Larry Chisley, director, at (813) 261-5200 or me at (703) 248-2300.

B. Wayne Goleski Assistant Inspector General for Core Operations

Attachment

cc: Richard J. Strasser, Jr. John A. Rapp Ernest C. Dardis Earl J. Jones Susan M. Duchek

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## **EXECUTIVE SUMMARY**

Introduction	This report presents the results of our self-initiated audit of inventory management of mail processing equipment parts and maintenance repair operations. Our objectives were to determine whether inventory levels for mail processing equipment parts were appropriate and identify cost savings in maintenance repair operations.
Results in Brief	Our audit disclosed that approximately \$9 million in excess <sup>1</sup> spare parts for mail processing equipment was in inventory at the Topeka Material Distribution Center as of April 2002. Excess inventory was the result of item managers maintaining stock levels above demand and because depot spare part estimates for newly deployed mail processing equipment were sometimes overstated. As a result, excess mail processing equipment spare parts should be used prior to making any new spare part purchases for mail processing equipment.
	In addition, we identified approximately 47,000 broken parts that were awaiting final disposition in the Topeka Material Distribution Center, some for as long as 4 years. We estimated the value of these parts to be approximately \$13 million, if repaired. We also found that the shipping and receiving department for broken parts at the Topeka Material Distribution Center duplicated the receiving operation of the Central Repair Facility. As a result, the Postal Service could potentially save about \$1.15 million over a 10-year period by reassigning staff and eliminating the duplicate receiving department at the Topeka Material Distribution Center.
Summary of Recommendations	We recommended management reevaluate authorized stock levels to ensure the levels reflect demand data in the Material Distribution and Inventory Management System; coordinate with the Provisioning Improvement team to develop a systematic process for estimating depot spare parts; identify excess repair parts for equipment at the end of its life cycle and dispose of parts that are no longer needed.
	In addition, we recommended the Postal Service use mail processing equipment repairable spare parts that exceed the normal demand prior to making any new spare part purchases,

<sup>&</sup>lt;sup>1</sup> Excess stockage levels are defined as inventory for serviceable material over and above its demand.

	and repair or dispose of broken parts identified as "Not Ready for Issue" at the Topeka Material Distribution Center.
	We also recommended management perform a cost benefit analysis of consolidating the receiving function at the Central Repair Facility and eliminating the function at the Topeka Material Distribution Center to achieve the potential cost avoidance. If potential savings are identified, modify the Central Repair Facility contract to allow the contractor to receive, store, and repair broken parts and ship repaired items to either the field or distribution centers facility.
Summary of Management's Comments	Management agreed with the recommendations. Management stated that they will review the stocking objective process and develop a solicitation provision that will encourage suppliers to use common parts. In addition, management stated they would identify and dispose of end of life parts, utilize spare parts prior to making any new spare parts purchases, and dispose or repair of "Not Ready for Issue" parts. Management stated they would perform a cost/benefit analysis of consolidating the receiving function at the Central Repair Facility and the Topeka Material Distribution Center.
	Management disagreed that \$15 million in excess spare parts were in inventory. Management stated that based on their sampling of the highest dollar value inventory items, only \$1.25 million is excess spare parts. The other \$13.75 million consists of items for initial provisioning, insurance items, and end-of-life items where no external suppliers are available. Management also disagreed with the 10-year cost savings projection of \$1.7 to \$2.7 million for the receiving function at the Topeka Material Distribution Center. Management stated that their cost analysis showed a 10-year net cost savings projections of \$152,000 to \$381,000.
	Management's comments, in their entirety, are included in Appendix B of this report.
Overall Evaluation of Management's Comments	Management's actions taken or planned are responsive to the recommendations and should correct the issues identified in this report.
	However, we disagree with management's assertion that only \$1.25 million of the \$15 million in repairable spare parts should

be considered excess. We considered the additional information provided by management identifying \$2 million as items for equipment near its end of life and \$4 million as insurance items that can no longer be purchased on the open market. As a result, we have revised the total amount of excess spare parts from \$15 million to \$9 million.

We also disagree with management's net cost savings projections of \$152,000 to \$381,000 over a 10-year period. Based on our review of the cash flow methodology and analysis provided by management, we revised our cost savings projections to reflect the current escalation rate and the contractor labor rate. As a result, we revised our cost saving projections that ranged from \$1.7 million to \$2.7 million to \$1.15 million over 10 years for consolidating the receiving function and reassigning the five employees.

Background	The Topeka Material Distribution Center in Topeka, Kansas, is responsible for contracting, purchasing, stocking, and managing repairable spare parts for mail processing equipment. Repairable mail processing equipment spare parts are also stored at the Critical Parts Center in Indianapolis, Indiana. Broken repairable and warranty parts from field locations are sent to the Topeka Material Distribution Center for routing to the appropriate repair facility. Some broken repairable parts are sent directly to the Indianapolis Repair Facility. The Indianapolis Repair Facility located in Indianapolis, Indiana, and the Central Repair Facility in Topeka, Kansas, repair broken repairable parts.
	The Postal Service uses several information systems to manage repairable parts. The Material Distribution and Inventory Management System is the national level material management information system used by both centers. In the field, Visual Maintenance Activity Reporting and Scheduling is the primary system used for ordering parts from Topeka's Material Distribution Center, which also controls maintenance activity within the Postal Service facility. The two systems are integrated and data from both systems are updated daily.
	The manager of Maintenance Policies and Procedures under the vice president, Engineering, develops, defines and disseminates maintenance policies, guidelines, and strategies for Postal Service equipment, including mail- processing equipment. The Maintenance Technical Support Center in Norman, Oklahoma, provides information, methods, technology, and technical support to maintenance personnel.
Objectives, Scope, and Methodology	Our objectives were to determine whether inventory stockage levels for mail processing equipment were appropriate and to identify cost saving opportunities in maintenance and repair operations. To review inventory stockage levels, we obtained on-hand inventory balances for 1,648 mail processing equipment parts as of April 2002 at the Topeka Material Distribution Center.

## INTRODUCTION

	To determine if the inventory levels were appropriate or in excess, we reviewed the on-hand balances <sup>2</sup> for the 1,648 stock numbers in Topeka and subtracted the demand for accounting periods 1 through 8 of fiscal year (FY) 2002 from the on-hand balances. We interviewed Postal Service Headquarters officials in the offices of National Supply Management, Maintenance Policies and Programs, and the Maintenance Technical Support Center on policies and procedures for inventory management and repair operations. In addition we interviewed item managers, identified as a result of a statistical sample of 234 of the 1,648 parts, to further review inventory management in Topeka.
	To identify cost savings opportunities in maintenance repair operations, we obtained completed work order data for the Central and Indianapolis Repair Facilities for the period October 2000 through April 2002. We observed repair operations at both facilities. We selected a statistical sample <sup>3</sup> of work order data from both repair facilities to compare repair cost, workload, operations, and performance data for each facility to identify cost savings opportunities. We also interviewed personnel at the Topeka Material Distribution and Critical Parts Centers, Central Repair and Indianapolis Repair Facilities, and contractors on how spare parts were purchased, managed, and repaired.
	This audit was conducted from April 2002 through March 2003 in accordance with generally accepted government auditing standards and included such tests of internal controls as were considered necessary under the circumstances. We discussed our conclusions and observations with appropriate management officials and included their comments, where appropriate.
Prior Audit Coverage	We did not identify any prior audits or reviews related to the objectives of this audit.

<sup>&</sup>lt;sup>2</sup> We employed methodology analogous to that used by Topeka item managers. We allowed eight accounting periods of inventory instead of the three to five accounting periods used at the Topeka Material Distribution Center, before evaluating our excess. <sup>3</sup> The statistical sample was used only to ensure impartiality of items selected. We did not project any factors.

Inventory Balances Exceed the Demand	Inventory balances for mail processing equipment spare parts exceeded the demand. Our review of 1,648 spare part stock numbers indicated that approximately 60 percent of the line items were in excess of Postal Service's demand data. The excess inventory was the result of item managers maintaining stock levels above demand and overstating depot spare part estimates for newly deployed mail processing equipment. As a result, \$9 million in mail processing equipment spare parts above the stocking objective were in inventory at the Topeka Material Distribution Center as of April 19, 2002.
	Item managers at the Topeka Material Distribution Center stated that they maintained an on-hand inventory balance of three to five accounting periods for mail processing equipment spare parts. However, our review showed that on hand balances for 984 of the 1,648 spare part stock numbers had balances that exceeded eight accounting periods. (See Appendix A for examples.) Generally, item managers were unable to provide any documentation or an adequate explanation for the excess balances or how the excess was being managed. In addition, item managers did not request or use information management reports that identified stock numbers that exceed the five accounting periods threshold, even though the information was available. Instead, item managers said they only review weekly management reports to ensure they could accommodate the field's five accounting periods spare part requirement. In addition, information reflecting inventory balances that exceed the five accounting periods threshold was only used annually to identify parts that should be written-off in preparation for the annual budget.
Initial Provisioning of Depot Spares	Estimates for the initial provisioning of depot spare parts <sup>4</sup> contained in the initial kits were sometimes overstated. Our review of 234 stock numbers for mail processing equipment spare parts indicated that 37 line items had excess depot spare parts valued at approximately \$1 million. This occurred because the number of spare parts purchased were in excess of the Postal Service's need. Postal Service officials stated that depot spare parts requirements for new

## AUDIT RESULTS

<sup>4</sup> Depot spare kits, which are issued to the Topeka Material Distribution Center, consist of parts needed to support newly deployed equipment.

equipment are estimated when demand history is not available. In addition, Postal Service officials stated that estimates were based on their experience, knowledge of spare parts previously deployed with similar equipment, and testing data that describes the new part expected failure rate analysis. They also stated that during the initial provisioning conference, management made the best decision they could based on the available information.

For example, 8 of 37 stock numbers with excess were repair parts for the newly deployed Automated Flat Sorting Machine 100. Automated Flat Sorting Machine 100 deployment began in April 2000 and ended in April 2002. Postal Service officials provided documentation that indicated that they estimated 450 depot spares were needed for the eight line items in our sample. However, we were able to determine that the national demand for these parts was only 80 for the eight accounting periods ending April 19, 2002. Additionally, Postal Service officials provided documentation that indicated that they estimated 90 depot spare parts were needed for three stock numbers in our sample that were used to support Phase II deployment of the Automated Flat Sorting Machine 100. Our review indicated that only five of these depot spares were actually needed over the eight accounting periods reviewed in our sample.

Postal Service officials stated they were aware of the problem and that they had established a Provisioning Improvement team in December 2001 to evaluate the process used to estimate depot spares for new equipment deployment. The team included Postal Service officials from Engineering and the Topeka Material Distribution Center and four of their major contractors. According to Postal Service officials the Provisioning Improvement team was expected to provide management with recommendations on how to improve the initial provisioning process. Officials told the Office of Inspector General (OIG) they issued the report in December 2002.

### Excess Parts Awaiting Final Disposition During our audit, we identified approximately 47,000 broken mail processing equipment parts at the Topeka Material Distribution Center that were awaiting final disposition. Parts arriving in the Topeka Material Distribution Center are

	received and placed in a holding area until the item manager determines whether the part should be repaired. However, approximately 42 percent of the parts had been on hand for at least 8 months at the time of our review, with some parts awaiting disposition for about 4 years. We estimate the value of the parts at about \$13 million <sup>5</sup> if repaired.
	According to the Inventory manager at the Topeka Material Distribution Center, the majority of broken parts "Not Ready for Issue" were awaiting repair because item managers did not authorize the repairs because they already had sufficient repaired parts in inventory. For example, we were able to determine that about 43 percent or 70 of the 161 stock numbers with excess in our sample also had broken parts in the holding area awaiting repair. Postal Service officials acknowledged the problem during the course of the audit and began conducting a review of broken parts at the Topeka Material Distribution Center to determine whether the parts should be repaired or turned in for disposal. Postal Service officials informed the OIG in November 2002 that they have disposed of approximately 14,800 parts.
Recommendation	We recommend the vice presidents, Supply Management and Engineering:
	<ol> <li>Reevaluate authorized stock levels for mail processing equipment repair parts and ensure that stock levels are reflective of demand data in the Material Distribution and Inventory Management System.</li> </ol>
Management's Comments	Management agreed with the intent of the recommendation and stated they will review the stocking objective process for maintaining a minimum of three accounting periods and a maximum of five accounting periods of stock on hand. Management also stated that stocking levels would be established using demand data, future forecasts, and life

<sup>&</sup>lt;sup>5</sup> Postal Service officials told us that these parts have a zero value while awaiting repair. The Material Distribution and Inventory Management System computes the unit price for repairable parts based on the cost for a new part in inventory and the repair cost for this item when repaired and returned to inventory. We computed the value of these parts to be \$13 million based on the system price.

	cycle considerations. Supply Management will complete this review by the end of quarter 4, FY 2003.
Recommendation	We recommend the vice presidents, Supply Management and Engineering:
	<ol> <li>In coordination with the Provisioning Improvement team, develop a systemic process for estimating depot spare parts. At a minimum, the process should include testing reliability data that identifies time between failures and encourages the use of common parts that are already being used to support other pieces of mail processing equipment.</li> </ol>
Management's Comments	Management agreed with the recommendation and will develop a solicitation provision that will encourage suppliers to use common parts that are already being used to support other pieces of mail processing equipment. This provision will be completed and recommended for use to Engineering during quarter 3, FY 2003.
Recommendation	<ol> <li>Identify excess repair parts for mail processing equipment at the end of its life cycle and dispose of parts that are no longer needed.</li> </ol>
Management's Comments	Management agreed with the recommendation and stated that the Postal Service budgets for disposal of excess repair parts for mail processing equipment at the end of the life cycle on an annual basis. Management stated they have budgeted \$5.4 million for inventory write-offs and mark downs to lower-cost-or-market value in FY 2003. Supply Management will complete these additional write-offs and adjustments during quarter 4, FY 2003.
Evaluation of Management's Comments	Management's comments are responsive to recommendations 1, 2, and 3. Management's actions, taken or planned, should correct the issues identified in the report.

Recommendation	We recommend the vice presidents, Supply Management and Engineering:
	<ol> <li>Utilize the \$15 million in excess mail processing equipment repairable spare parts that are above the normal demand prior to making any new spare part purchases for mail processing equipment.</li> </ol>
Management's Comments	Management agreed with the intent of the recommendation. They stated that item managers currently review all repairable spare parts prior to placing work orders to repair or buy new items. However, they disagreed that \$15 million in excess mail processing spare parts were in inventory at the Topeka Material Distribution Center. Management stated that of the 984 items identified as excess, approximately \$13.75 million is not considered excess. Management stated they stratified the 194 highest dollar items and found that \$5 million are newly provisioned items having less than adequate demand data for determining actual need. A second group of items totaling \$4 million are insurance items held in stock for catastrophic contingencies. A third group totaling \$2 million are end of life items that cannot be repaired or replaced due to obsolescence. For the other repairable spare parts, only \$1.25 million can be defined as excess.
Evaluation of Management's Comments	Management's comments are responsive to the recommendation and their actions, taken or planned, should correct the issues identified in the report.
	However, we disagree with management's assertion that only \$1.25 million of the \$15 million in repairable spare parts should be considered excess. We considered the additional information provided by management identifying \$2 million as items for equipment near its end of life and \$4 million as insurance items that can no longer be purchased on the open market. As a result, we have revised the total amount of excess spare parts from \$15 million to \$9 million.
	Management stated that \$5 million of the \$15 million in excess repairable spare parts were for newly provisioned items and that there was not adequate demand data for determining actual need. However, we found that 83 percent of the items listed by management had demand

	data for at least eight accounting periods, which could have been used by item managers to develop a stocking objective. Item managers are only required to maintain three to five accounting periods of supply. Also, Postal Service officials acknowledged that the process used for estimating initial provisioning items was problematic and established a Provisioning Improvement team in December 2001. Our discussions with Provisioning Improvement team members and item managers confirmed that estimating procedures for newly provisioned items contributed to excess supplies being on hand. In addition, management has agreed to develop a systematic process for estimating depot spare parts, which at a minimum would include testing reliability data that identifies time between failures and encourages the use of common parts that are already being used. Therefore, we still believe management should use the \$5 million in repairable spare parts identified as newly provisioned items prior to making any new purchases.
Recommendation	We recommend the vice presidents, Supply Management and Engineering:
	<ol> <li>Repair or dispose of broken parts identified as "Not Ready for Issue" at the Topeka Material Distribution Center.</li> </ol>
Management's Comments	Management agreed with the intent of the recommendation and stated that not all "Not Ready for Issue" broken parts can be disposed of without jeopardizing future mail processing equipment operations and maintainability. In addition, premature repair of these items would incur time and material costs and inflate inventory balances unnecessarily. Management stated they reviewed the "Not Ready for Issue" broken parts and disposed of approximately 14,800 parts. They also stated Supply Management will conduct another review during quarter 3, FY 2003.
Evaluation of Management's Comments	Management's comments are responsive to the recommendation. Management's actions, taken or planned, should correct the issues identified in the report.

Duplicate Receiving Department	The Topeka Material Distribution Center broken parts shipping and receiving department duplicated the receiving operation of the Central Repair Facility. According to Postal Service officials, the Topeka Material Distribution Center and Central Repair Facility shipping and receiving departments were set up separately when the operations were established. As a result, we believe the Postal Service can save \$1.15 million over a 10-year period by eliminating the shipping and receiving department in the Topeka Material Distribution Center and reassigning staff to other positions within the Postal Service. At the time of our review, the Topeka Material Distribution Center had five full-time employees assigned to the shipping and receiving function. When a repairable item is received in the Topeka Material Distribution Center receiving area, the part is placed in the broken parts inventory holding area until an item manager authorizes the repair. Postal Service employees then send the part either to the Central Repair Facility, the Indianapolis Repair Facility, or to the vendor if the item is still under warranty. However, if the contractor's staff at the Central Repair Facility was allowed to receive, process, and store all the repairable parts; the receiving function at the Central Repair Facility and the Topeka Material Distribution Center could be consolidated. By consolidating and allowing the receiving function to be performed at the Central Repair Facility, the Postal Service could eliminate duplicate receiving, shipping, and storing functions at the Topeka Material Distribution Center. Also, repairable parts authorized for repair would already be at the repair facility, thereby eliminating the need for additional handling. The contractor's staff at the Central Repair Facility
	already has partial access to the inventory management system. The staff would only need additional software applications and login authorities, which would reduce delays in processing items from the broken parts holding area.
Recommendation	<ul> <li>We recommend the vice president, Engineering:</li> <li>6. Perform a cost benefit analysis of consolidating the receiving function at the Central Repair Facility and eliminating the function at the Topeka Material Distribution Center to achieve the potential cost</li> </ul>

	avoidance. If potential savings are identified, modify the Central Repair Facility contract to allow the contractor to receive, store, and repair repairable items and ship repaired items to either the field or distribution centers.
Management's Comments	Management agreed with the intent of the recommendation stating they would perform a cost/benefit analysis of consolidating the receiving function at the Central Repair Facility and the Topeka Material Distribution Center. Management disagreed with the monetary impact of the OIG's 10-year cost savings projection of \$1.7 to \$2.7 million. Management stated that their cost/benefit analysis showed a 10-year net cost savings projections of \$152,000 to \$381,000.
Evaluation of Management's Comments	Management's comments are responsive to the recommendation and their actions, taken or planned, should correct the issues identified in the report.
	However, we disagree with management's net cost savings projections of \$152,000 to \$381,000 over a 10-year period because management used a lower labor rate for the five clerks. A national average fully loaded (salary, fringe, and service wide cost) rate should have been used, per Postal Service Finance memo dated March 2002. Based on our review of management's documentation, we revised our cost savings projections to reflect the current escalation rate for Postal Service labor effective November 2002, and compared labor costs using only one scenario with five employees for both the Postal Service and the contractor. Also, we used the current contractor labor rate provided by management. As a result, we changed our cost saving projections to \$1.15 million over 10 years.

Matters for Postal Service Management Consideration	During our audit, the contracting officer representative stated that the repair operation at the Indianapolis Repair Facility was under review for a possible relocation to Memphis, Tennessee. Also, located at the Indianapolis Repair Facility is the Critical Parts Center. The Critical Parts Center maintains and distributes support equipment for several programs including, POS-One, Dinero Segura, and Delivery Confirmation. With the possible relocation of the repair operations, the programs mentioned above would remain at the Indianapolis Repair Facility as the Program Support Center.
	We determined that the Great Lakes Facility Service Office established a 10-year nonterminating lease for the Indianapolis Repair Facility. The nontermination clause is scheduled to expire in October 2008. However, the personal service contract for the facility operations terminates in September 2004. If the Indianapolis Repair Facility vacates the space in 2003, as proposed, the Postal Service will be responsible for about \$924,000 of leasing cost over a 5-year period. Absent of subleasing the space, the Postal Service would be paying for unused space. At the time of our review, we did not receive any documentation or analysis that would adequately explain how the proposed move of the repair operations from Indianapolis to Memphis would produce significant cost savings.
Management's Comments	Management stated that they examined multiple options to move the Indianapolis Repair Facility/Critical Parts Center to Memphis, Tennessee. It was jointly determined between Supply Management and Engineering that due to the cost of setting up a facility and the nontermination clause of the current lease in Indianapolis, there was not a sufficient margin of savings to justify a move at this time.
Evaluation of Management's Comments	Management's comments are responsive and address the issues identified in the report.

## APPENDIX A

### TOP TEN STOCK NUMBERS WITH EXCESS PARTS IN INVENTORY

National Stock Number	Description	Unit Cost	Balance on Hand Topeka	Demand	Excess	\$ Value of Excess
5963-02-000-4597	MODULE	\$1,723	281	30	251	\$ 432,531
7025-04-000-6076	DISK DRIVE	\$ 617	714	58	656	\$404,942
7042-04-000-2380	SWITCH	\$2,081	200	10	190	\$395,457
7010-04-000-3327	COMPUTER, PC SERVER	\$ 3,767	109	8	101	\$380,434
5998-03-000-4671	CARD ASSEMBLY	\$9,872	39	5	34	\$335,638
5998-04-000-4087	CARD ASSEMBLY	\$ 3,541	89	3	86	\$304,508
7025-04-000-9158	VERIFIER/INSPECTOR	\$ 1,667	189	8	181	\$301,727
5998-04-000-4783	PCB ASSY, ANALYZER	\$1,669	168	14	154	\$257,031
6720-05-000-9940	CAMERA, HEAD ASSEMBLY	\$ 4,950	50	0	50	\$247,500
5998-03-000-4928	PCB ASSY, BASE	\$ 4,661	55	9	46	\$214,418

### APPENDIX B. MANAGEMENT'S COMMENTS



February 6, 2003

**B. WAYNE GOLESKI** 

SUBJECT: Draft Audit Report – Inventory Management and Maintenance Repair Operations (Report Number AC-AR-03-DRAFT)

We appreciate the opportunity to review and comment on the subject draft audit report. Generally, we are in concurrence with the report's recommendations, and Attachment A provides specific responses to each recommendation. With regards to the report's findings, we cannot concur with the monetary impacts identified by the Office of Inspector General (OIG).

First, we disagree that there are \$15 million in "excess" mail processing spare parts. Based on sampling the highest dollar value inventory items, the Postal Service has approximately \$1.25 million in "excess" mail processing spare parts. The other \$13.75 million identified by the OIG included inventory where balances were above eight accounting periods of demand. This inventory is not considered "excess" and includes mail processing spare parts stocked to cover catastrophic events, newly provisioned items where demand has not yet been established, and end-of-life items where no external suppliers are available.

Second, we disagree with the 10-year cost savings projection of \$1.7 to \$2.7 million from eliminating work performed by both the Central Repair Facility and the Material Distribution Center. Attachment B includes the Supply Management and Engineering cost comparison that results in a potential 10-year net present value savings of \$152,000 to \$381,000.

We do not believe that this report contains any proprietary or business information and may be disclosed pursuant to the Freedom of Information Act (FOIA). Marie Martinez, of Supply Management, will monitor implementation of report recommendations and can be reached at (202) 268-4117. You may also contact Jerome Holmes at (703) 280-7501 if you have any questions for Engineering.

Indon Mac Mahon

Keith Strange Vice President Supply Management

22 Thomas G. Day Vice President Engineering

Attachments

cc: Richard J. Strasser, Jr. (all w/attachments) John A. Rapp Ernest C. Dardis Susan M. Duchek

475 L'ENFANT PLAZA SW WASHINGTON DC 20260 ATTACHMENT A Supply Management and Engineering Response OIG Report AC-AR-03-DRAFT Inventory Management and Maintenance Repair Operations Page 1 of 2

#### **OIG RECOMMENDATIONS**

We recommend the vice presidents, Supply Management and Engineering:

1. Reevaluate authorized stock levels for mail processing equipment repair parts and ensure that stock levels are reflective of demand data in the Material Distribution and Inventory Management System.

Management agrees with the intent of this recommendation. We will review our stocking objective process for maintaining a minimum of 3 accounting periods and a maximum of 5 accounting periods stock on hand. Stocking levels will be established using demand data, future forecasts and life cycle considerations. Supply Management will complete this review by the end of quarter 4, fiscal year 2003.

2. In coordination with the Provisioning Improvement team, develop a systematic process for estimating depot spare parts. At a minimum, the process should include testing reliability data that identifies time between failures and encourages the use of common parts that are already being used to support other pieces of mail processing equipment.

Management agrees with this recommendation. In December 2001 prior to the audit effort, a team was chartered to improve the provisioning process. The team's recommendations were presented to management in December 2002 and are in the process of being implemented. The team's efforts include developing a solicitation provision that will encourage suppliers to use common parts that are already being used to support other pieces of mail processing equipment. This provision will be completed by the team and recommended for use to Engineering during quarter 3, fiscal year 2003. In addition, the statement of work used for provisioning is in the process of being standardized. Suppliers will be instructed to use mean time between failure data when proposing spare parts lists. Supply Management will recommend to Item Managers use of the standardized statement of work during quarter 3, fiscal year 2003.

3. Identify excess repair parts for mail processing equipment at the end of its life cycle and dispose of parts that are no longer needed.

Management agrees with this recommendation. The Postal Service budgets for and disposes of excess repair parts for mail processing equipment at the end of its life cycle on an annual basis. We have budgeted \$5.4 million for inventory write-offs and mark downs to lower-of-cost-or-market value in fiscal year 2003. This compares to \$5.6 million (actual) in fiscal year 2002. The additional write-offs and adjustments will be completed by Supply Management during quarter 4, fiscal year 2003.

4. Utilize the \$15 million in excess mail processing equipment repairable spare parts that are above the normal demand prior to making any new spare part purchases for mail processing equipment.

Management agrees with the intent of this recommendation. Item managers currently review all repairable spare parts prior to placing work orders to repair unusable "Not Ready for Issue" spare parts or before buying additional new items.

We disagree that there are \$15 million in "excess" mail processing spare parts. Of the 984 items identified as excess, approximately \$13.75 million is not defined as or considered to be "excess." For example, when stratifying the 194 highest dollar items, we found that \$5 million are newly provisioned

ATTACHMENT A Supply Management and Engineering Response OIG Report AC-AR-03-DRAFT Inventory Management and Maintenance Repair Operations Page 2 of 2

items having less than adequate demand data for determining actual need. A second group of items totaling \$4 million are insurance items held in stock for catastrophic contingencies. A third group totaling \$2 million are end of life items that cannot be repaired or replaced due to obsolescence. For the other repairable spare parts that exceed normal demand and can be defined as excess (\$1.25 million), we will not purchase any new parts until forecasted requirements exceed the available stock on hand. Supply Management will issue a letter instructing the Item Managers of this by the end of quarter 3, fiscal year 2003.

5. Repair or dispose of broken parts identified as "Not Ready for Issue" at the Topeka Material Distribution Center.

Management agrees with the intent of this recommendation. Not all the "Not Ready for Issue" broken parts can be disposed of without jeopardizing future mail processing equipment operations and maintainability. In addition, premature repair of these items would incur time and material costs and inflate inventory balances unnecessarily. We have reviewed the "Not Ready for Issue" broken parts and disposed of approximately 14,800 parts. Supply Management will conduct another review during quarter 3, fiscal year 2003.

We recommend the vice president, Engineering:

6. Perform a cost/benefit analysis of consolidating the receiving function at the Central Repair Facility and eliminating the function at the Topeka Material Distribution Center to achieve potential cost avoidance. If potential savings are identified, modify the CRF contract to allow the contractor to receive, store, and repair repairable items and ship repaired items to either the field or distribution centers.

Management agrees with the intent of the recommendation and will perform a cost/benefit analysis for consolidating the receiving function at the Central Repair Facility and the Topeka Material Distribution Center. Based on the analysis outcome we will work with Supply Management to develop a cost effective process for receiving, storing and distributing repairable parts, both not ready for issue and ready for issue. This effort will be completed by end of postal quarter 3, fiscal year 2003.

There will be joint accountability and responsibility for plan implementation between Supply Management and Engineering. Richard James will be the Supply Management point of contract. Carl Leary will be the Engineering point of contact.

### **OIG MATTERS FOR POSTAL SERVICE MANAGEMENT CONSIDERATION**

Supply Management and Engineering examined multiple options to move the Indianapolis Repair Facility/Critical Parts Center (IRF/CPC) to Memphis, TN. We examined these options in an effort to determine if a sufficient business case was present to justify moving closer to the FedEx air transportation hub located in Memphis, TN.

A detailed analysis was prepared for several options. It was jointly determined between Supply Management and Engineering that due to the cost of setting up a facility and the non-termination clause of the current lease in Indianapolis, there was not a sufficient margin of savings to justify a move at this time.

ATTACHMENT B Supply Management and Engineering Response OIG Report AC-AR-03-DRAFT Inventory Management and Maintenance Repair Operations Page 1 of 1

### **COST COMPARISON**

### POSTAL SERVICE VERSUS OUTSOURCING THE SHIPPING/RECEIVING AREA AT THE TOPEKA MATERIAL DISTRIBUTION CENTER-BUILDING 8

Scenario	Current Number of Postal Service Employees	In-House Total Cost Postal Service	Proposed Number of Contract Employees	Outsource Total Cost Contractor	Total Cost Avoidance	Net Present Value
1	5	\$2,858,778.83	5	\$2,254,679.91	\$604,098.91	\$381,031.00
2	4	\$2,287,023.06	4	\$1,803,743.93	\$483,279.13	\$304,825.00
3	3	\$1,715,267.30	3	\$1,352,807.95	\$362,459.35	\$228,619.00
4	2	\$1,143,511.53	2	\$ 901,871.97	\$241,639.57	\$152,413.00

Based on Supply Management and Engineering Assumptions

1. Number of Employees: Five Clerks - Level 5 and No Supervisor

2. Postal Service productive hours per work year: Clerks - 1774

3. Delta between the CRF Labor costs and TMDC Labor costs: \$10.82

4. Postal Service labor escalation: 2.1 percent (source: Postal Service finance memo effective March 23, 2002).

5. Number of contract employees: maximum five; minimum two.

6. Contractor productive hours: 2080 (maximum)

- 7. Contractor escalation rate: 3.5 percent (Union negotiated) on current contract
- 8. Discount rate: 5.25 percent (Postal Service borrowing rate). Source-Finance memo