

144881



United States  
General Accounting Office  
Washington, D.C. 20548

Accounting and Information  
Management Division

B-114839

September 10, 1993

Board of Directors  
Panama Canal Commission



149881

We have issued opinions on the financial statements of the Panama Canal Commission and on its internal control structure and have reported on its compliance with applicable laws and regulations for the year ended September 30, 1992 (GAO/AIMD-93-22).

In planning and performing our audit of the financial statements of the Commission, we identified several matters regarding accounting procedures and internal control structure which could be improved. These include cash reconciliation procedures with the U.S. Treasury and the updating of the actuarial valuation for the early retirement benefits accrual. They also include recording inventory receipts, issuances, and results of physical inventories; processing data input; documenting computer system methodology; defining computer back-up procedures; centralizing responsibility for security over information assets; and limiting physical access to the administration building.

Although these matters are not material in relation to the financial statements, they warrant the attention of management. The purpose of this letter is to advise you of these matters and to make suggestions for improvement. As appropriate, we discussed the matters addressed in this letter with Commission supervisory personnel and have included their comments for your information.

RECONCILIATION OF CASH  
HELD BY U.S. TREASURY

Monthly reconciliation of cash on hand to cash with Treasury or with commercial banks is a key internal accounting control to ensure that cash transactions are adequately monitored. The Commission reported to the Treasury the results of its cash transactions including cash with Treasury, the disbursing commercial bank account, and cash on

GAO/AIMD-93-23ML

069026/149881

hand on its monthly SF 1220 report, "Statement of Transactions." However, the Commission could not perform monthly reconciliations with Treasury because, unlike a commercial bank, Treasury did not maintain a record of the Commission's cash transactions, nor did it provide the Commission a balance of its cash with Treasury at any point in time. Failure to perform these reconciliations could result in cash not being adequately safeguarded against theft or misuse.

The majority of the Commission's cash receipts were electronically transferred by customers to the Commission's Treasury account and consisted primarily of transit tolls and related revenues. Treasury sent this customer information immediately to the Commission in order for the Commission to properly credit the appropriate accounts receivable and determine if the customer paid the correct amount.

The Commission Treasurer manually wrote 8 to 10 checks monthly on its Treasury account to transfer funds to its commercial bank account and to make payments to other governmental agencies. The Commission then used its commercial bank account to cover accounts payable and payroll transactions. The Commission listed checks written and reported the amounts to Treasury monthly, but Treasury kept all the checks and sent no record of actual checks cleared to the Commission. An independent listing of all checks written on an account and reconciliation of Commission and Treasury records by the Reports and Analysis Branch could prevent improper checks being credited to the account either inadvertently or intentionally.

To ensure that funds with Treasury are protected from potential theft and are properly recorded and accounted for, we suggest that the Commission

- request Treasury to provide the Commission a monthly listing showing the amount of each check cleared and
- require that the Reports and Analysis Branch reconcile the cleared checks provided by Treasury with the cash disbursements recorded by the Commission Treasurer.

The Chief Accountant and the Chief of the Reports and Analysis Branch told us that they need such a reconciliation and said that they have already started discussions with Treasury on how to obtain a monthly list of checks cleared.

**UPDATE OF EARLY RETIREMENT  
BENEFITS ACTUARIAL VALUATION**

The Commission is liable for the increase in benefits payable to employees and their survivors under the early retirement provisions of the Panama Canal Act of 1979. The Commission must recover this cost from its tolls and other revenues. As of September 30, 1992, this liability and its appropriate offsetting deferred asset were approximately \$106 million. Any changes in economic conditions such as inflation and interest rates could have an effect on the actuarial estimates. Payments the Commission makes to the Office of Personnel Management (OPM) to fund early retirements are tied to the inflation rate and Treasury earnings on funds the Commission deposits with Treasury for the early retirement program.

While OPM is responsible for determining the liability, it has done so in the past only at the request of the Commission. OPM updated their actuarial valuation for fiscal year 1992 and determined that no changes needed to be made to the liability. This update was the first performed since 1988.

We suggest that the Commission request OPM to update this valuation annually so that the Commission will have sufficient time to fund or adjust the liability and the offsetting deferred asset before the end of 1999 when the Canal is turned over to the Republic of Panama on a debt-free status.

**RECORDING INVENTORY RECEIPTS,  
ISSUANCES, AND RESULTS OF  
PHYSICAL INVENTORIES**

**Inventory Receipts**

Generally accepted data processing standards call for data managers to establish controls to ensure that all source documents are converted into machine-readable format and correctly processed. In addition, reports generated by the computer system which are used to verify data accuracy should be designed to allow ease of use and should be used by those responsible for checking data accuracy. Use of a turnaround transmittal document, which provides an audit trail of the source documents processed, is a means for controlling data originating in one department, but processed by another. Turnaround transmittals normally consist of two copies--one is retained by the originating

department; the second accompanies the source documents and is annotated by processing departments with control information and returned to the originating department for reconciliation with the first copy, which would have control totals for what was sent.

We found that the Inventory Management Branch was sending batched inventory reports daily to the Computer Operations Division without using turnaround transmittal documents. This is a significant internal control weakness because the Inventory Management Branch did not use other procedures to ensure that all the inventory receipt data that were sent were actually received and accurately processed. We found that the Computer Operations Division did not return to the Inventory Management Branch (1) receiving reports or (2) the document transmittal that accompanies submitted data. Instead, it forwarded them to the General Ledger Branch for storage and reference. Therefore, the Inventory Management Branch cannot verify that all documents were received by the Computer Operations Division or determine if batches have been lost.

Also, the Computer Operations Division produced printed reports of the data entered only on an exception basis. It provided the Inventory Management Branch the daily Batch and Error Report that listed (1) computer-rejected receiving reports and (2) all receiving reports for which the control total on the transmittal document did not match the total for the receiving reports keypunched. The Inventory Management Branch used the report solely to research and then resubmit records rejected by computer edit checks.

We suggest that the Inventory Management Branch use a sequentially prenumbered, two-part turnaround transmittal document to ensure that the Computer Operations Division receives all documents. The first copy should be retained by the Inventory Management Branch and, at a minimum, should include a control total of a selected field such as the quantity of stock items received. The second copy should not include the control total and should accompany the receiving reports sent to the Computer Operations Division for keypunch. The Computer Operations Division should independently compute a control total for the same data field, record this total on the turnaround transmittal document, and return it to the Inventory Management Branch, which should match the prerecorded document number and the control total received against what was sent. This would provide assurance that all documents are received by the Computer Operations Division for keypunching into the computer system.

We also suggest that the Computer Operations Division modify the Batch and Error Report for inventory receipts to include all receiving reports processed to allow for data

verification and that the Inventory Management Branch use the revised Batch and Error Report to verify that all receipts data were entered into the system.

The Chief of the Inventory Management Branch concurred with the above concerns and stated he would consider implementation of these suggested procedures.

### Inventory Issuances

Lack of controls over entering data into the computer system was also evident for inventory issuances. As in the inventory receipt area, batch control procedures for material orders sent to the Computer Operations Division were inadequate for ensuring that all documents were processed. Material order forms, which are used to record issuances of stock, were batched daily by the Warehousing Branch for data entry and sent to the Computer Operations Division along with a transmittal form showing the number of material orders in the batch. After data entry, the Computer Operations Division returned them to the Warehousing Branch. We found that the Warehousing Branch did not match the returned batches of material orders against its logs of batches sent to the Computer Operations Division to determine if all had been received and processed.

Also, the Warehousing Branch did not use the Batch and Error Report received from the Computer Operations Division to check the accuracy of material orders entered into the computer system. It used the Batch and Error Report only to determine why data were rejected by computer edits (for example, an invalid stock number) in order to make appropriate corrections and resubmit the corrected data for keypunching.

In addition, the Batch and Error Report listed all keypunched data only if the number of material orders written on the document transmittal form did not match the number of records keypunched. Thus, the Batch and Error Report did not provide a routinely printed list of all data entered, which could be used to verify the accuracy of information about quantities of stock provided to Commission units.

We suggest that the Warehousing Branch use a two-part prenumbered turnaround transmittal document to ensure that all documents are received by the Computer Operations Division. The first copy, at a minimum, should include a control total of a selected field such as the quantity of stock items issued to Commission units. The second copy should not include the control total and should accompany the receiving reports sent to the Computer Operations Division for keypunch. The Computer Operations Division should independently compute the control total using the same data

field, enter this total on the turnaround transmittal document, and return it to the Warehousing Branch, which should match the prerecorded document number and the control total against what was sent.

We also suggest that the Computer Operations Division modify the Batch and Error Report for inventory issuances to list complete data for all batches processed. The Warehousing Branch should then use the comprehensive Batch and Error Report to verify all issuance data entered into the system.

The Chief of the Warehousing Branch stated that he plans to further study and investigate these areas before coming to any conclusions but would make any systems changes deemed necessary. He also agreed that a daily printout of all material order batches processed would aid him in researching keypunch errors.

#### Physical Inventory Results

Periodic physical inventory counts and the resulting reconciliation and adjustment of the records are important inventory controls. All Commission inventory items are subject to a yearly physical inventory count by the inventory team. Commission procedures require that physical inventory results be compared to the recorded amount in the perpetual inventory. If there is a difference between the count and the inventory records, the item is to be recounted a second or a third time, if necessary. When the actual amount on hand is finally determined, the inventory team should adjust the records to correct for any overages or shortages.

However, lack of internal control over the required item recounts and subsequent adjustments to the records allowed the inventory records to remain inaccurate. Some items that should have been counted a third time because of unresolved differences between the physical count and the inventory records were not recounted or investigated. Also, the inventory records were not adjusted for some overages and shortages identified through physical inventories. Even when adjustments were made to the perpetual inventory as a result of a physical count, there was no assurance that the adjustments were recorded accurately into the system. The Inventory Team Warehousing Coordinator did not review (1) the Inventory Adjustment Report sent to data processing for completeness or (2) the resulting Physical Adjustments Report detailing all adjustments for accuracy.

The Inventory Team Warehousing Coordinator agreed that all count discrepancies should be investigated and that inventory records should be adjusted to reflect the

results of the physical inventory. He also stated that this was not a major problem because any errors not detected this year would be identified in the following year. However, a 1-year time lag is not acceptable since errors in the inventory records, although immaterial, would go undetected and therefore be included in the financial statements.

We suggest that the Commission strengthen the controls and procedures in the physical inventory area by requiring the Inventory Team Warehousing Coordinator to (1) document and review the investigation and resolution of count discrepancies, (2) review the Inventory Adjustment Report for accuracy and completeness before submission to Data Processing, and (3) verify the Physical Adjustments Report received from Data Processing.

#### KEYPUNCH VERIFICATION OF DATA IN COMPUTER OPERATIONS DIVISION

Commission procedures require keystroke verification or double keypunching to prevent the input of incorrect data into the system. However, the Data Entry and Control Branch instructions on how to perform the computer check for double keypunching were incorrect. As a result, the computer operator transferring data from disk to tape was entering the command to not check for double keypunching; therefore, the Commission had no assurance that double keypunching was being performed. Computer Operations Division staff told us that this condition probably existed since 1989 when changes were made to the inventory system software.

The Computer Operations Division changed the instructions during our audit to reflect the correct procedures. However, we suggest that, in addition, the Data Processing Systems Division change the software so that it automatically checks for double keypunching with an override of this automatic check permitted only by an appropriate supervisory level outside of the Data Entry and Control Branch.

#### DOCUMENTATION OF SYSTEM DEVELOPMENT METHODOLOGY

We reported last year that the Data Processing Systems Manual did not document key phases of the Management Information Systems methodology, which is used to develop and maintain application systems. During this year's audit, we found that the Data Processing Systems Division had not developed the documentation for the Project and Feasibility Study phases. Target dates for completing this documentation had not been established.

Management Information Systems personnel added computer system design documentation in January 1993 and revised quality assurance test procedures in February 1993 to address emergency changes. The Chief of Management Information Systems said it was his policy to continually create and improve the manuals until all key phases are documented.

In order to ensure timely completion of this system documentation, we suggest that the Chief of Management Information Systems establish a timetable for fully documenting the remaining key phases of the methodology used to develop and maintain its application systems.

#### BACKUP OF COMPUTER DATA

Controls for preventing the loss of data include (1) making backup copies of data files, (2) storing them in a protective environment, and (3) having procedures to reenter erroneously deleted data. During our audit, we requested from the Computer Operations Division a database of all inventory stock issuances for fiscal year 1992. However, the Computer Operations Division informed us that the data for the first 9 months of fiscal year 1992 were inadvertently erased in the process of backing up the data.

Loss of key data can hamper the Commission's ability to safeguard its assets and carry out its mission; therefore, we suggest that the Chief of Management Information Systems determine why the data was lost and make appropriate changes to procedures for backing up data files.

#### CENTRALIZED RESPONSIBILITY OVER INFORMATION ASSETS

We reported last year that responsibility for information security was fragmented throughout the Commission with no branch or division having overall responsibility for data security. Also, we pointed out that generally accepted data processing standards suggest that this responsibility be assigned to an information security manager reporting to the Commission's senior management.

Such a position had not been established at the time of our audit. However, the Commission has contracted with a consultant to review the security needs of the Commission and make recommendations as to the authority, duties, and responsibilities of a security administrator.



As suggested last year, when this position is defined, it should be independent of the programming and data processing operations, and the designated individual should report to senior Commission management.

PHYSICAL SECURITY OF ADMINISTRATION BUILDING

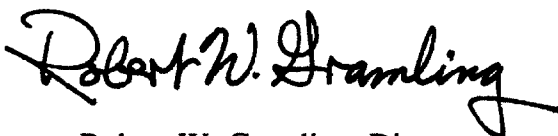
As stated in our 1991 letter, allowing unauthorized personnel into the administration building could be a threat to the security of the Central Computer Facility. However, we found that Commission personnel were still not following system controls. The guard requested that our staff member (who was testing access to the building) show his Commission badge only 3 of 6 times over a 3-week period. However, at no time did the guard examine the badge to determine its validity or expiration date. We also observed many individuals entering the building without badges displayed.

After we discussed this matter with the Acting Chief of the Panama Canal Commission Protection Division, he stated that he had previously instructed all guards to require proper identification from anyone entering the property.

We suggest that the Chief of the Protection Division enforce the requirement that guards be provided proper identification from individuals entering the administration building by periodically monitoring and testing compliance with required procedures.

- - - - -

We would like to thank the Commission for the courtesy and cooperation extended to our audit team. Should you have any questions regarding these suggestions, please call Linda Garrison at (404) 679-1902 or me at (202) 512-9406.



Robert W. Gramling, Director  
Corporate Financial Audits

(917662)