



Audit Report



OIG-06-015

BILL AND COIN MANUFACTURING: Control Issues Identified at the Bureau of Engraving and Printing Western Currency Facility

December 8, 2005

Office of
Inspector General

Department of the Treasury

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Abbreviations

BEP	Bureau of Engraving and Printing
CCTV	Closed Circuit Television
OIG	Office of Inspector General
PSB	Product Security Branch
SVS	Securities Verification Section
WCF	Western Currency Facility

*The Department of the Treasury
Office of Inspector General*

December 8, 2005

Thomas A. Ferguson
Director
Bureau of Engraving and Printing

We are providing this interim report to bring to your immediate attention two internal control issues identified during our visit to the Bureau of Engraving and Printing (BEP) Western Currency Facility (WCF) located in Fort Worth, Texas, during the week of October 31, 2005. These issues, outlined below, were discussed during a November 4, 2005, meeting with senior management. This interim report does not reflect all of the results of our work, which is still ongoing at WCF.

BEP prints billions of Federal Reserve Notes for delivery to the Federal Reserve System each year. These notes are produced at facilities in Washington, D.C., and Fort Worth, Texas. In October 2004, a WCF employee allegedly removed at least \$5,000 of \$50 Federal Reserve Notes slated for destruction.

The overall objectives of our audit are to determine the internal control failures at WCF that allowed a theft to be perpetrated and to determine whether BEP has enhanced internal controls to (1) prevent the occurrence of a similar theft and (2) provide for timely detection should another theft occur.

The results presented in this interim report are based on observations made during our visit to WCF from October 31 through November 4, 2005. During this visit, we conducted walk-throughs of the currency production floor and observed production activities from the tourist center catwalk over the currency production floor and through closed circuit television (CCTV)

cameras. We also discussed controls with WCF management and supervisors and received recently issued policies and procedures, system print-outs, and security incident reports. We are conducting our audit, and prepared this interim report, in accordance with generally accepted government auditing standards.

In brief, we found that (1) WCF does not have a contingency plan for destroying mutilated currency during periods when its destruction equipment is not functioning and (2) the mutilated currency currently being stored is vulnerable to theft. We make two recommendations to improve accountability for mutilated currency currently being stored and to prevent similar deficiencies in the future.

In a memorandum dated December 2, 2005 (Appendix 1), BEP presented actions taken and planned, which we believe address the intent of our recommendations. Within a month of our onsite visit that identified these concerns, BEP management advised us of plans to develop a contingency plan and of the destruction of the stored mutilated currency.

Findings and Recommendations

Finding 1 Management Should Develop and Implement a Contingency Plan for the Ongoing Destruction of Mutilated Currency

WCF does not have a contingency plan for destroying mutilated currency¹ when its destruction equipment is not functioning. During our visit to WCF the week of October 31, we observed that the Destruction Cage no longer contained destruction equipment.

¹ The term *mutilated currency* refers to spoilage created during the production process. Although considered spoiled, some mutilated currency can be passed without nonexperts being able to detect that it is mutilated.

We were advised by WCF management that the old equipment had been taken down on October 12, 2005.

As a result, mutilated currency designated for destruction accumulated in the Paper Vault until destruction equipment could be replaced.

Storing mutilated currency increases its vulnerability to theft. This vulnerability is further increased when mutilated currency that has been verified² and sealed by the Securities Verification Section (SVS) and Product Security Branch (PSB) is subsequently unsealed and re-handled.

We consider it sound business practice to develop and implement a contingency plan for the ongoing destruction of mutilated currency when destruction equipment is not operational. As a standard of internal control in the Federal government, agencies need to clearly document internal control and all transactions and other significant events. The documentation should appear in management directives, administrative policies, or operating manuals.³

Recommendation

1. The Director should ensure that a contingency plan is developed and implemented at WCF to provide for the destruction of mutilated currency in a timely manner when its destruction equipment is not functioning.

Management Comments

BEP concurs with this recommendation and anticipates that evaluations will be completed and that a contingency plan to

² The term *verified* refers to a detailed process that includes ensuring that mutilated currency is accurately counted and properly defaced.

³ *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1, November 1999.

provide for the destruction of mutilated currency will be prepared and approved on or about February 28, 2006.

OIG Response

We believe that the actions planned by BEP address the intent of the recommendation. We plan to review the contingency plan once it is approved.

Finding 2 Management Should Verify Stored Mutilated Currency Prior to Destruction

In the Paper Vault, we observed mutilated currency stored on skids and in clear tanks and also in 11 cardboard boxes. WCF management explained that the boxes contained mutilated currency that was originally transferred to the Paper Vault in clear tanks after it was verified by SVS and PSB. Because of a shortage of clear tanks, the mutilated currency was transferred to boxes so that the clear tanks could be returned to the production floor.

We subsequently watched live CCTV coverage of Printing Plant Workers transferring mutilated currency from clear tanks to cardboard boxes under the observation of PSB staff. While such observation provides some measure of control, we believe that once the mutilated currency in the clear tanks has been verified by SVS and PSB, it should not be re-handled without another verification before destruction.

The Manager of PSB stated that skids of mutilated currency were moved to the Paper Vault for storage beginning on October 7, 2005, and that the old destruction equipment was taken down on October 12, 2005. We noted that some of the mutilated currency had been identified for destruction as early as September 30, 2005. On November 22, 2005, management advised us that the new equipment had been installed and that destruction would start as soon as testing was completed.

According to information provided to us by WCF management, the amount of mutilated currency awaiting destruction at WCF as of November 9, 2005, included the following:

Type ⁴	Quantity
Straps	16,435.0
16-subject sheets	8,140.0
32-subject sheets	605,793.5

Internal control serves as the first line of defense in safeguarding assets. In accordance with *Standards for Internal Control in the Federal Government*, agencies must establish physical control to secure and safeguard vulnerable assets, which should be periodically counted and compared to control records.

Recommendation

2. The Director should, with respect to the mutilated currency that accumulated, ensure that proper accountability was maintained and require that the stored mutilated currency be verified before it is destroyed.

Management Comments

In its response, management stated that BEP had verified 36 percent of the mutilated currency straps and then destroyed all of the straps by November 23, 2005. In addition, BEP inspected individual skids and verified seals before transferring the mutilated currency to the Destruction Cage. The entire backlog of mutilated currency was destroyed by December 2, 2005.

⁴ Each strap consists of 100 single notes banded together at the end of the printing process. At the beginning of the printing process, each full sheet of currency paper yields 32 notes and is referred to as a 32-subject sheet. As the 32-subject sheets move through the printing process, the sheets are cut in half, creating 16-subject sheets. The final phase consists of 16-subject sheets being cut into single notes and banded together in straps.

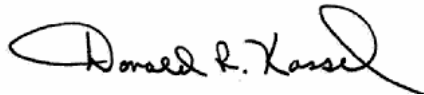
OIG Response

We believe that the actions taken by BEP address the intent of the recommendation.⁵

We plan to review documentary evidence of the verification and destruction of the stored mutilated currency. We also plan to review some of the actions taken to provide security and accountability over stored mutilated currency, which are discussed in Attachment A of BEP's response, in further detail for our overall report.

* * * * *

We appreciate the courtesies and cooperation provided to our staff during the onsite visit. If you wish to discuss this report, you may contact me at (202) 927-6512 or Maria V. Carmona, Audit Manager, at (202) 927-6345. Major contributors to this report were Ms. Carmona; Susan R. Sebert, Analyst-In-Charge; Horace A. Bryan, Auditor; and Gabriel Ortiz, Special Agent.



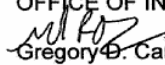
Donald R. Kassel
Director, Fiscal Service Audits

⁵ We noted that BEP interpreted our recommendation to require a complete re-verification of the stored mutilated currency, but this was not our intent. For this reason, BEP's position that a complete re-verification was not warranted is not being treated as a non-concurrence.



DEPARTMENT OF THE TREASURY
BUREAU OF ENGRAVING AND PRINTING
WASHINGTON, D.C. 20228

December 2, 2005

MEMORANDUM FOR MARLA A. FREEDMAN
ASSISTANT INSPECTOR GENERAL FOR AUDIT
OFFICE OF INSPECTOR GENERAL
FROM: 
Gregory D. Carper
Chief Financial Officer
SUBJECT: Draft Interim Audit Report: Control Issues Identified at the
Bureau of Engraving and Printing's Western Currency Facility

Thank you for the opportunity to review the Office of Inspector General's (OIG) draft interim audit report "Control Issues Identified at the Bureau of Engraving and Printing's Western Currency Facility," dated November 22, 2005. The Bureau of Engraving and Printing (Bureau) offers the following comments on the draft interim report:

Recommendation 1

The Bureau Director should ensure that a contingency plan is developed and implemented at the Western Currency Facility (WCF) to provide for the destruction of mutilated currency in a timely manner when its destruction equipment is not functioning.

Comment

We concur with this recommendation. However, we believe the actions taken by the WCF during this time were reasonable and prudent to safeguard the mutilated currency and the lack of a contingency plan did not adversely affect the security and accountability over the stored mutilated currency.

Over the past several months, the Western Currency Facility has been evaluating destruction alternatives in the event the WCF destruction capabilities became unavailable. The WCF identified vendors that profess the capability of destroying currency at the WCF site using mobile destruction equipment. This work has resulted in three vendors who are scheduled to demonstrate the capabilities of their equipment the week of December 5, 2005. The WCF has also developed sources that could be called upon to transport mutilated currency to the Washington DC facility for destruction. Finally, the WCF determined, unlike in the Washington DC area, there is no vendor

Appendix 1
Management Response

in the Dallas-Fort Worth area that provides secure destruction capabilities to which securities could be transported in the event the WCF's equipment is unavailable. We anticipate these evaluations will be completed and the recommended contingency plan will be prepared and approved on or about February 28, 2006.

Recommendation 2

The Bureau Director should, with respect to the mutilated currency that accumulated, ensure that proper accountability was maintained and require that the stored mutilated currency be verified before it is destroyed.

Comment

As noted by your report, the Bureau prints billions of Federal Reserve Notes for delivery to the Federal Reserve System each year. During fiscal year 2006, the combined deliveries from both Bureau facilities will approximate 8.2 billion notes, of which 4.4 billion notes will be delivered from the Western Currency Facility. Mutilated currency at the WCF, which results from work that does not meet quality standards, is anticipated to be approximately 0.2 billion notes for the year. Although this quantity is quite small compared to total production, the Bureau is extremely cognizant of the importance to safeguard the mutilated currency as well as the currency that will be shipped to the Federal Reserve System. As we demonstrated to the OIG staff during their on-site audit at the WCF the week of October 31, 2005, and as they reported during the November 4, 2005, meeting with senior management, the Bureau has made significant progress the past year to enhance security and accountability over its securities and processes.

In this spirit, WCF personnel took appropriate measures that ensured the security and accountability of the mutilated currency stored in the paper vault. The actions the WCF took to safeguard and ensure accountability over the mutilated currency were more than adequate to meet the Government Accountability Office's *Standards for Internal Control in the Federal Government*. Proper accountability and physical controls were maintained over the currency during the entire time, and the work confirmed to control records prior to destruction. See Attachment A for a detailed list of the actions taken at the WCF to provide security and accountability over this mutilated currency.

We believe these actions were prudent and provided reasonable assurance that all mutilated work was safeguarded and accounted for until its ultimate destruction. The entire backlog of stored mutilated currency was destroyed by December 2, 2005. Due to the controls and procedures followed by the WCF, a 100% re-verification of the currency was not warranted to provide reasonable assurance of the integrity of the stored currency and its accountability. Consequently, although the WCF ensured that proper accountability was maintained over the stored mutilated currency, we do not concur with the portion of this recommendation which requires the mutilated currency to be verified (i.e. all work recounted and the counts compared to mutilation schedules) before destruction. Therefore, we consider this recommendation implemented.

Appendix 1
Management Response

If you have any questions, or wish to discuss our comments, please call me on (202) 874-2020.

Attachment

Attachment A

**ACTIONS TAKEN AT WESTERN CURRENCY FACILITY TO PROVIDE
SECURITY AND ACCOUNTABILITY OVER STORED MUTILATED CURRENCY**

Prior to Taking Destruction Equipment Out Of Service

1. Security Division personnel surveyed the Paper Vault to determine the best location within the vault to store the mutilated currency.
2. Security Division personnel reviewed camera coverage in the Paper Vault and adjusted camera views to provide optimum coverage. All cameras were set to record.
3. Security Division personnel reviewed card reader access rights to the Paper Vault and removed access privileges from non-Security Division staff. Access into the Paper Vault could only be achieved by Security Division personnel.
4. Security Division and Management Control Branch personnel determined the physical control procedures for the storage of the mutilated currency to ensure the security of the work and to prevent unauthorized access to it.

Physical Controls and Storage Procedures for Mutilated Currency

1. Access to the Paper Vault could only be achieved via escort by Security Division staff.
2. All activity in the Paper Vault was recorded by security cameras. The security system recorded the date, time and duration of access for all individuals who entered the Paper Vault.
3. The work was stored in tanks or on skids that were strapped and sealed to prevent unauthorized access.
4. Security Division personnel conducted two physical inventories of the stored mutilated currency. All of the mutilated currency work was accounted for and the results of each inventory were reconciled to control records.

Controls Followed to Transfer Mutilated Currency from Currency Tanks to Cardboard Boxes

1. All work was conducted under the direction of Security Division personnel and recorded by security cameras. The security system recorded the date, time and duration of access for all individuals who entered the Paper Vault.

2. Prior to opening the tanks, seals were verified to the seal register.
3. Work from each tray was removed from the tank and was put into individual plastic bags.
4. The plastic bags were placed into cardboard boxes. When the box was full, it was taped closed with packing tape and placed into a second cardboard box, which was also taped closed.
5. Two boxes were placed on each skid with a ¾" thick plywood cover placed on top. The skid was strapped and sealed. The seal numbers and date were written on the cartons. Each security specialist signed the mut schedule for the skid, certifying the contents and annotated the mut schedule with the seal number.

Controls Followed during Destruction of Stored Mutilated Currency

1. Individual skids were inspected by Management Control Branch and Security Division personnel to ensure integrity and that the seals were verified to the seal registers prior to the transfer to the Destruction Cage.
2. The transfer of skids from the Paper Vault to the Destruction Cage was performed under dual custody control.
3. All verification and destruction activity was recorded by camera coverage. Security seals were verified to seal registers and mut schedules prior to removal.
4. Management Control Branch personnel selected a random sample of cartons to verify contents to control records. Approximately 36% of stored mutilated currency straps were verified. No exceptions were identified.
5. All stored mutilated currency straps were destroyed by the end of the day on November 23, 2005.
6. Security Division personnel witnessed the verification and destruction of all securities.

Department of the Treasury

Office of Strategic Planning and Performance Management
Office of Accounting and Internal Control

Bureau of Engraving and Printing

Director
Associate Director (Chief Financial Officer)

Office of Management and Budget

OIG Budget Examiner