September 20, 1999

PATRICIA M. GIBERT VICE PRESIDENT, RETAIL

JOHN H. WARD VICE PRESIDENT, FINANCE AND CONTROLLER

SUBJECT: Audit Report - Point of Service ONE (Audit Report Number DA-AR-99-002)

This report represents the results of our audit of the Point of Service ONE system. This report is the first in a series of reports we plan to issue. We will continue monitoring the Point of Service ONE system, including all remaining deployment stages.

While management has made significant progress in deploying the Point of Service ONE system, we found ongoing hardware and software problems contributed to increases in accounting adjustments and window clerk work hours. As a result, all of the benefits of the Point of Service ONE system envisioned by management were not being achieved.

Management generally agreed with 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 audit. If you have any questions or need additional information, please contact Director, Developmental, at Director, or myself at (703) 248-2300.

Richard F. Chambers
Assistant Inspector General
for Performance

Attachment

cc: M. Richard Porras Allen R. Kane David G. Hunter Alan B. Kiel John R. Gunnels

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### **EXECUTIVE SUMMARY**

### Introduction

In June 1996 the United States Postal Service (USPS) Board of Governors approved the deployment of the Point of Service ONE system, Stage 1. This system will replace the outdated integrated retail terminals at the retail windows of the post offices. We conducted an audit to determine if project planning and system development were effective and to evaluate whether the deployed Point of Service ONE system is achieving the desired results and benefits as outlined in the approved Decision Analysis Report.

### Results in Brief

Since the program was initiated in June 1996, the Point of Service ONE program office made extensive progress in developing and implementing the Point of Service ONE system. While deployment has not been without problems, management took commendable initiative to objectively identify risks by contracting with a consultant to review the program. Officials also assigned the defined risks and supporting observations to project team members for additional definition and mitigation. As a result, more than 65 percent of the identified risks had been mitigated as of April 1999.

Despite management's actions, however, we found the development and deployment of the system was not fully achieving the desired results and benefits as outlined in the Decision Analysis Report approved by the USPS Board of Governors. Specifically, the number of days allocated for testing the Point of Service ONE software were significantly reduced, thereby failing to prevent additional system problems, such as failed Standard Field Accounting System transmissions and system locks. To illustrate:

- software and hardware problems persist despite several updated software releases designed to correct the problems;
- vendors were modifying accountability and retail transaction data to correct accounting errors at Point of Service ONE sites without prior approval by the appropriate USPS personnel;

 the number and dollar value of accounting adjustments have risen by 83 percent and 500 percent, respectively in the three accounting periods after implementation as compared to fiscal year (FY) 1998;

- the work hours of window clerks and accounting staff in Point of Service ONE sites increased by 2 percent and 3.8 percent, respectively in the three accounting periods after implementation as compared to FY 1998; and
- the Point of Service ONE new business processes were not sufficiently mature to fully provide customer satisfaction and fully support retail operations.

We briefed the Capital Investment Committee and the Capital Projects Committee on our interim assessment of the Point of Service ONE system in April 1999. This report reflects that assessment and also contains additional analyses of the Point of ONE system.

Overall, we believe the Point of Service ONE project is needed to keep USPS competitive and provide necessary information for management. However, we believe deployment of the Point of Service ONE system caused additional costs to USPS and did not fully meet desired results and benefits.

# Summary of Recommendations

We provided the Vice President, Retail, and the Vice President, Finance and Controller, six recommendations regarding monitoring and controlling Point of Service ONE activities to ensure accountability and to improve system quality and performance.

# Summary of Management's Comments

Management agreed with our recommendations and has either taken or initiated the necessary corrective actions. Management's comments are summarized in the body of the report and appear verbatim at Appendix A.

# Evaluation of Management's Comments

Management's actions taken or planned are responsive to the issues raised in this report.

### INTRODUCTION

### **Background**

Point of Service ONE is the new USPS retail system designed to replace over 60,000 aging and outdated integrated retail terminals and cash registers used by USPS window clerks. This new retail system is expected to improve customer service and help collect important sales and merchandising information.

In June 1996 The Board of Governors approved \$275 million for the deployment of Point of Service ONE Stage 1. Due to significant changes in capital requirements, the Board approved additional funding of \$53.7 million in May 1998, bringing the total investment for the first phase to \$328.7 million.

To ensure development of the best system and stimulate competition, the USPS awarded contracts to develop Point of Service ONE to two vendors. In Stage 1, these two companies are scheduled to develop and install Point of Service ONE at 4,124 postal locations. In the proposed Stage 2, additional functionality will be added to this system as deployment continues to other locations. Stage 3 will be the final full deployment that will reach approximately 20,000 postal locations.

Point of Service ONE is a component system of the USPS Associate Office Infrastructure - a project, designed to put local area networks and computer hardware in field offices. This infrastructure will enable USPS to update and process information pertaining to Point of Service ONE retail transactions. USPS officials have indicated the deployment of Point of Service ONE throughout the network will allow USPS to remain competitive in the retail market by providing:

- accurate service:
- state-of-the-art equipment;
- accurate, complete, and consistent information; and
- full range of marketing reports.

# Objectives, Scope, and Methodology

The objectives of our audit were to:

(1) determine whether project planning, development, and testing were effective, and

(2) determine if the deployed Point of Service ONE system provides accurate and reliable data and is achieving desired results as outlined in the Decision Analysis Report.

In completing the audit, we reviewed numerous documents and reports relating to Point of Service ONE. We extracted data from USPS systems to perform analytical procedures. We interviewed USPS officials and contractors at Headquarters and in field offices. Also, we attended project meetings, teleconferences, and training courses on Point of Service ONE.

The audit was conducted from January through July 1999 in accordance with generally accepted government auditing standards. We reviewed internal controls related to the Point of Service ONE system to the extent we considered necessary under the circumstances.

This is the first in a series of reports we plan to issue. We will continue monitoring the Point of Service ONE system, including all remaining deployment stages.

### **AUDIT RESULTS**

### **Point of Service ONE**

The Point of Service ONE system was deployed with numerous problems affecting the quality, reliability, and integrity of the Point of Service ONE data. Program management officials believed the level of risk was manageable and deployed a system that still had critical, functional deficiencies, which were found during the First Article Test. Subsequently, the number of days allocated for software testing were significantly reduced, causing additional system problems. As a result:

- hardware and software problems still existed despite several updated software releases designed to correct the problems;
- (2) vendors were modifying the data to correct accounting errors at Point of Service ONE sites without prior approval by the appropriate USPS personnel;
- (3) the number and dollar value of accounting adjustments rose by 83 percent and 500 percent, respectively;
- (4) the work hours of window clerks and accounting staff increased by 2 percent and 3.8 percent, respectively; and
- (5) the Point of Service ONE new business processes were not sufficiently mature to fully provide customer satisfaction and fully support retail operations.

### System Deployment

To ensure development of the best system and stimulate competition, the USPS awarded contracts to two vendors for the development and deployment of Point of Service ONE. In 1996 research and development was initiated to design this system. During this phase, vendors conducted the Developer Integrated Testing and System Integrated Testing. Also during this phase, USPS conducted a First Article Test. After this test, production software was released for deployment in September 1998. As of April 1999 Point of Service ONE was deployed at approximately 1,200 sites.

<sup>&</sup>lt;sup>1</sup> First Article Test is the contractual evaluation of the vendor's solution by USPS prior to release.

At the initial sites for deployment, the functionality of the system was hindered by hardware and software problems. To address these problems the vendors developed and released new versions of the software and modified hardware. However, even after the release of the latest versions, sites continued to incur functionality problems such as inability to transmit financial data to the Standard Field Accounting System.

# Testing and Certification of Software

The Point of Service ONE program manager significantly shortened the time allocated for effective software testing from the original First Article Test. A tight deployment schedule caused this testing to be condensed, especially at pilot sites. As a result, the shortened testing time frames contributed to functionality problems of the Point of Service ONE system.

The First Article Test, performed by USPS engineering test and evaluation officials, lasted six weeks and required about 20 personnel to test each vendor's solution. USPS engineering staff provided the program office with the results of the First Article Test, showing major problems. For example, problems were encountered in printing money orders, systems locking up, screens freezing, inventory errors, and accountability at the end of the operating day. Officials in the program office decided to accept the risk and deploy Point of Service ONE units despite these software problems.

As part of USPS engineering process, after the First Article Test, all software maintenance testing is the responsibility of the Engineering Software Management organization. Currently, an independent contractor under the supervision of Engineering Delivery and Customer Services Equipment performs maintenance testing.

The program office limited the duration of all Point of Service ONE software testing by allocating only:

 Fifteen working days to test the functionality of a full software release at USPS Engineering, Delivery and Customer Services Equipment;

 Ten working days to test full software releases for network compatibility at USPS Information Systems in Raleigh, North Carolina;

- five working days to test software patches and data files, both at Information Systems and Engineering; and
- one to five working days to test any type of Point of Service ONE software at USPS pilot sites.

We believe reducing the number of days allocated for testing increased the risk of introducing software errors. For example, one to five days of testing does not allow for pilot sites to effectively test all Point of Service ONE retail transactions and functions. With only five days of testing, complete error checking in a live field environment may not be possible.

Appendix A contains a chart that outlines the process the program office established as the test structure for new software.

We believe this test structure was sufficiently redundant to identify software defects. However, we believe the program office allocated insufficient time at key test areas.

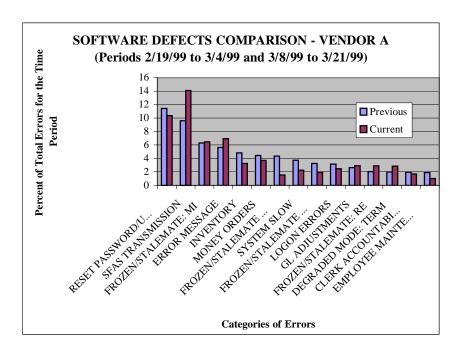
# Hardware and Software Releases

While progress has been made, the hardware and software releases still contain numerous problems. This condition exists because software testing was condensed, insufficient resources are allocated for data file development and testing, and hardware was not consistently functioning. As a result, there was increased customer-waiting time, reduced confidence in the system by USPS employees, and reduced confidence in retail operations' data integrity.

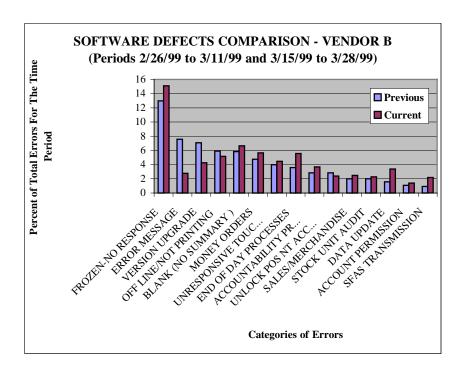
USPS original concept for Point of Service ONE was to use a commercial "off-the-shelf" solution to reduce development time and costs. During software evaluation, vendors believed that 70 percent commercial "off-the-shelf" software and 30 percent custom built design software was to be used in developing Point of Service ONE. However, during the actual development, vendors realized that more custom design software was needed because of the uniqueness and complexities of USPS business processes. At the early-deployed sites, the functionality of the system was hindered by hardware and software problems. Both

vendors have released new versions of software intended to eliminate problems of the previous release. However, even after the release of the latest versions, sites continued to have functionality problems. (See following charts for examples.)

As part of our review, we compared help desk calls before and after the latest software releases. We computed the percentage of each category of help desk calls and determined that there was no significant change in the category of the help desk call or the percentage of occurrence. The following charts present the results of our analysis for vendors A and B.



Although improvements have been made in some categories for Vendor A, our review revealed category increases in Standard Field Accounting System problems (4.5%), Error Message (1.3%), Frozen/Stalemate: Reports and Miscellaneous (1.0%), and Degraded Mode: Terminal (0.9%).



The previous chart also reflected improvements in some categories. The category increases for Vendor B were Frozen-No Response (2.1%), End of the Day Process (2.0%), Data Update (1.8%), and Standard Field Accounting System Transmission problems (1.3%).

Further, the table below reflects the occurrences of Point of Service ONE help desk tickets for both vendors during the two-week periods before and after the latest software releases.

Total Occurrences of Help Desk Calls				
Vendor	Previous Release	Current Release		
A	3295	3629		
В	1201	1007		

We believe the high volume of help desk tickets was the result of systemic problems with the software. This is based on our review and the consultant's risk assessment that revealed recurring problems. In addition, we identified vendors using script files to correct errors on an as needed basis because of software problems. Program management officials recognized the issue of software dependability as an ongoing problem. However, the program manager believed the software problems were manageable and deployment could continue.

### Vendor Help Desk Fixes

Vendor help desks<sup>2</sup> use specialized software utilities, called scripts or script files,<sup>3</sup> to correct Point of Service ONE out of balance conditions and other errors. An out of balance condition occurs when a discrepancy exists between receipts and disbursements. USPS Information Systems, at the program manager's request, provide a high level of network access<sup>4</sup> to vendors, which allow them to run script files. This permits the vendor to correct Point of Service ONE accountability and other data problems with minimal documentation and oversight. Further analysis of these adjustments is needed to ensure financial integrity and the security of Point of Service ONE system are not compromised.

The contract allows the vendors access to Point of Service ONE systems to perform diagnostic functions. However, contractors are not allowed to create, delete, or modify user accounts; distribute software; or remotely reconfigure Point of Service ONE devices.

The scripts used to correct Point of Service ONE out of balance conditions and other problems have insufficient procedural controls, monitoring, and documentation of accounting data. Vendor help desk tickets are the only records kept of accountability data changes. Neither Point of Service ONE sites nor centralized facilities maintain detailed, independent transaction logs resulting from script file usage. Such records are essential to a sound system of internal controls, and minimize the risk of improper or fraudulent transactions being initiated through the Point of Service ONE system.

Neither Information Systems nor Engineering were involved in the development and testing of scripts files. Information Systems, in fact, had not authorized Point of Service ONE vendor help desks to make any accountability changes. The only process Information Systems approved was to allow the help desks to return their Point of Service ONE

<sup>&</sup>lt;sup>2</sup> Technicians who attempt to answer questions and solve problems identified by Point of Service ONE users staff vendor help desks.

<sup>&</sup>lt;sup>3</sup>Script files can directly edit database tables, which contain retail and inventory transaction data.

<sup>&</sup>lt;sup>4</sup>The vendors' access allows them to map to any of their respectively deployed Point of Service ONE terminals. Mapping allows the help desks to directly connect to the hard disk drive of each of their Point of Service ONE terminals via the Postal Routed Network and conduct file management. These procedures seldom leave any audit trail of changes.

terminals to an original state. The vendors and the Point of Service ONE program office interpreted this as an authorization to bring Point of Service ONE terminals back into balance.

Scripts have been used to make accountability adjustments ranging from a few cents to over \$300,000. Scripts have also been applied in error with mistakes ranging from making accountability changes at the wrong Point of Service ONE site to making the Standard Field Accounting System database unreadable by the database management software. As a result, critical financial data could not be accessed.

Prior to briefing the Capital Investment Committee on our interim assessment of the Point of Service ONE system, we met with program management officials to discuss our concerns. After discussing our concerns regarding the use of script files, management took action to correct this problem. They directed the vendors to get approval from the USPS finance and program office officials prior to using script files to correct out of balance conditions and errors.

# Accounting Adjustments

There has been a significant increase in the financial and accounting adjustments due to the deployment of Point of Service ONE system. The accounting adjustments increased 83 percent in volume and approximately 500 percent in dollar value. USPS officials indicated an increase in the volume of accounting adjustments was expected because of the Point of Service ONE design. However, even taking this into consideration, we believe this condition illustrates the numerous problems outstanding in the software as well as the window clerks learning curve for using Point of Service ONE. Further analysis of these adjustments is needed to ensure data integrity.

Form 1908, Financial Adjustment Memorandum, is used by USPS district finance offices to document financial errors and adjustments due to imbalances of window clerks' accountability. These forms are generated from the Standard Field Accounting System. This process was in existence before the deployment of Point of Service ONE.

We analyzed Forms 1908 for the two vendors during a three-month period prior to and after installation of the Point of Service ONE system.<sup>5</sup> We identified large increases in volume and dollar value of Forms 1908 after Point of Service ONE was deployed, as shown in the chart below.

### \$16,000,000 \$14,000,000 \$12,000,000 Before ■ After Adjustment Amount \$10,000,000 \$8,000,000 \$6,000,000 \$4,000,000 \$2,000,000 \$0 763 69 61 761 **Account Identifier Codes**

#### Financial Adjustment Memorandum (1908s)

The top five financial adjustment increases were in the following account identifier codes, <sup>6</sup> listed in order of frequency by occurrence:

- 069: Bank Deposit Overage records the amount reported by a bank as a deposit overage;
- 061: Miscellaneous Overage not described in any other account identifier codes;
- **761:** Miscellaneous Suspense records the value of suspense items that do not fit in other categories;
- **763:** Bank Deposit Shortage records the amount reported by a bank as a deposit shortage; and
- 768: Reserve Stock Shortage records the amount of a unit reserve stock shortage detected during an audit of the accountability.

In addition, other major reasons, which may not be related to Point of Service ONE, attributing to financial adjustment

<sup>&</sup>lt;sup>5</sup> Accounting periods three, four, and five of FY 1998 and 1999 were selected for this analysis.

<sup>&</sup>lt;sup>6</sup> Account identifier codes are numeric three-digit codes assigned to identify various financial transactions.

increases were returned checks, salary advances, credit card understatement and errors, counterfeit bills, and employees stamp shortages.

We conducted further analysis of Forms 1908 to determine the number of occurrences and dollar value associated with each adjustment by vendor. Our analysis revealed the following:

Vendors	Adjustment	Pre-Point of Service	Post-Point of Service	Increase
А	# of Occurrences	12,412	24,394	97%
А	Dollar Value	\$4.70 million	\$16.53 million	252%
В	# of Occurrences	5,317	7,952	50%
В	Dollar Value	\$1.69 million	\$21.32 million	1166%

USPS management officials stated the increase in 1908's was because Point of Service ONE automatically produces a 1908 to correct an error. Previously, the preparation of a 1908 could be circumvented in an integrated retail terminal environment. We agree with their assertion. However, we believe the significant increase in volume of adjustments is also an indication of the numerous problems in the Point of Service ONE system.

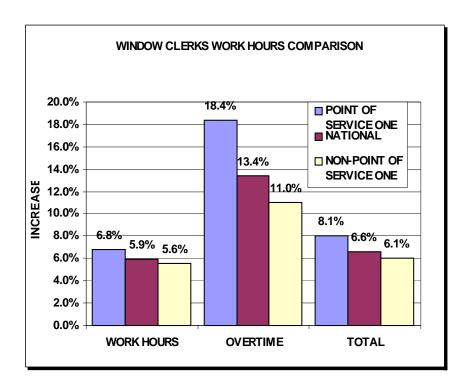
We believe the rapid increase in number of financial errors and adjustments was causing increased work hours among the window clerks and accounting staff to correct the accounting adjustments.

Work Hours

There was an increase in work hours of window clerks and accounting staff after the deployment of Point of Service ONE system.<sup>7</sup> This situation was caused by an increase in the errors and adjustments, software and hardware problems, slow help desk response, and reconstruction of lost data. As a result, work hours of window clerks and accounting staff increased 2.0 percent and 3.8 percent, respectively.

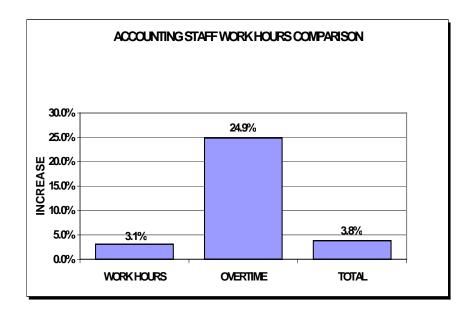
<sup>&</sup>lt;sup>7</sup> Accounting periods three, four, and five of FY 1998 and 1999 were selected for this analysis.

We analyzed work hours for window clerks and accounting staff at Point of Service ONE, national, and non-Point of Service ONE offices. This analysis was done for three accounting periods prior to and after deployment. The chart below illustrates the results of the analysis for window clerks:



Point of Service ONE sites have a 2 percent higher rate of increase in work hours than non-Point of Service ONE sites. This is the difference between the Point of Service ONE offices (8.1 percent) and the non-Point of Service ONE offices (6.1 percent). The work hours of window clerks at Point of Service ONE offices increased by more than 79,000 hours. The cost of this increase was \$2.4 million, using the FY 1999 labor rate provided by USPS Finance.

The chart below illustrates the results of our analysis for accounting staff work hours. Our analysis covers all districts for accounting periods three, four, and five of FY 1998 and 1999.



There was a 3.8 percent increase in work hours. The work hours of the accounting staff at district finance offices increased by more than 20,500 hours. The cost of this increase is more than \$650,000, using the FY 1999 labor rate provided by USPS Finance.

The Point of Service ONE sites are absorbing the increase in work hours out of existing budgets. If the increases continue at the current rate, nationwide deployment of Point of Service ONE will result in additional labor costs that was not budgeted.

### **New Business Process**

The Point of Service ONE new business processes were not sufficiently mature to fully provide customer satisfaction, and fully support retail operations. This condition was caused by condensed time for software testing, premature releases of software, software and hardware problems, and information systems support problems. In addition, coordination among USPS functional units, such as Retail, Engineering, Information Systems, Purchasing and

Materials, and Finance was not totally effective due to a lack of accountability. As a consequence, the Point of Service ONE program has not fully achieved its proposed benefits and results.

USPS designed the Point of Service ONE system to capture detailed transaction data to support its sales and marketing efforts and improve operations. This system was intended to deliver better service, increase customer satisfaction, and increase the effectiveness of sales, marketing, and operations.

Point of Service ONE system was tested at a small number of beta sites in order to gain live operational experience and fully validate the hardware and software. The sites experienced many problems with the system. Formal deployment began in September 1998. The program office recognized the need for a comprehensive risk assessment and hired a consultant in October 1998. The consultant's report was issued in November 1998. The report identified over 140 risk areas that could adversely affect the program. Because of the upcoming Christmas holiday season and the identified risks, deployment was delayed.

In response to the consultant's report, the program office implemented a process to address the risks. The program office assigned risk areas to individuals responsible for mitigating the identified problems. This mitigation process is ongoing and the program office tracks progress in mitigating the risks. Many new processes were put in place to correct risk areas. However, many of these new processes have only been in place for a few months and their effectiveness remains to be determined. In addition, as problems were corrected, the program office identified new risk areas.

In March 1999 the program office resumed Point of Service ONE deployment. Although all of the risks had not been mitigated, the program manager believed that the risks were "manageable." However, we believe the deficiencies identified in this report show that Point of Service ONE lacks the maturity to support nationwide retail operations.

### Recommendations

We recommend the Vice President, Retail:

 Perform an independent assessment of the duration and resources needed for effective software testing and allocate the necessary resources.

# Management's Comment

Management agreed with the specific recommendation. Management stated "The Point of Service ONE Program Office agrees with the OIG recommendation that an independent assessment of testing is desirable. This recommendation has been implemented. In May 1999, the Point of Service ONE Program Office requested an assessment by an independent contractor under the direction of USPS Engineering, Delivery, and Customer Services Equipment. The independent contractor worked with USPS Information Systems, Point of Service ONE Training, Retail Operations, the Point of Service ONE Program Office, and Engineering, Delivery, and Customer Services Equipment to define integrated processes for Point of Service ONE software test and certification. A Point of Service ONE Certification Process Document, Version 1.0, was published on August 12, 1999. Specific timeframes are included for each step in the testing process. These processes and timeframes are implemented for Point of Service ONE software test and certification and appropriate resources have been allocated."

 Continue to monitor and control the use of scripts or script files to perform accountability changes. Implement detailed procedures governing network access permissions, dollar value of accountability changes, and transaction activity logging.

# Management's Comment

Management agreed with the specific recommendation. Management stated "The Point of Service ONE Program Office and Finance did agree that running of scripts should be more formally controlled and that system access should continue to be closely monitored. Immediately upon being alerted to potential issues by the OIG, the Point of Service ONE Program Office, with the support of Finance, took the following actions:

 On April 15, after being alerted that the OIG had an issue, the Point of Service ONE Program Office stopped vendors from running any scripts without the

- written permission of the Point of Service ONE Contracting Officer's Representative (COR).
- In April, the Point of Service ONE Program Office requested a consultant specializing in security to review vendor network access. A draft report delivered in June concluded that vendor access at the Point of Service ONE Help Desk was appropriate and controlled, both in terms of the Point of Service ONE contract and USPS Policies and Procedures. The final report is expected to be complete by August 31.
- In May, the Point of Service ONE Program Office and Finance implemented a formal, documented process for monitoring and controlling the use of scripts or script files to perform accountability changes. The process is controlled and managed by the Point of Service ONE Contracting Officer's Representative (COR) and Finance. The process produces detailed, independent transaction records for all scripts.
- The Point of Service ONE Program Office scheduled meetings in July and August with the vendors and USPS Finance to review the accountability adjustment process and software defects that cause accountability errors."
- 3. Work with the vendors to reduce the number of problems, identified through help desk tickets, in future software releases.

# Management's Comment

Management agreed with the recommendation and stated: "Management agrees with and has already implemented the OIG recommendation to continue to work with the Point of Service ONE vendors to reduce problems identified through help desk tickets. This work began with the initial deployment of Point of Service ONE and the Point of Service ONE Program Office continues to refine and improve these efforts with the Point of Service ONE vendors. Since the period audited by the OIG, there has been a significant drop in help desk tickets for both vendors, even though deployment of new sites has continued. The number of tickets has dropped in all areas, indicating that there are no systemic problems with the software."

the district finance offices and determine the cause for any unexpected increases.

# Management's Comment

Management agreed with the specific recommendation and stated: "Management concurs that increases in work hours should be identified and investigated regardless of the cause. There are numerous reasons for the work hour increases including Districts that have expanded window hours to accommodate customer requirements and accounting staff hours influenced by SFAS consolidations in many Districts.

Point of Service ONE did have an impact on work hours particularly in sites that we deployed in the Fall of 1998. These hours can be attributed to start up issues and software and data updates." Management noted there has been a significant improvement in work hours since the audited accounting periods. Management further stated the improvements in work hour trends are primarily due to field operations management attention to work hour usage and to some degree improvements in Point of Service ONE.

5. Coordinate Point of Service ONE activities with the Vice Presidents of Engineering, Purchasing and Materials, Information Systems, and Finance to ensure affected USPS departments are held accountable for accomplishing their assigned responsibilities.

# Management's Comment

Management agreed with the specific recommendation and stated: "Retail has always recognized the need for the subject Vice Presidents to be directly involved in the development and implementation of Point of Service ONE. These four Vice Presidents serve on a Point of Service ONE steering committee, along with the Vice President of Field Retail Operations, chaired by the Vice President of Retail. The committee was involved with the selection of the Point of Service ONE vendors and has met periodically over the last three years to monitor the progress of Point of Service ONE. The Vice Presidents are actively involved with Point of Service ONE and have assigned employees full-time to support the program."

Management also noted "Numerous improvements have been achieved to date in 1999 in Point of Service ONE including significant reductions in accountability issues,

reduced call volumes at the Help Desk, and achievement of production level software with both Point of Service ONE vendors in April 1999."

Finally, management stated "Retail considers the other functional groups an integral part of the implementation of Point of Service ONE. The functional groups have provided excellent support and continue to respond to their responsibilities. In addition, the Vice Presidents, Area Operations have confirmed that Point of Service ONE has achieved the level of maturity to support full deployment and nationwide retail operations. The OIG recommendation is fully implemented."

We recommend the Vice President, Finance and Controller:

6. Monitor the volume of Forms 1908 generated by the Standard Field Accounting System and determine the cause of the adjustments.

## Management's Comment

Management agreed with the finding and recommendation. However, management said the increase in the number of 1908s was expected due to the added control built into the design of the system. Management felt the scope of the audit should have included an analysis of closed 1908s.

Additionally, they noted that no analysis was done to determine the offices' condition prior to Point of Service conversion or to determine if there was a general increase in 1908s across non-Point of Service units.

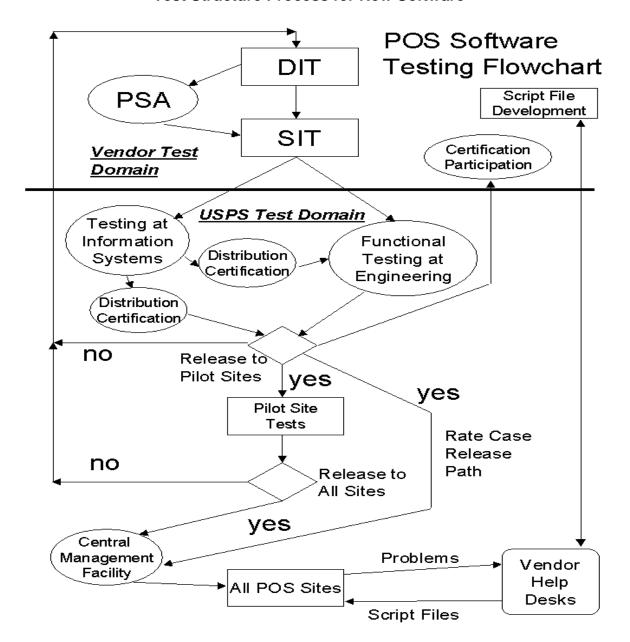
With regard to the recommendation, management stated "Management agrees with the recommendation to monitor the volume and cause of 1908s that are generated, however, since 1908 data is not readily available, the open control report will be utilized. The Standard Field Accounting Unit Revenue Data Access is one tool the area Finance group is using to monitor open items in trust and suspense. We strongly believe that this is the best method to monitor the adjustments. Standard Field Accounting Unit Revenue Data Access provides the capability to analyze open control items down to the unit level, by account identifier code and cause of the adjustment. Discussions with the area Finance coordinators have resulted in most areas monitoring the open control report from Standard

Field Accounting Unit Revenue Data Access every accounting period. In Postal Quarter 1, FY 2000, Headquarters Finance will issue formal instructions to the areas for monitoring the dollar amounts entered into trust and suspense, as well as the clearance and aging of those items. In summary, the Finance group has actively monitored and attempted to resolve all 1908 issues and provided proper accounting controls."

### Overall Evaluation of Management's Comment

Management's actions meet the intent of the recommendations.

As noted in the Objectives, Scope, and Methodology paragraph, this is the first in a series of reports we plan to issue on the Point of Service ONE system. Our second report will address among other things, more specific issues related to the 1908s.



**Test Structure Process for New Software** 

### **Vendor Testing**

Vendors conduct Developer System Integrated Testing (DIT) and System Integrated Testing (SIT) at their facilities to stress the software under simulated field conditions in their test domain. USPS personnel conduct Preliminary System Assessment (PSA) testing using unscripted test procedures to simulate actual retail transactions.

### **USPS Information Systems Testing**

Testing at Information Systems focuses on Point of Service ONE software's ability to interface with existing USPS networks, Postal Routed Network and AOI, and information management programs such as the Standard Field Accounting System.

### **Functional Testing at USPS Engineering**

Testing at Engineering focuses on the functionality of Point of Service ONE and its ability to execute all transactions required in the statement of work.

### **Pilot Site Testing and Deployment**

Once testing at Information Systems and Engineering is complete, the program office decides if the software is ready to be released to Point of Service ONE pilot sites. Testing there verifies that the software will function in a live retail environment.

### **Distribution Certification**

Information Systems distributes and loads Point of Service ONE software electronically to each individual terminal in the field. During testing, software is electronically distributed and loaded to Point of Service ONE terminals at Engineering. These electronically distributed software versions are then tested for completeness and proper functionality.

## **Central Management Facility**

This organization, part of Information Systems, has responsibility to electronically distribute and load all Point of Service ONE software in the field.

### Rate Case Release Path

The normal software release path involves pilot site testing. When software changes are due to a rate case change, pilot site testing is bypassed to insure that all Point of Service ONE sites are conducting retail transactions in accordance with the rate change.

PATRICIA M. GIBERT VICE PRESIDENT. RETAIL



September 7, 1999

RICHARD F. CHAMBERS

SUBJECT: Draft of Audit Report Point of Service ONE

This is in response to your July 26, request that we review the subject report (DR-AR-99-DRAFT) and provide our response.

The following are our responses to the recommendations on page 15 of the report.

#### OIG Recommendation #1:

Perform an independent assessment of the duration and resources needed for effective software testing and allocate the necessary resources.

#### Management Response to Recommendation #1:

Management agrees with the specific recommendation. Testing of the POS ONE software by the USPS was more extensive then originally envisioned in the contract. The USPS provided a Preliminary System Assessment (PSA) team of USPS personnel at each vendor's facility prior to First Article Test (FAT). The duration of FAT was jointly agreed to by the POS ONE Program Office and USPS Engineering, Delivery, and Customer Services Equipment. Both vendor's passed FAT with conditional acceptance, meaning that some system problems still existed that would be corrected under the existing fixed priced contract, but the system was ready to be deployed. The duration of software testing was set by USPS Engineering, Delivery, and Customer Services Equipment and by USPS Information Systems in Raleigh, North Carolina.

The POS ONE Program Office agrees with the OIG recommendation that an independent assessment of testing is desirable. This recommendation has been implemented. In May 1999, the POS ONE Program Office requested an assessment by an independent contractor under the direction of USPS Engineering, Delivery, and Customer Services Equipment. The independent contractor worked with USPS Information Systems, POS ONE Training, Retail Operations, the POS ONE Program Office, and Engineering, Delivery, and Customer Services Equipment to define integrated processes for POS ONE software test and certification. A POS ONE Certification Process Document, Version 1.0, was published on August 12, 1999. Specific timeframes are included for each step in the testing process. These processes and timeframes are implemented for POS ONE software test and certification and appropriate resources have been allocated.

#### OIG Recommendation #2:

Continue to monitor and control the use of scripts or script files to perform accountability changes. Implement detailed procedures governing network access permissions, dollar value of accountability changes, and transaction activity logging.

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### Management Response to Recommendation #2:

Management agrees with this specific recommendation. Vendor Help Desk personnel documented all script files run as part of normal Help Desk procedures. All vendor Help Desk personnel have appropriate system access to perform their responsibilities; those personnel with a high level of access have USPS "Sensitive" level clearances in accordance with USPS Policies and Procedures. USPS Information Systems granted the access to vendor Help Desk personnel and was fully aware of the rights and responsibilities of that access. The SFAS database has been readable and critical financial data has been accessible.

The POS ONE Program Office and Finance did agree that running of scripts should be more formally controlled and that system access should continue to be closely monitored. Immediately upon being alerted to potential issues by the OIG, the POS ONE Program Office, with the support of Finance, took the following actions:

- On April 15, after being alerted that the OIG had an issue, the POS ONE Program Office stopped vendors from running any scripts without the written permission of the POS ONE Contracting Officer's Representative (COR).
- In April, the POS ONE Program Office requested a consultant specializing in security to review vendor network access. A draft report delivered in June concluded that vendor access at the POS ONE Help Desk was appropriate and controlled, both in terms of the POS ONE contract and USPS Policies and Procedures. The final report is expected to be complete by August 31.
- In May, the POS ONE Program Office and Finance implemented a formal, documented
  process for monitoring and controlling the use of scripts or script files to perform
  accountability changes. The process is controlled and managed by the POS ONE
  Contracting Officer's Representative (COR) and Finance. The process produces
  detailed, independent transaction records for all scripts.
- The POS ONE Program Office scheduled meetings in July and August with the vendors and USPS Finance to review the accountability adjustment process and software defects that cause accountability errors.

#### OIG Recommendation #3:

Work with the vendors to reduce the number of problems, identified through help desk tickets, in future software release.

#### Management Response to Recommendation #3:

Management agrees with and has already implemented the OIG recommendation to continue to work with the POS ONE vendors to reduce problems identified through help desk tickets. This work began with the initial deployment of POS ONE and the POS ONE Program Office continues to refine and improve these efforts with the POS ONE vendors. Since the period audited by the OIG, there has been a significant drop in help desk tickets for both vendors, even though deployment of new sites has continued. The number of tickets has dropped in all areas, indicating that there are no systemic problems, with the software.

For vendor A, the number of Tier 1 help desk tickets dropped from an average rate of 2.1 tickets week per site March 15–20 to an average of 1 ticket per week per site July 30–August 6. Tier 2 tickets dropped from 0.4 tickets per week per site March 15–20 to an average of 0.2 tickets per week per site July 30–August 6. For vendor B, the number of Tier 1 help desk tickets dropped from an average rate of 2.3 tickets week per site March 15–20 to an average of 1 ticket per week per site July 30–August 6. Tier 2 tickets dropped from 0.8 tickets per week per site March 15–20 to an average of 0.2 tickets per week per site from July 30–August 6. The drop in tickets is due to improved software, improved training, experience level with the system in the field, and specific actions taken by both vendors at the request of the POS ONE Program Office. The specific actions taken by the vendors include an analysis approach that assists in targeting defect fixes for the most serious or highest number of problems in the field. This analysis includes: comprehensive review of help desk tickets to identify specific software problem areas, root cause analysis, identification of specific defects related to the problem areas, and scheduling and completion of the defect fixes.

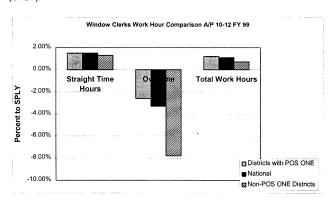
#### OIG Recommendation #4:

Monitor the trend of work hour utilization at the units and the district finance offices and determine the cause for any unexpected increases.

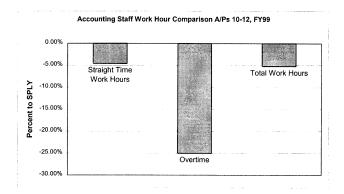
#### Management Response to Recommendation #4:

Management agrees with the specific recommendation. Management concurs that increases in work hours should be identified and investigated regardless of the cause. There are numerous reasons for the work hour increases including Districts that have expanded window hours to accommodate customer requirements and accounting staff hours influenced by SFAS consolidations in many Districts.

POS ONE did have an impact on work hours particularly in sites that we deployed in the Fall of 1998. These hours can be attributed to start up issues and software and data updates. In March 1999 the Postal Service had deployed POS ONE to 1,048 sites. At the end of Accounting Period 12 (August 13, 1999) the Postal Service had deployed POS ONE to 2,768 sites or an increase of 1,720 sites. The bar charts show the window work hours and accounting staff hours for Accounting Periods 10 through 12 of this fiscal year compared to the same period last year (SPLY).



The trend in work hours is a significant improvement from the work hours noted in the report for Accounting Periods 3 through 5. The difference in total work hours compared to the same period last year for window clerks in Districts with POS ONE compared to Districts without POS ONE is 0.5% for Accounting Periods 10 through 12 compared to the 2.0% noted in the audit for Accounting Periods 3 through 5.



Accounting staff total work hours are below the same period last year nationally by 4.6% for Accounting Periods 10 through 12 compared to the 3.8% increase noted in the audit for Accounting Period 3 through 5. The improvements in work hour trends are primarily due to field operations management attention to work hour usage and to some degree improvements in POS ONE.

### OIG Recommendation #5:

Coordinate Point of Service ONE activities with the Vice Presidents of Engineering, Purchasing and Materials, Information Systems, and Finance to ensure affected USPS departments are held accountable for accomplishing their assigned responsibilities.

### Management Response to Recommendation #5:

Management agrees with this specific recommendation. Retail has always recognized the need for the subject Vice Presidents to be directly involved in the development and implementation of POS ONE. These four Vice Presidents serve on a POS ONE steering committee, along with the Vice President of Field Retail Operations, chaired by the Vice President of Retail. The committee was involved with the selection of the POS ONE vendors and has met periodically over the last three years to monitor the progress of POS ONE. The Vice Presidents are actively involved with POS ONE and have assigned employees fulltime to support the program.

In addition, the Manager, POS ONE has lead meetings on a regular basis with representatives from all of the functional areas. At these meetings specific action items are discussed and monitored until complete. Specific support actions from the other functional groups include: (1) management of the accountability adjustment process and continuous review of functionality by Finance; (2) deployment process review and test and certification process update sponsored by Engineering; (3) Help Desk improvements, certification issues and security by Information Systems; and (4) support of contract issues by Purchasing and Materials.

The POS ONE program office has held regular telecons with area executives since February 1999. The Capital Investment Committee asked for recommendations from the Vice Presidents, Area Operations in March 1999 for the restart of deployment. Based on the recommendations from the Vice Presidents and the report from the Manager, POS ONE, the Capital Investment Committee concurred with the continued deployment of POS ONE. Numerous improvements have been achieved to date in 1999 in POS ONE including significant reductions in accountability issues, reduced call volumes at the Help Desk, and achievement of production level software with both POS ONE vendors in April 1999. The Postal Service has successfully deployed 2,768 sites through August 13, 1999 or an increase of 1,720 sites since March 1999. A number of Areas have requested that POS ONE be deployed faster to support their efforts in achieving Fiscal Year 2000 goals.

Retail considers the other functional groups an integral part of the implementation of POS ONE. The functional groups have provided excellent support and continue to respond to their responsibilities. In addition, the Vice Presidents, Area Operations have confirmed that POS ONE has achieved the level of maturity to support full deployment and nationwide retail operations. The OIG recommendation is fully implemented.

In summary, the improvements made in the POS ONE system by the vendors, enhancements to our internal processes and field experience with POS ONE to date supports continued deployment of POS ONE. We appreciate the support of the Office of Inspector General and request that an updated report be completed in October 1999.

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JOHN H. WARD
VICE PRESIDENT, FINANCE, CONTROLLER



September 7, 1999

Mr. Richard F. Chambers Assistant Inspector General for Performance 1735 N Lynn Street Arlington, VA 22209-2020

SUBJECT: Audit Report- Point of Service ONE

We have received and reviewed the draft report of the subject audit. As previously agreed, Finance will be responding to Recommendation #6 only. The following are the specific responses to the recommendation:

#### Recommendation #6

The vice president, finance controller, should monitor the volume of Forms 1908 generated by the Standard Field Accounting System (SFAS) and determine the cause of the adjustments.

#### Response

Management agrees with the finding and recommendation, but as stated in the exit conference an analysis of closed items was not performed. Furthermore, an increase in 1908 numbers and dollars at POS ONE units is reflective of the systems design.

Finance provided data on 1908s to analyze clearance of the trust and suspense accounts, however, this is not included in the report. The increase in 1908s does not provide an accurate picture of the internal controls, a better indicator is the time frame on closing the items.

An increase in the number of 1908s is expected due to added control built into the design of the system. Forms 1908 are not a weakness, but a better financial control and audit trail. In IRT and manual offices, flexibility exists to make adjustments at the unit level without generating a Form 1908. The number and dollars of 1908s were analyzed only for POS units. No data research was done to indicate if there was a general increase in 1908s across non-POS units. Also, no analysis was made to determine the offices' condition prior to POS conversion.

Finance initiated a task force in May 1999 to review open items in trust and suspense at eight districts, four for each vendor. Although POS units constituted 4 percent of the reporting units in the SFAS, they accounted for 23.5 percent of the items entered into Account Identifier Codes; 049-Reserve Stock Overage, 057-Employee Overage, 061-Miscellaneous, 069-Bank Deposit Overage, 761-Miscellaneous Suspense Issued, 763-Bank Deposit Shortage Issued, 767-Stamp Credit Shortage Issued, and 768-Reserve Stock Shortage Issued. Analysis of this data supports a conclusion that if a unit had bad practices prior to the POS One conversion, the practice was carried over into the new operating system.

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Additionally, data was included in the analysis that reflected an increase in returned checks, salary advances, and counterfeits. These items are not an indicator of the POS system's integrity and are driven by external factors.

Management agrees with the recommendation to monitor the volume and cause of 1908s that are generated, however, since 1908 data is not readily available, the open control report will be utilized. The Standard Field Accounting Unit Revenue Data Access (SURDA) is one tool the area Finance group is using to monitor open items in trust and suspense. We strongly believe that this is the best method to monitor the adjustments. SURDA provides the capability to analyze open control items down to the unit level, by AIC and cause of the adjustment. Discussions with the area Finance coordinators have resulted in most areas monitoring the open control report from SURDA every accounting period.

In Postal Quarter I, FY 2000, headquarters Finance will issue formal instructions to the areas for monitoring the dollar amounts entered into trust and suspense, as well as the clearance and aging of those items.

In summary, the Finance group has actively monitored and attempted to resolve all 1908 issues and provided proper accounting controls.

John H. Ward

Major Contributors to This Report

