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Accounting and Information
Management Division

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January 18, 1996

Ms. Cece Smith
Chairman, Board of Directors
Federal Reserve Bank of Dallas,
Eleventh District
2200 N. Pearl Street
Dallas, Texas 75201

Dear Ms. Smith:

As part of our response to a request by Representative Henry B. Gonzalez, we reviewed the internal accounting controls of the 11th District Federal Reserve Bank (FRB). The control areas covered by the review included the financial reporting process, electronic data processing (EDP) systems, the controls used by the Dallas FRB and its Houston branch to process check transactions, and the procedures the Dallas FRB and its branches within the 11th District used to process Federal Reserve notes.

The purpose of this letter is to advise you of the specific control issues we identified and our suggestions for improvement. The enclosures to this letter detail our findings in the following areas: the financial reporting process (enclosure I), EDP systems controls (enclosure II), check processing controls (enclosure III), and currency system controls (enclosure IV). Addressing these control issues will strengthen the overall control environment within the District.

In performing this review, we examined those controls providing assurance that balance sheet accounts are properly recorded and the assets of the 11th District are properly safeguarded. We observed and tested the controls to determine whether they were in place, adequately designed, and operating effectively. We believe the control matters we identified are significant enough to warrant management's attention.

We performed our work at the Dallas FRB and its three branches in Houston, San Antonio, and El Paso between July 1994 and August 1995 in accordance with generally accepted government auditing standards. We discussed these matters with cognizant officials of the 11th District FRB, provided them a draft of this report, and have incorporated their comments where appropriate.

We would appreciate receiving your comments and a description of the corrective actions the FRB plans to take to address the matters in the enclosures within 30 days from the date of this letter. We acknowledge the cooperation and assistance provided by Dallas FRB officials and staff while conducting this review. We are sending a copy of this letter to Representative Henry B. Gonzalez; the Chairman, House Committee on Banking and Financial Services; the Chairman and Ranking Minority Member, Senate Committee on Banking, Housing and Urban Affairs; the Chairman of the Board of Governors of the Federal Reserve System; and the President and Chief Executive Officer of the Federal Reserve Bank of Dallas. If you have any questions concerning these matters, please contact me at (202) 512-9406.

Sincerely yours,

Robert W. Gramling

Robert W. Gramling
Director, Corporate Audits
and Standards

Enclosures

FINANCIAL REPORTING CONTROLS

The Federal Reserve System (FR System) has decentralized the accounting responsibilities within each federal reserve bank (FRB). Operating units within the FRBs are responsible for recording journal entries applicable to their operations and reconciling certain balance sheet accounts. The Integrated Accounting System (IAS) serves as the accounting system which generates the general ledger, customers' depository statements, and subsidiary records for various general ledger accounts. The reported account balances from IAS are used in the preparation of the FR System's combined financial statements and in the financial statements prepared solely for the District.

Access to IAS is controlled through Cost Center Work Units (CCWUs), which correspond to the operating units processing financial transactions. Operating units access the general ledger through CCWUs and record the transactions processed by the unit. Operational units record transactions through a CCWU to the general ledger either directly via manual entry or indirectly through electronic feeder systems. The FR System and the District have developed a number of financial reporting controls external to IAS to ensure that accurate and complete account balances are reported, assets owned by the District are adequately safeguarded, and the proper accounting policies are utilized.

Our review identified opportunities to improve internal controls related to financial reporting. The following sections in this enclosure detail each of these matters and our suggestions for improvement.

CONTROLS OVER VALIDITY AND COMPLETENESS OF TRANSACTIONS NEED IMPROVEMENT

To ensure that transactions have been recorded completely and accurately, the District requires operating units to independently verify the transactions recorded in IAS for each CCWU, a two step process known as the daily CCWU settlement. Not performing this procedure properly could result in invalid or incomplete transactions being recorded.

We found weaknesses in both steps of this procedure that impaired its effectiveness as a control:

-- First, in order for the CCWU to close, users in operating units were required to independently calculate daily activity totals from their unit records and reconcile them to activity processed by IAS. However, we found instances where users accessed IAS' "Data Entry - Batch Summary - All Batches" screen, which displayed the amount IAS processed for each batch. This allowed them to calculate total transactions using data processed by IAS instead of their own records.

-- Second, after users input the transaction totals, IAS displayed the difference between its own activity total and the amount entered. Users were expected to research and resolve the difference utilizing the independent records of the operating unit. However, we found instances where users utilized the difference provided by IAS rather than the unit's independent records to perform the CCWU settlement, impairing the effectiveness of this process as a control. In addition, Financial Planning and Control Department (FP&C) management did not review CCWU settlements where large differences occurred. As a result, there was no assurance that users had relied upon their own records rather than the differences IAS provided to bring the totals into agreement.

Suggestions

To ensure that staff members are using the appropriate supporting documentation to perform the CCWU settlement and resolve identified differences, we suggest that the District pursue modification of IAS so that it will (1) not display the batch amount on the IAS "Data Entry - Batch Summary - All Batches" screen before a user attempts to settle their assigned CCWU and (2) allow FP&C to identify CCWU settlements where initial input of users' calculated total transactions resulted in significant differences.

Additionally, we suggest that the appropriate level of accounting management from FP&C review CCWU settlements in which significant differences arise and the documentation used by operating staff to ensure that the differences were properly resolved. Finally, FP&C management should meet with operating unit personnel to ensure that users appreciate the importance of CCWU settlements and of using amounts supported by their own independent records to perform the settlements.

CONTROLS OVER VALIDITY AND COMPLETENESS OF ACCOUNT BALANCES NEED IMPROVEMENT

To ensure that recorded transactions have been classified to the appropriate general ledger account, the District requires operating units to independently verify the resulting general ledger account balances. Not performing this procedure properly could result in misstated account balances not being detected. We found weaknesses in the implementation of this procedure that impaired its effectiveness as a control.

To verify the general ledger account balance, the District used an automated verification system in 1994. Users were required to independently calculate ending balances in each account under their responsibility, based on the activity processed by their unit, and compare the balances they calculated to balances reported by IAS. The verification system gave users in operating units any differences which they were required to research and resolve based on their own independent records.

However, FP&C management did not review these verifications to ensure they were performed properly, allowing users to circumvent this important control. We found instances where users simply input $1 and then used the difference the verification system displayed to bring the accounts into agreement without referring to their supporting documentation. We also found instances where users determined account balances from IAS general ledger transaction reports rather than from an independent source.

In September 1994, the District began using a centralized version of IAS. Because this action led to delays in the availability of IAS balances, the District adopted a manual account verification process in 1995 to allow more timely account balance verifications. Under this manual process, users continued to receive the IAS printouts listing the amounts they needed to verify their accounts. In addition, FP&C managers were still not reviewing the verifications users performed to ensure that they were properly performed.

Suggestions

To ensure that the staff members are using the appropriate supporting documentation to resolve identified differences, we suggest that accounting management from FP&C periodically review account balance verifications in each operating unit as well as the supporting documentation used to resolve any differences.

Also, FP&C management should meet with operating unit personnel to ensure that users appreciate the importance of (1) this control and (2) using amounts supported by their own independent records to perform account balance verifications.

ACCOUNT ANALYSIS BY OPERATING DEPARTMENTS AND FP&C WAS INADEQUATE

The District requires operating departments to analyze each assigned account at the end of every month in order to ensure that all transactions comprising the account balance are accurate, complete, and properly classified. The results should be communicated to FP&C in view of its responsibility for the accuracy of reported balances and the District's compliance with accounting standards. To be effective, such analyses should detail the items comprising significant accounts and correlate operational data to ending account balances and fluctuations in these balances. For example, a change in a payroll accrual account could be correlated to changes in staffing levels or pay scales. However, we found that in performing the monthly analyses, the operating departments did not correlate account balances to operational results or provide their analyses to FP&C.

District policies and procedures did not require operational departments to correlate the balances in the accounts under their responsibility to related operating results. In addition, because of the decentralization of certain accounting functions, the operating departments did not give their analyses to FP&C. Consequently, FP&C was unable to develop an expectation for ending account balances or fluctuations in account balances by which to judge the appropriateness of reported amounts. This impaired FP&C's ability to detect possible misstatements in account balances which could have resulted in inaccurate or incomplete information being reported.

Suggestions

We suggest that the District require that departments which process significant transactions on the general ledger give FP&C quarterly analyses of the items comprising all accounts with significant balances. District policies and procedures should be amended to require each operating department to also give FP&C a quarterly analysis that correlates operating data, such as transaction volume or number of employees, to actual account balances and to budgeted amounts.

GENERAL LEDGER TRANSACTION FLOW WAS UNCLEAR

For the general ledger to be an effective management tool, it should be designed to clearly communicate to management the nature and effect of underlying transactions. To do this, the flow of transactions from their origin in operational events to the affected general ledger accounts should be logical and consistent with the nature of the transactions. In addition, transactions should be recorded in a manner that avoids unnecessary complexity and that affects only those accounts necessary to appropriately report the transactions on the financial statements. However, we found that the clarity of the District's general ledger information was impaired by excessive, and in some cases illogical, use of balance sheet and control accounts.[1]

We found that transactions were sometimes unnecessarily passed through an excessive number of control accounts before being posted to the balance sheet account where they were ultimately classified. For example, one shift in the Check Department was assigned 12 control accounts for only three basic types of transactions. However, the second shift was assigned two control accounts for the same type of transactions. We also found instances where balance sheet accounts were used as control accounts, and large volumes of activity flowed through them enroute to other balance sheet accounts. Finally, at the District's three branches, we found that the balance sheet account for FR Notes Held by Bank only reflected the daily net change in the account rather than the transaction detail. The excessive complexity involved in the District's current approach to processing transactions makes it more difficult for management to correctly interpret and make appropriate use of the information captured in the general ledger. This substantially reduces its value as a management tool and increases the risk that any errors resulting from incorrect recording or omission of transactions would not be promptly detected.

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[1]Control accounts are established in IAS to capture transactions processed in phases. These accounts should have zero balances at the end of each reporting period.

Suggestions

We suggest that the District review the transaction flow between general ledger accounts to ensure that transactions are recorded in a manner consistent with the substance of the transactions processed. In so doing, the District should attempt to route transactions in the most direct manner possible to the accounts they will ultimately update and minimize the use of intervening control accounts. The District should also discontinue the use of balance sheet accounts as control accounts and prohibit the posting of any transaction to a balance sheet account unless the transaction is intended to update the balance of that account. We further suggest that each balance sheet account separately reflect each transaction impacting the account to improve the clarity of the underlying activity and its interaction with control accounts.

GENERAL LEDGER ACCOUNTS WERE INCONSISTENT AND OUTDATED

In order to report consistent financial information in a way that is readily understandable, the District needs to use an up-to-date chart of accounts having general ledger account titles that accurately describe the nature of the accounts. The Dallas FRB and its branches need to use the same accounts to record common types of transactions. However, we found that (1) the Dallas FRB and its branches often individually established different accounts to record transactions common to all offices in the District, (2) the chart of accounts was not current in that it contained many dormant accounts, and (3) the titles for many accounts did not indicate the type of activity recorded in the accounts.

As of December 31, 1994, the District had established a total of 353 asset and liability accounts and 167 control accounts to record transactions common to the Dallas FRB and its three branches. However, each of these four offices used a different chart of accounts. Individual offices often created new accounts to be used by that office alone, although the transactions to be recorded were common to all offices. We found 127 asset and liability accounts and 98 control accounts that were used by only one or two offices to record transactions common to all four offices. Additionally, the four offices did not use an average of 106 asset and liability accounts and 83 control accounts during the year. Finally, 74 (44 percent) of the control accounts were described as "Internal Control Account," "Bridge

Control Account," or "Teller Control Account" without any distinction as to the type of activity they should reflect.

These conditions make it more difficult for management to understand the nature of transactions recorded on the general ledger and ensure consistency in reporting on a districtwide basis. It also diminishes the utility of the general ledger as a management tool and increases the risk that accounts could be misstated. Further, when a large number of dormant accounts exist on the general ledger, there is an increased risk that any erroneous or unauthorized transactions recorded in these accounts would not be detected on a timely basis.

Suggestions

We suggest that the District perform an annual review of the general ledger that would require written justification for the retention of those accounts not used at least once during the fiscal year and would ensure that account titles are appropriately descriptive and accurate. We also suggest that the District establish a consistent chart of accounts for similar transactions processed by the Dallas FRB and its three branches. District personnel have indicated that a committee has been formed to review their general ledger chart of accounts in the fourth quarter of 1995.

FINANCIAL STATEMENTS DID NOT DISCLOSE ALL SIGNIFICANT ACTIVITIES AND LACKED FOOTNOTE DISCLOSURES

In order for financial statements to provide informative disclosure to users, they need to clearly present all significant financial activities of the organization. They should also be accompanied by notes which present information essential to understanding the financial statements, such as significant accounting policies and disclosures required by generally accepted accounting principles (GAAP) or another basis of accounting. However, we found that the District's financial statements did not always disclose major financial activities and significant accounting policies, thereby reducing their value to users.

The District publishes an annual report which includes its financial statements. The District's financial information is also included in the financial statements and reports of the FR System. However, we found that the District's financial statements did not separately report Foreign Currencies--which had a balance of $1.6 billion (10 percent of total assets) as of December 31, 1994. These amounts were included in the $1.9 billion Other Assets line item on the District's financial statements. As a result, financial statement users may be unaware of the level of holdings in foreign currencies, whose recorded values are subject to exchange rate fluctuations.

In addition, no informative disclosures accompanied the District's financial statements to explain significant accounting policies, such as those involving the District's investments in U.S. government securities and foreign currencies or its liabilities for Federal Reserve notes. We found that the District has not established financial reporting policies requiring these disclosures. Because the financial statements did not contain such disclosures, users may be unaware of the accounting policies used to measure the reported assets and liabilities and lack other financial information necessary to assess the financial condition of the District.

Suggestion

We suggest that the District establish a policy which requires significant assets or liabilities to be separately presented on the face of the financial statements and information required under GAAP or another basis of accounting to be disclosed.

ACCOUNTING POLICIES FOR FIXED ASSETS DID NOT CONFORM TO GAAP

GAAP provides requirements for recording fixed asset transactions. For fixed assets owned, the cost of capital expenditures should be recorded in the fixed asset accounts until the assets are sold or retired, and accumulated depreciation for assets remaining in the fixed asset accounts should be recorded in accumulated depreciation accounts. When assets are sold, any difference between the sales proceeds and the net book value of the assets should be recorded as a gain or loss.

However, we found that certain accounting policies were inconsistent with these principles. FR System accounting policies 30.40 and 30.60 allowed capitalizable costs to be recorded as a decrease to accumulated depreciation rather than an increase to the cost basis of the fixed asset account. This had the effect of understating the accumulated depreciation account balance and misstating the asset's cost basis. In addition, FR

System accounting policies 40.46 and 40.47 allowed gains and losses resulting from the sale of an asset to be recorded to depreciation expense rather than to a gain or loss account.

These practices could lead to incorrect footnote disclosures of information required under GAAP, such as the description, cost basis, and accumulated depreciation for the major classes of assets. Additionally, this could impair the District's ability to maintain accountability over the assets acquired. By reporting gains and losses on sales of assets as depreciation expense, the District is not accurately classifying the results of operations.

During 1995, the Board revised the Financial Accounting Manual so that capitalizable costs are now recorded as an increase to the cost basis of a fixed asset account. A new directive was also provided to the FRBs requiring them to separately report gains and losses on sales of assets.

Suggestion

We suggest that the District propose that the Board incorporate the directive requiring separate reporting of gains and losses on sales of assets in the Financial Accounting Manual.

LACK OF ADEQUATE ACCOUNTABILITY
OVER FIXED ASSETS

In order to ensure accurate reporting of fixed assets and accountability for assets constructed or acquired, the costs incurred to purchase or construct fixed assets should be reconciled to fixed asset accounts on a timely and routine basis. Subsidiary records should also be maintained and reconciled to related fixed asset accounts. These records should describe the item and list its cost basis, date of acquisition, expected salvage value, estimated useful life, method of depreciation, periodic depreciation expense, and accumulated depreciation. However, we found that the District could not reconcile $168 million of construction costs to general ledger accounts and that most of this amount had not been recorded on a fixed asset subsidiary ledger.

Construction of the new Dallas District offices was substantially completed during 1992 at an incurred cost of $168 million. Estimates were prepared reflecting how these costs should be allocated to the various fixed asset accounts. However, no reconciliation was performed which identified the general ledger accounts where these costs were initially recorded.

As a result, FP&C did not have the appropriate level of detail to ensure that the amounts recorded to fixed asset and construction accounts are accurate and complete and have been properly classified. Additionally, about $130 million of the costs incurred had not been recorded on a fixed asset subsidiary ledger as of December 31, 1994, impairing the District's ability to safeguard these assets. With the passage of time, it will become more difficult for accounting management to review the propriety of the capitalization and classification of the amounts paid. Finally, there is a greater risk that erroneous amounts could be removed from accounting records upon sale or disposition of these assets.

Suggestions

We suggest that the District reconcile the costs incurred on the construction of the new bank offices to the general ledger accounts where they were recorded. Accounting management should then review the individual costs to ensure the propriety of their capitalization. Individual assets should be established on a fixed asset subsidiary system whose balances should be routinely reconciled to the appropriate general ledger account balances. An initial physical inventory of the assets on the subsidiary system should then be performed, and periodic subsequent inventories should follow.

Any balances remaining in the construction account that are not related to ongoing construction projects should be reclassified to expense or, in the case of disputed costs, to a receivable with an appropriate allowance for uncollectibility. In the future, we suggest that the District more closely monitor construction accounts to ensure that individual costs incurred are reclassified to the appropriate fixed asset, receivable, or expense account at the time the asset is substantially ready for its intended use.

MATCHED TRANSACTIONS WERE NOT CLEARED FROM ITEMS IN PROCESS OF COLLECTION SUBSIDIARY RECORDS

The purpose of subsidiary records is to document transactions which collectively comprise a general ledger account balance. These records should be reviewed by accounting management to monitor items remaining in the account and to substantiate the account balance. However, we found that the District continues to carry large numbers of transactions in its subsidiary records for Items in Process of Collection after these transactions have been completed. This practice obscures the true makeup of the outstanding balance.

We found that during December 1994, significant transactions in the Items in Process of Collection subsidiary records should have been matched to offsetting transactions and deleted from the subsidiary records. These amounts represented items due from Houston and Dallas depository institutions (DIs). Amounts due from these DIs often accounted for over 20 percent of the total debit items reflected on the District's subsidiary record, referred to as the Open Item Report. The subsidiary system can only automatically match individual debits and credits with equal offsetting balances. These items had not been matched because DIs provided data in a manner that was incompatible with this matching approach.

When matchable transactions remain on the Open Item Report, it becomes considerably more difficult to identify and manage open unmatched items. Consequently, the report's effectiveness as a tool for monitoring outstanding transactions is impaired. In addition, extensive time is required to manually match these transactions. Timely matching of transactions is critical because FRBs cannot verify the validity of amounts due from DIs until the corresponding matching credits are recorded. Therefore, monitoring the unmatched debit entries is necessary for promptly identifying possible invalid transactions and processing errors.

Suggestion

We suggest that the District require that DIs depositing checks for collection provide check detail in a manner that allows offsetting debits and credits to be automatically matched by the subsidiary system.

IAS CONTROLS DID NOT ADEQUATELY RESTRICT CHANGES TO BATCHED TRANSACTIONS

To ensure the integrity of financial information, transactions and balances should be subject to controls to ensure that they are properly authorized. IAS should not allow users to modify batched transactions which have been entered either manually or via electronic interface from an automated feeder system unless the transactions have first been subjected to the controls of the operating unit processing the transactions. However, due to the lack of restricted access within CCWUs, users were able to change the individual transactions comprising the batched entries after IAS has already balanced them against the control total.

In one instance, a staff member deleted an individual transaction from a batched entry that had already been balanced in IAS and then modified the control total for the deletion. The reports from the automated system passing the batch transaction to IAS still reflected the transaction that had been deleted.

Because users can modify transactions after they have been processed by IAS without obtaining supervisory approval, they are able to circumvent the operating units' controls for ensuring the completeness and accuracy of transactions processed by IAS. As a result, general ledger account balances could be misstated, and the reports generated by the automated feeder systems no longer serve as an audit trail for the transactions processed by the originating department.

Suggestions

We suggest that the District only allow operating unit management to modify batched transactions after IAS has balanced the control total and transaction details of a batched entry. A documented reconciliation between the feeder system reports and IAS should be prepared when such modifications are made. Alternatively, users could be instructed to make modifications or corrections through separate manual journal entries subject to the review and approval of the appropriate supervisory personnel within the operating unit.

DOCUMENTATION AND SUPERVISORY REVIEW OF IAS MAINTENANCE CHANGES WERE INADEQUATE

Changes to IAS involving the definition and structure of items such as the CCWUs, transactions and journal entries, the chart of accounts, general ledger reports, depository institutions' statements, and transmission of those statements to the institutions should be appropriately authorized in advance. Such changes can affect the input, processing, and reporting of transactions. However, we found that FP&C's maintenance procedures allowed users to make these changes without written authorization.

We found that as of December 31, 1994, personnel from the CCWUs were allowed to submit maintenance requests on the telephone without evidence of supervisory review or approval within the operating department. The Dallas FRB General Auditor had previously identified this condition, but IAS personnel within FP&C had not yet corrected it. In addition, supervisory review and approval was not being obtained from IAS management within FP&C to ensure the propriety of the changes before they were implemented in IAS. This increases the risk that unauthorized or incorrect changes could be made to IAS, and could result in inappropriate processing and reporting of transactions. For example, transactions could be posted to the wrong accounts or invalid accounts could be created.

To ensure that all maintenance changes to IAS are properly authorized and appropriate, they should be made based on written requests which have been reviewed and approved by management in the department requesting the change and IAS management within the FP&C department. After December 31, 1994, FP&C began requiring that all change requests be in writing, approved by the management of the department requesting the change, and reviewed by an IAS supervisor.

KEY IAS STAFF DUTIES WERE
INSUFFICIENTLY SEGREGATED

In order to prevent staff members from having the opportunity to both make an unauthorized transaction and conceal it, key staff duties and responsibilities performed within IAS should be adequately segregated. Specifically, FP&C staff responsible for reconciling balance sheet accounts that are updated by transactions processed by many operational departments such as Deposits, Interdistrict Settlement, and Items in Process of Collection should not have access to operational department CCWUs in IAS. Furthermore, staff performing IAS maintenance should not also be responsible for data origination or input. However, we found that the District did not require these key duties to be segregated at the time of our fieldwork.

In each of the District's offices, some accounting staff assigned to the CCWUs performing reconciliations for the Deposits, Interdistrict Settlement, and Items in Process of Collection accounts were also assigned to operational CCWUs. In addition, certain accounting staff in the El Paso, Houston, and San Antonio offices were able to make maintenance changes to IAS even though they could also enter accounting transactions.

If these duties are not adequately segregated, transactions not subject to the controls of the operating units could be processed and the effectiveness of controls ensuring the propriety of changes made are diminished. This increases the risk of unauthorized transactions or of valid transactions being processed incorrectly.

Suggestions

After our fieldwork, the Dallas FRB ensured that duties within IAS were adequately safeguarded by removing accounting staff access to the operational CCWUs in IAS. We suggest that the District also require the El Paso, Houston, and San Antonio branches to take similar actions to the extent they are cost effective. We also suggest that the District consider consolidating IAS maintenance in Dallas or creating separate groups in each office to perform IAS maintenance to ensure that maintenance staff are not allowed to enter and modify transactions.

ACCESS TO IAS CCWUs WAS
NOT PERIODICALLY REVIEWED

Access to critical financial applications and systems should be monitored periodically to ensure that it is granted only to those individuals whose assigned job responsibilities require it. If this is not done, unnecessary access to CCWUs in IAS could be allowed and not be detected, thereby permitting unauthorized personnel to process invalid transactions on the general ledger. We found that although the IAS group required security change requests to be documented and approved, IAS systems personnel did not require periodic reviews to determine whether the access provided to personnel was still appropriate as of December 31, 1994.

After year-end, the IAS group started generating a report every other month listing all personnel with access to each CCWU. This report was provided to the management of the appropriate operating departments for their review and approval. This will allow management to ensure that only personnel whose job responsibilities require it will have access to IAS CCWUs.

POLICIES AND PROCEDURES
OVER IAS' CONTROL ENVIRONMENT
WERE NOT FORMALIZED

Formal policies and procedures are needed to ensure that the control environment is stable in the event of personnel changes and that personnel process and analyze information in a manner consistent with management directives. However, we found that the District has no documented policies and/or procedures for (1) granting access to IAS, (2) requesting, authorizing, and performing IAS maintenance, and (3) periodically reviewing items such as IAS transactions that update the general ledger and the submission of deposit statements to customers.

As a result, the District's ability to ensure that all transactions are reported accurately on its financial statements and to its customers and other FRBs may be diminished. When policies and procedures are not formally documented, personnel, especially new employees, may not understand and/or apply the policies, processes, and controls that the organization has designed.

Suggestion

We suggest that the District formally document IAS policies and procedures that clearly define the responsibilities of the IAS group, accounting staff, and operational staff in all District offices.

ELECTRONIC DATA PROCESSING CONTROLS

Although the Federal Reserve Automated Services (FRAS) is responsible for most of the general controls[1] over the computer financial information systems that support the District, the District itself is responsible for controlling access to data on certain computer systems, such as the Automated Clearing House (ACH) system. We reviewed the District's general controls over computerized information and identified the following opportunities to improve these controls.

CONTROLS DID NOT ENSURE REMOVAL OF TERMINATED EMPLOYEES' ACCESS TO DATA OR SYSTEMS

A fundamental objective of internal controls is to ensure that unauthorized personnel are not allowed access to sensitive or confidential data. This includes prompt removal of systems access of terminated employees. District personnel informed us that, as part of employee exit procedures, department managers are required to notify Security Administration of the termination. At this point, Security Administration cancels the terminated employee's log-on identification (ID),[2] which prevents continued access. Then once personnel records show that the employee has been terminated, Security Administration permanently removes access for the

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[1]General controls are policies and procedures that apply to the overall effectiveness and security of an entity's computer operations and create the environment in which other related computer controls operate. General controls include the organizational structure, operating procedures, software security features and physical protection designed to ensure that (1) only authorized changes are made to computer programs, (2) access to computer systems and data is appropriately restricted, (3) backup and recovery plans are adequate to ensure the continuity of essential operations, and (4) computer security duties are segregated.

[2]Log-on IDs allow a user to establish a session on a mainframe computer or local area network. A staff member's log-on ID can be in any of three conditions; (1) active, which gives the user normal access, (2) suspended, which normally bars access, but may be reset to active by customer support representatives, or (3) cancelled, which also bars access and can only be reset to active by Security Administration staff.

terminated employee by deleting their log-on ID. However, we found several instances where terminated employees continued to have active or suspended log-on IDs.

As a control to ensure that all access has been removed for terminated employees, a report is generated which lists the log-on IDs of terminated employees and indicates whether the IDs have been cancelled. However, due to a programming error, the report did not list the terminated employees whose log-on IDs remained active or suspended. We found four terminated employees who were not listed on the control report because their IDs had not been cancelled. Two of these employees had active log-on IDs, and two had suspended log-on IDs. Not promptly cancelling the log-on IDs of terminated staff and removing their computer access increases the risk that terminated employees can access sensitive data files, programs, and system software without detection.

As a result of our finding, Security Administration deleted the log-on IDs of these four former staff members and made the necessary corrections to their program so that it would list all terminated employees regardless of the status of their log-on ID. These revisions should enhance the Security Administration's ability to provide stronger monitoring to ensure that access to Federal Reserve information resources has been removed for terminated employees.

SECURITY MONITORING PROGRAM NEEDS IMPROVEMENT

A basic internal control objective is to implement policies and procedures to protect data, programs, and software from unauthorized access and changes. In addition, unusual processing activity and violations should be monitored as a means of detecting unauthorized access or changes to sensitive or confidential data. However, we found that the District had not developed comprehensive policies and procedures for monitoring system access and changes to access levels. In particular,the District had not clearly defined the roles and responsibilities of Security Administration, data owners, and user management in monitoring access. In addition, we found that existing reports were not designed to capture unusual processing activity for all employees and application systems.

As a result of these conditions, various weaknesses existed in the security monitoring program at the time of our review:

-- Log-on IDs with ACF2[3] special privileges were not regularly reviewed to ensure that the privileges were appropriately granted.

-- ACF2 dataset access rule[4] changes were not regularly reviewed by data owners to ensure that changes were authorized and correctly implemented.

-- Logging and violation reports provided to data owners and management did not contain activity for FRAS employees or violations for systems at centralized processing locations such as IAS.

-- The IAS data owner was not receiving a periodic listing of Dallas centralized IAS users for review to ensure that access was appropriate.

In addition, we found instances where users had unnecessary access to datasets. For example, update access was granted to Travel Department production batch jobs, allowing them to update the Automated Clearing House (ACH) production file containing American Bankers Association (ABA) numbers and the types of files they were allowed to transmit for ACH processing.

Subsequent to our review, the District adopted the District Information Security Administration Manual (DISAM) to better define roles and responsibilities concerning security monitoring. Additionally, DISAM specifically states that data owners must review and certify access control rules annually. Security Administration has also begun reviewing the propriety and continued need of special privileges granted through ACF2. They also developed a group of reports for data owners which will facilitate monitoring of dataset access, including access changes. Logging and violation reports were modified to include FRAS employee violations and violations occurring on systems that were

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[3]ACF2 (Access Control Facility 2) is an access control software package by Computer Associates International, Inc., that provides system-level security over computer usage and resources, such as data, transactions, accounts, and programs.

[4]Dataset access rules control the information users can access once their sessions are established.

centralized for the overall FR System. Finally, Security Administration began providing, on request, listings of IAS users to the Dallas IAS owner.

CHECK PROCESSING CONTROLS

The federal reserve banks provide check collection processing services to customer financial institutions. These services allow financial institutions, which receive checks drawn on other institutions, to send them for collection to a federal reserve bank or office. The total dollar value of checks each financial institution forwards to the federal reserve bank is summarized in documents known as cash letters. The Dallas FRB and its Houston branch account for the majority of the checks processed in the District. We reviewed the adequacy of internal controls in the check processing departments at these offices and noted control deficiencies in the following areas.

CHECKS WERE NOT ADEQUATELY SAFEGUARDED

Since cash letters and checks represent the assets of the District's customers, an adequate level of security should be maintained over them from receipt through the end of processing. However, we found that controls over access to these sensitive documents in Dallas and Houston were not adequate to ensure that they were not lost or misappropriated.

We noted that in the Dallas and Houston offices, access to cash letters and checks was restricted in the mail room. However, there was no policy requiring restriction of access to the check processing areas. As a result, cash letters and checks were accessible to any individual in these offices. We also noted that checks were often left in unattended rooms.

Although there is little risk that an individual could personally gain from stealing a check, the loss of a customer's checks would require the customer to devote the time and expense necessary to provide copies of the checks to the District before receiving credit for them. This in turn could cause the District to lose business, thereby reducing its net income and the amount it remits to the U.S. Treasury.

Suggestion

We suggest that the District limit access to check processing areas where cash letters and checks are kept to authorized personnel. The District has concurred with our suggestion and told us that plans have been made to secure the check processing area for the Dallas FRB in late 1995. However, the District is planning to delay modification of the check processing areas at the three branches in the District until it decides to either renovate the existing premises or construct new ones. We believe that in the interim, the District should take prudent steps to ensure that cash letters and checks are appropriately safeguarded.

PRINT ERRORS EXISTED IN PEGA SYSTEM REPORTS

Because feeder system reports are used to verify the completeness and accuracy of transactions passed to IAS, it is critical that these reports list and summarize all the transactions processed. The District utilizes the PEGA[1] system to account for adjustments to previously processed cash letters. However, we found that the PEGA system reports did not include all transactions that this system transmitted to IAS even though these transactions were reflected in the report totals.

When feeder system reports do not reflect all processed transactions, an actual summarization error in the feeder system could go undetected. This could lead to errors in processing and potentially misstate general ledger and customer account balances. In addition, the lack of transaction detail in PEGA reports could lead to inefficiencies if these reports were used to investigate and resolve inquiries by customers about these transactions.

Suggestion

We suggest that the District review the program used by the PEGA system to print processed data and make the necessary corrections so that the system will report all transactions processed. The District attributed this problem to an error in the PEGA computer program and is currently working with the software developers to address the completeness of PEGA reports.

ASSIGNMENT OF ACCOUNT RECONCILIATIONS NEEDS IMPROVEMENT

The District requires a daily reconciliation of each balance sheet account to separately maintained ledgers. However, because

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[1]This is an automated system designed by PEGA Systems, Inc.

of the manner in which the Dallas Check Department reconciles accounts assigned to the Department, misstatements in account balances might not be detected in a timely manner.

Staff in the Dallas Check Department used an IAS journal entry report as their basis for reconciling accounts to the general ledger balances. This report listed transactions being posted to the general ledger and was generated by the same system that produced the general ledger. Consequently, the two records were not independent and the reconciliation was not effective. This type of reconciliation would not detect transactions processed by the Check Department that were not recorded in the general ledger or that were recorded incorrectly because both the journal entry report and the general ledger balance would reflect the same error.

We also found that balance sheet account reconciliations were not well documented. The Dallas Check Department is responsible for reconciling 87 balance sheet accounts that are updated by the transactions it processes. Due to inadequate guidance, the department did not formally document its reconciliations of all accounts assigned but instead used a calculator tape to document its computations of the account balances. For some reconciliations we reviewed, staff were either unable to locate the calculator tape or source documents, or could not reconcile the calculator tape to the account balance. From existing documentation, we were unable to determine who performed the reconciliation for each account and if a supervisor reviewed the reconciliation.

Suggestions

We suggest that for each account assigned to the Check Department, the District develop a standard reconciliation format that identifies the independent sources of data that should be used and the general ledger account balance. Check Department managers should review these reconciliations daily, including all supporting documentation, to ensure that the reconciliations are accurate, complete, properly documented, and performed using independent source documentation.

ACCOUNTABILITY OVER
PROCESSING AND REVIEW OF
CHECK TRANSACTIONS NEEDS IMPROVEMENT

Key responsibilities should be segregated among staff members so that no individual is in a position to both cause and conceal errors or irregularities. However, we found that individuals who established control totals for checks to be processed also had the ability to reconcile the processed checks to this control total and make adjustments to customer deposit accounts or suspense accounts for any differences. These adjustments were not subject to adequate supervisory approval. Also, although District security policies require that employees use only their own log-on IDs, we found that employees reconciling processed checks to control totals often did so while using other employees' log-on IDs.

The District has chosen not to segregate these processing and reconciliation responsibilities because, in management's opinion, the relative risk of error does not justify incurring the cost that would be involved. Since there was no policy addressing this matter, we found that supervisors did not review the supporting documentation for adjustments resulting from the reconciliation. When individuals are allowed to reconcile and record adjustments to transactions they initially prepared for processing without any supervisory review, there is an increased risk that differences will be obscured or resolved in an inappropriate manner.

When employees use each others' log-on IDs, they eliminate the audit trail documenting who processed any adjustments. This could also result in unauthorized employees processing erroneous or otherwise inappropriate adjustments. Should this occur, customers' depository balances and/or general ledger accounts could be misstated.

Suggestions

To compensate for the lack of segregation of duties, we suggest that supervisors review the supporting documentation for all significant adjustments to customers' depository accounts as well as to other general ledger accounts resulting from the reconciliation. Also, the District should strictly enforce current security policies regarding the use of log-on IDs and stress to its employees the importance of not allowing other staff members to know or use them.

CURRENCY SYSTEM CONTROLS

As of December 31, 1994, the District held $3.9 billion of Federal Reserve (FR) notes in its vaults. This inventory of FR notes was divided between the Dallas FRB and its three branches in the District. The District has established various safeguards and accounting controls for these assets, such as vaults, surveillance systems, and physical inventory counts. However, we found that some of the existing controls could be improved in several areas.

PERPETUAL INVENTORY RECORDS OF FEDERAL RESERVE NOTES WERE INADEQUATE

Since FR notes are the nation's currency and are highly liquid and vulnerable to misappropriation, it is critical that reporting and safeguarding controls over them be designed to promptly detect processing errors, theft, or loss. To facilitate this objective, inventory records should track the existing balances of inventories so that these assets can be easily verified. We identified opportunities to improve the accounting controls surrounding the inventory records maintained by the Houston, San Antonio, and El Paso branches.

Because the FR System does not require standardization of accounting systems among district banks, Dallas was the only office in the District which maintained an automated perpetual inventory system tracking (1) individual transactions by depository institution and (2) the movement and ending balances of the FR note inventories between tellers by individual unit of stored FR notes (storage units).

Inventory records maintained by the tellers in the District's other three offices consisted only of a running balance of the tellers' holdings by denomination based on their gross transaction activity. These records did not reflect the portion of the total contained in each of the underlying storage units of FR notes actually on hand. Consequently, when tellers counted currency within a storage unit when transferring the unit to another teller, the count results could not be matched with these records. In addition, since the tellers did not maintain ongoing records of the contents of each storage unit, they could not use periodic cycle counts of a sample of storage units to verify reported FR note holdings.

Because the tellers' records do not contain the detail necessary to correlate them to actual inventory on hand by storage unit, they do not lend themselves to continual verification of balances. As a result, the three branches must rely on physical inventory counts to substantiate the balances held by the tellers at a point in time. However, these inventory counts are only conducted quarterly or semiannually, which may not be frequent enough for an inventory as sensitive as FR notes, particularly in the absence of continual verifications. Consequently, between the quarterly or semiannual inventory dates, the District cannot confirm that its other safeguarding and recording controls are working as intended to detect processing errors, theft, or loss.

Suggestion

We suggest that the District develop perpetual inventory records which reflect the ending balances of FR notes by storage container. These records should be verified on a continuous basis through cycle counts and through the verification of storage containers being transferred between tellers. The District should also consider the feasibility of automating these records based on the expected costs to be incurred and benefits to be derived.

FREQUENCY AND QUALITY
OF PHYSICAL INVENTORY COUNTS
COULD BE IMPROVED

The FR System's Custody Control Principles and Standards Manual requires that each District perform periodic counts of physical inventories of the FR notes held in its vaults. According to the four offices within the District, their policy is to perform such counts of inventories on a quarterly basis. However, because the Manual does not provide instructions regarding control objectives for counting physical inventories, we found instances where required physical inventory counts were either not performed or were performed in an incomplete or otherwise flawed manner:

-- During 1994, no inventory counts were performed on the holdings of San Antonio's high speed verification tellers, while inventory counts were performed only twice on the holdings of San Antonio's receiving tellers and once for its paying tellers.

-- In Houston, monthly inventory counts of the holdings of the high speed verification tellers only counted the FR notes which had been prepared for processing in the counting machines. FR notes which had not yet been prepared for processing or had already been processed were excluded.

-- At the District's three branches, supervisors determined the counted balances by calculating the dimensions (height, width, and depth) of the stacked storage units of inventory. No further verification was performed to ensure that the inventory included in the stacked storage units was the same denomination or that the contents assumed to be in the storage units comprising each stack were actually present.

-- At one branch, the supervisor did not consistently perform dimensional calculations of all stacked storage units present and relied on representations from the tellers regarding the units' contents.

-- Periodic physical inventory counts at the Dallas FRB and its three branches were conducted on the holdings of different teams at different times. None of the offices counted the inventory in its entire vault at any one time during 1994.

-- Documentation of inventory counts was inadequate. It consisted only of memorandums or logs documenting that inventory counts were performed and the results were "OK."

As a result, incorrect inventory counts can occur, resulting in inaccurate inventory balances. This also impairs the District's ability to verify the effectiveness of existing controls used to detect processing errors, theft, or loss. Also, since inventory counts are not properly documented, management cannot gain a full understanding of the inventory count procedures performed, discrepancies that arose, and how the discrepancies were resolved.

Suggestion

We suggest that the District revise its policies to require that (1) a simultaneous count of all teams' holdings (the entire vault) be conducted at least annually by Cash Department personnel, (2) each inventory unit be counted and, on a sample basis, the quantity and denomination of FR notes inside the storage units be verified, (3) quarterly inventory counts of all FR notes held in the vaults be conducted, and (4) standardized forms be developed and used to document the counts of inventory and their reconciliation to the inventory records. We also suggest that the District closely monitor compliance with these policies.

INADEQUATE DOCUMENTATION OF INVENTORY RECORDS FOR HOUSTON'S HIGH SPEED VERIFICATION TEAM

Subsidiary records in support of balance sheet amounts are a critical tool for management oversight of the balance and should be prepared in a clear and concise manner. The District's subsidiary record for its largest liability, FR notes, is a daily worksheet each teller is required to prepare to update the balance of FR notes for current activity based on original source documents. However, we found that the worksheets prepared by the Houston high speed verification tellers were difficult to understand, reducing their value as a subsidiary record.

The amounts the tellers entered on their worksheets in Houston lacked the detail and descriptions that would allow them to be identified with individual transactions. The worksheets also included unnecessary amounts that were added to or deducted from the prior day's balance, obscuring the flow of processed transactions. Finally, the worksheet for the high speed verification team was combined with the worksheet of the cancellation team. This made the worksheet difficult to use as a tool to review the activity processed or the holdings of either team. These conditions reduce the branch's level of assurance that transactions are accurately recorded and accountability over assets is adequately maintained.

Suggestion

We suggest that the District require the Houston branch tellers to prepare separate worksheets for each team processing activity on a given day. The branch should review all worksheets prepared by the teams to ensure that (1) they adequately describe each transaction and (2) unnecessary transactional data are not presented.

RECONCILIATIONS OF PROCESSING ACTIVITY WERE NOT ADEQUATELY COMPLETED AT HOUSTON AND EL PASO

Reconciliations are an important control for assuring that transactions are correctly and completely recorded. To ensure that all processing activity has been recorded by the high speed verification tellers, a reconciliation is performed to establish accountability for the FR notes processed through the high speed counting equipment. To avoid undetected theft or loss of currency, this reconciliation must be performed completely and a supervisor must review it against supporting documentation.

However, during our review of this reconciliation at the Houston and El Paso branches, we found that not all line items on the reconciliation were completed consistently. For example, the "Opening Balance" line item, which serves as a control total, was not always completed. The same was true of the "Unworked Notes" line item in several instances.

Unless each line item of the reconciliation is completed, accountability over the FR notes processed through the high speed counting equipment cannot be established and the District cannot be assured of the completeness and accuracy of the currency being returned to the vault. Further, not completing this reconciliation would make it more difficult to detect incorrect counts of shredded or fit currency by the high speed counting equipment.

Suggestion

We suggest that the District more closely review these reconciliations to ensure that the tellers are consistently completing each line item.

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