September 20, 1999

WILLIAM J. DOWLING VICE PRESIDENT, ENGINEERING

SUBJECT: Review of the USPS Equipment Preventive Maintenance Program (AC-MA-99-001)

This management advisory report presents the results of our review of the United States Postal Service (USPS) Equipment Preventive Maintenance Program, (Project Number 99PA019DS000). The purpose of this report is to provide you with interim results of our work at USPS Headquarters and the field sites, as well as inform you of how we plan to proceed with the review. After we complete our initial review of the corporate data, we would like to meet with USPS Headquarters engineering personnel to discuss our preliminary results and planned approach to complete the audit.

Results in Brief

Based upon the results to date, we concluded that our planned approach should be revised because we will likely find that the data is either unavailable or inconsistent at other processing and distribution centers.

We initially planned to obtain fiscal year (FY) 1998 and 1999 system-generated reports (nine from each year) from the Maintenance Activity Reporting and Scheduling and the Visual Maintenance Activity Reporting and Scheduling systems¹ to test data integrity. However, maintenance personnel at the two sites we visited could not provide many of the system-generated reports we requested.

At the first site, maintenance personnel produced two of the FY 98² and seven of the FY 99 reports. Maintenance

¹ These systems provide maintenance data relative to equipment, supplies, repair parts, inventories, cost of parts,

productivity, labor, contracts information, and maintenance scheduling.

² For both sites, the two reports were hardcopies maintained by maintenance personnel and were not generated from the FY 98 backup file.

personnel could not generate the remaining FY 98 reports because the backup tape was not available. Further, personnel indicated they were not aware of how to generate the remaining two FY 99 reports. At the second site, officials produced two of the FY 98 reports and all nine of the FY 99 reports. However, personnel could not generate the remaining FY 98 reports³ during our site visit because of limited technical resources (computer equipment and personnel) at the processing and distribution center.

Consequently, we have revised our audit approach to obtain and evaluate maintenance data at the corporate level and evaluate data integrity at all processing and distribution centers.

Additionally, based on our observations to date we offered suggestions to: (1) remind maintenance personnel to maintain FY 98 backup tapes; and (2) provide maintenance personnel with additional guidance on retrieving FY 98 and FY 99 maintenance reports.

Background

The Vice President, Engineering has overall management authority for the USPS Maintenance Program. The responsibilities include maintenance of all automation, mechanization, postal operating equipment and much of the customer services and retail sales equipment. In addition, engineering personnel also develop, define, and disseminate maintenance policies, guidelines and strategies for postal equipment. The processing and distribution centers use the Visual Maintenance Activity Reporting System to record maintenance data; however, prior to this system the Maintenance Activity Reporting System was used. The current system allows maintenance personnel to request maintenance data or reports relative to equipment, supplies, repair parts, inventories, cost of parts, productivity, labor, contract information, and maintenance scheduling. The USPS Handbook MS-63, Maintenance Operations Support, is the primary guidance used by employees who support maintenance operations.

Objective, Scope, and Methodology

The objective of our review was to evaluate the integrity of maintenance data and preventive maintenance schedules. To accomplish these objectives, we planned to evaluate

³ Personnel subsequently obtained the resources and support to retrieve and provide FY 98 reports after our visit.

maintenance data at 19 processing and distribution centers. However, after visiting two sites, we determined that our planned approach should be revised due to unavailable or inconsistent maintenance data. In conducting our review, we interviewed processing and distribution center maintenance personnel and headquarters engineering personnel. We reviewed USPS policy and procedures, as well as other pertinent documents relating to equipment maintenance. This review was conducted between May and September 1999 in accordance with the President's Council on Integrity and Efficiency, Quality Standards for Inspections.

Maintenance Reports

Maintenance personnel at the two sites we visited could not provide many of the system-generated reports we requested. At the first site, maintenance personnel produced two of the FY 98⁵ and seven of the FY 99 reports. Maintenance personnel said that they could not generate the remaining FY 98 reports because the backup tape was not available. Also, personnel indicated they were not aware of how to generate the remaining two FY 99 reports. At the second site, officials produced two of the FY 98 reports and all nine FY 99 reports. However, personnel could not generate the remaining FY 98 reports⁶ during our site visit because of limited technical resources (computer equipment and personnel) at the processing and distribution center.

In addition, our review of maintenance data provided by Headquarters and the two processing and distribution centers revealed discrepancies between system-generated reports and local source documents. For example, at the first site, we noted differences in FY 98 data between Headquarters and locally generated reports. At the same site, one report showed that all preventive maintenance was bypassed for the first three accounting periods of FY 99. At the second site, transaction dates and frequency of maintenance accomplished differed in summary reports, detailed reports, and source documents. We have not identified the underlying causes of these problems; however, differences may have occurred because

⁴ The two sites visited were the Norfolk, VA, and Detroit, MI, processing and distribution centers.

⁵ For both sites, the two reports were hard copies maintained by maintenance personnel and were not generated from the FY 98 backup file.

⁶ Personnel subsequently obtained the resources and support to retrieve and provide FY 98 reports after our visit.

personnel did not follow prescribed conversion procedures or data verification procedures.

Suggestions

We offer the following suggestions.

The Vice President, Engineering should:

- 1. remind maintenance personnel to maintain FY 98 backup tapes; and
- 2. provide maintenance personnel with additional guidance on retrieving FY 98 and FY 99 maintenance reports.

Management Response

The Vice President, Engineering concurred with our observations and suggestions. Action has been taken to remind offices to maintain the prior fiscal year backup tapes. In addition, detailed instructions have been developed to assist offices with retrieving FY 98 and FY 99 maintenance reports. Management was concerned that the audit would become a system review rather than a preventive maintenance review. We have summarized management's comments in the report and included the full text of the Vice President, Engineering response in the appendix.

Evaluation of Management Response

Management's comments are responsive to our suggestions. The actions taken by management to reiterate the processing and distribution centers' responsibilities for maintaining prior fiscal year backup tapes and providing more detailed instructions for retrieving reports will assist us in completing our planned objectives in a timely manner. In addition, it will allow us to provide the information requested.

In response to concerns expressed by the Vice President, Engineering, we plan to evaluate the reliability of computer based information's system. If the data is not reliable, we will coordinate an alternate approach with management that meets their needs. We appreciate the cooperation and courtesies provided by your staff during the review. If you have any questions, please contact or me at (703) 248-2300.

Richard F. Chambers Assistant Inspector General for Performance

cc: Norman E. Lorentz Alan B. Kiel John R. Gunnels WILLIAM J. DOWLING VICE PRESIDENT ENGINEERING



September 7, 1999

RICHARD F. CHAMBERS ASSISTANT INSPECTOR GENERAL FOR PERFORMANCE

SUBJECT: Review of the USPS Equipment Preventive Maintenance Program (AC-MA-99-001)

We have reviewed your Management Advisory Report with regard to your audit of the USPS Equipment Preventive Maintenance Program. We understand that your audit is in a very early stage, and the items you report are necessarily not specific enough at this point to allow us to formulate a comprehensive action plan. We have, however, (1) sent a memorandum to the Area Offices asking them to remind all affected offices of requirements to generate and retain backup tapes, and (2) developed detailed instructions on retrieving data from those tapes. It should be noted that these offices have implemented Visual Maintenance Activity Reporting and Scheduling (VMARS) relatively recently and that retrieving old data requires some fairly complicated processes since the old data is in a MARS (precursor to VMARS) format. This is not a process that they would have a need to do under normal circumstances.

Our Maintenance Policies and Programs personnel have been in continuing contact with your audit team leader to assure that he has support as needed at all levels of the Maintenance organization. While we understand and share the concerns that these early site visits have raised about possible data problems, the "revised audit approach" mentioned in your report also raises questions. We are concerned that the review is in danger of becoming a VMARS review instead of a preventive maintenance review. We have suggested a number of items to your team leader, in terms of correlating equipment performance to preventive maintenance performance.

We appreciate your team's efforts to date and look forward to your subsequent reports. As Areas are identified which require corrective measures, appropriate action will be taken.

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Major Contributors to This Report	