



U.S. Department of Energy
Office of Inspector General
Office of Inspections and Special Inquiries

Inspection Report

Internal Controls Over Personal Computers
at Los Alamos National Laboratory




Department of Energy

Washington, DC 20585

August 10, 2004

MEMORANDUM FOR THE SECRETARY

FROM:


Gregory H. Friedman
Inspector General

SUBJECT:

INFORMATION: Inspection Report on "Internal Controls Over Personal Computers at Los Alamos National Laboratory"

BACKGROUND

The Office of Inspector General initiated an inspection to determine the adequacy of internal controls over the extensive inventory of laptop and desktop computers at Los Alamos National Laboratory (LANL). Computers are used in the full range of operations at LANL, to include processing classified information. Department of Energy (DOE) and LANL property policies identify computers as "sensitive property," due largely to their susceptibility to theft and misappropriation.

On April 24, 2003, because of the significance of our preliminary findings, we issued an Interim Inspection Report, entitled *Inspection of Internal Controls Over Personal Computers at Los Alamos National Laboratory (DOE/IG-0597)*. Our inspection has now been completed, and the attached report addresses the final results of our review. Our work was completed prior to the current security stand-down at Los Alamos.

RESULTS OF INSPECTION

Our interim report documented internal control weaknesses regarding LANL computers, particularly classified and unclassified laptop computers, including accountability and accreditation issues. This follow-on report identifies continuing internal control weaknesses that undermine confidence in LANL's ability to assure that (1) computers are appropriately controlled and safeguarded from loss or theft and (2) computers used to process and store classified information are controlled in accordance with existing property management and security requirements. Specifically, we found that:

- A number of classified desktop computers were not, as required, entered into the LANL property inventory, and some were not assigned a property number;
- LANL's Office of Security Inquiries was not notified about a missing component of a computer system accredited for classified use, as required; and
- LANL's listing of classified desktop and laptop Sensitive Compartmented Information Facility computers was not completely accurate, and computer identification in accreditation paperwork did not always match the actual classified equipment.



In light of the designation of computers as sensitive property, we believe that strict property controls need to be consistently applied to classified and unclassified computers at LANL and that a strong program of review and oversight needs to be in place to assure that all computing resources are properly accounted for and controlled. Our report includes recommendations to management designed to enhance LANL's internal controls over its computer resources.

This inspection complements similar work performed by the Office of Inspector General at several other DOE sites, as well as the Office of Inspector General's *Special Inquiry on Operations at Los Alamos National Laboratory (DOE/IG-0584, January 2003)*, which identified inadequate or untimely analysis of, and inquiry into, property loss or theft and security issues; a lack of personal accountability for property; and inadequate controls over property systems.

MANAGEMENT REACTION

Management concurred with our recommendations. Management's comments are provided in their entirety in Appendix B of the report.

We found management's comments to be responsive to our report.

Attachment

cc: Deputy Secretary
Administrator, National Nuclear Security Administration
Under Secretary for Energy, Science and Environment
Director, Office of Security and Safety Performance Assurance
Director, Policy and Internal Controls Management
Director, Office of Program Liaison and Financial Analysis

INTERNAL CONTROLS OVER PERSONAL COMPUTERS AT LOS ALAMOS NATIONAL LABORATORY

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Overview

INTRODUCTION AND OBJECTIVE

Computers are used extensively in the full range of operations at the Los Alamos National Laboratory (LANL), including processing classified information. LANL reported an inventory of approximately 5,000 laptop and nearly 40,000 desktop computers at the end of Fiscal Year 2002. Department of Energy (DOE) and LANL property policies identify computers as “sensitive property,” due in part to their susceptibility to theft and potential for conversion to cash. Therefore, we believe that management controls over computers throughout the DOE complex must remain robust and consistent.

We initiated an inspection to determine the adequacy of internal controls over laptop and desktop computers at LANL. Because of the significance of our preliminary findings, we issued an Interim Inspection Report, titled *Inspection of Internal Controls Over Personal Computers at Los Alamos National Laboratory (DOE/IG-0597, April 2003)*, which identified significant weaknesses in LANL management controls over laptop computers. Our inspection has now been completed, and this report addresses the final results of our review. The primary focus of the work we conducted subsequent to the issuance of our Interim Report was the accountability of desktop computers.

This inspection complements similar work performed by the Office of Inspector General at other DOE sites, the results of which may be found in the following reports: *Inspection of Internal Controls Over Classified Computers and Classified Removable Media at the Lawrence Livermore National Laboratory (DOE/IG-0628, December 2003)*; *Inspection of Internal Controls Over Laptop and Desktop Computers at the Savannah River Site (INS-L-03-09, July 29, 2003)*; and *Management of Sensitive Equipment at Selected Locations (DOE/IG-0606, June 2003)*. This inspection also complements the Office of Inspector General’s *Special Inquiry on Operations at Los Alamos National Laboratory (DOE/IG-0584, January 2003)*, which identified inadequate or untimely analysis of, and inquiry into, property loss or theft and security issues; a lack of personal accountability for property; and inadequate controls over property systems.

OBSERVATIONS AND CONCLUSIONS

In our interim report, we found that internal controls over classified and unclassified laptop computers at LANL were inadequate. We identified several weaknesses, including poor accountability and accreditation of classified laptop computers. Accreditation is the authorization by a designated approval authority that a computer can be used to process classified information in a specific environment, based on the computer meeting pre-specified technical requirements for achieving adequate data security.

This follow-on report identifies continuing control weaknesses that undermine confidence in LANL's ability to assure that (1) computers are appropriately controlled and safeguarded from loss or theft and (2) computers used to process and store classified information are controlled in accordance with existing property management and security requirements. Specifically, we found that:

- A number of classified desktop computers were not, as required, entered into the LANL property inventory, and some were not assigned a property number;
- LANL's Office of Security Inquiries was not notified about a missing component of a computer system authorized to process classified information, as required; and
- LANL's listing of classified desktop and laptop Sensitive Compartmented Information Facility (SCIF) computers was not completely accurate, and computer identification in accreditation paperwork did not always match the actual classified equipment.

As previously noted and as discussed in our interim report, DOE and LANL identify computers as sensitive property. In this regard, we believe that strict property controls need to be consistently applied to classified and unclassified computers at LANL and that a strong program of review and oversight needs to be in place to assure that all computing resources are accounted for and controlled.

Details of Findings

COMPUTERS NOT IN PROPERTY INVENTORY

A number of classified desktop computers were not entered into the LANL property inventory, and some were not assigned a property number. LANL provided us a listing of its 450 single user standalone classified desktop computers, and we compared this listing to LANL's property management system, Sunflower. We identified discrepancies with 11 of the classified desktop computers. Specifically:

- Although eight of the classified desktop computers had valid property numbers, they were not entered into Sunflower; and
- Three of the classified desktop computers were not assigned property numbers and, therefore, were not entered into Sunflower.

MISSING CENTRAL PROCESSING UNIT NOT REPORTED

A missing central processing unit (CPU)¹ that was part of a computer system authorized for classified processing was not reported to LANL's Office of Security Inquiries, as required. The CPU utilized a removable hard drive, and LANL documentation showed that the hard drive had been destroyed. However, LANL did not have a record of the final disposition of the CPU.

This classified CPU was last inventoried on August 13, 2002. The CPU was moved on August 26, 2002, along with other property that was to be salvaged. However, after it was moved, there was no record that it had been taken to salvage, and the CPU was determined to be missing. LANL's "Check List for Missing, Lost, Stolen, Damaged or Destroyed Property" requires that missing automated information systems authorized for classified processing be immediately reported to the LANL Office of Security Inquiries by secure means in accordance with the General Security Los Alamos Internal Requirement (LIR) 406-00-01.0 Att 14, "Reporting Safeguards and Security Incidents." We were told by a LANL official that this missing CPU had not been reported to the Office of Security Inquiries as required.

While there is no evidence that classified information was on the missing CPU, it should have been reported to the Office of Security Inquiries because the CPU was part of an automated information system authorized for classified processing. LANL

¹ As used herein, central processing unit refers to a computer unit, which is the structure that houses the main electrical components of a computer; also known as the tower or desk top.

Details of Findings

policy requires that a security inquiry then be conducted. However, this inquiry was not performed because the reporting process was not followed.

DISCREPANCIES WITH CLASSIFIED SCIF COMPUTERS

LANL's listing of classified desktop and laptop SCIF computers was not completely accurate, and computer identification in accreditation paperwork did not always match the actual classified equipment. LANL's Office of Cyber Security provided us a listing of 65 SCIF computers accredited to process classified information. We sampled 14 of the 65 classified SCIF computers to determine if the computers on the list could be accounted for, had valid property numbers, and had appropriate accreditation paperwork. We identified two classified desktop computers with property numbers that did not match the accreditation paperwork. In addition, we identified a laptop computer that did not belong on the SCIF classified computer listing. Although this laptop had been accredited for classified use in February 2003, we determined that it was not labeled for classified use, was not intended to be used for classified processing, and had never been used for that purpose.

RECOMMENDATIONS

We recommend that the Manager, Los Alamos Site Office, take appropriate action to ensure that:

1. LANL enters all classified desktop computers into its property management system;
2. LANL properly reports missing classified computers and investigates them, including the instance identified in this report;
3. LANL maintains an accurate centralized listing of all computers used for classified processing;
4. LANL verifies that property numbers for classified computers match the property numbers on the accreditation paperwork; and
5. The issues raised in this report are considered in the next Site Office evaluation of LANL's property management and security performance measures.

**MANAGEMENT
COMMENTS**

In comments on our draft report, NNSA concurred with our recommendations. NNSA's comments are provided in their entirety in Appendix B of this report.

**INSPECTOR
COMMENTS**

We found management's comments to be responsive to our report.

Appendix A

SCOPE AND METHODOLOGY

The fieldwork for this inspection was conducted from December 2002 to March 2004. This review included interviews with DOE officials from the National Nuclear Security Administration Service Center and officials from LANL and its subcontractors. We reviewed applicable policies and procedures pertaining to sensitive property and property management. In addition, we conducted inventory verification of a judgmental sample of laptop and desktop computers.

This inspection was conducted in accordance with the “Quality Standards for Inspections” issued by the President’s Council on Integrity and Efficiency.



Department of Energy
National Nuclear Security Administration
Washington, DC 20585



AUG 04 2004

MEMORANDUM FOR Alfred K. Walter
Acting Assistant Inspector General
for Inspections and Special Inquiries

FROM: *for* Michael C. Kane *Dorsey Liberto*
Associate Administrator
for Management and Administration

SUBJECT: Comments to Draft Inspection Report on Personal
Computers at Los Alamos; S03IS016; 2004-26043

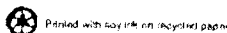
The National Nuclear Security Administration (NNSA) appreciates the opportunity to have reviewed the Inspector General's (IG) draft Inspection report, "Internal Controls Over Personal Computers at Los Alamos National Laboratory." We understand that this inspection was initiated to determine the adequacy of internal controls over both laptop and desktop computers at the Laboratory.

The inspectors concluded that a number of classified desktop computers were not entered into the Laboratory's property inventory and some computers were not assigned a property number. There was a missing unit that was accredited for classified use which was not reported to the Laboratory's Office of Security Inquiries as missing. Additionally, the inspectors concluded that the listing of the Laboratory's classified desktop and laptop "special purpose" computers was not completely accurate and that the accreditation paperwork did not always match the actual classified equipment.

As you are aware, the Los Alamos National Laboratory has suspended all operations until each business and programmatic element can be recertified for safe, secure operations. Therefore, since we agree with the recommendations, NNSA will provide our corrective action plan for each of the recommendations after the Laboratory has been recertified to a safe, secure operational state.

Should you have any questions about this response, please contact Richard Speidel, Director, Policy and Internal Controls Management. He may be contacted at 202-586-5009.

cc: Robert Braden, Senior Procurement Executive
Edwin Wilmot, Manager, Los Alamos Site Office
William Desmond, Acting Associate Administrator for Defense Nuclear Security
Karen Boardman, Director, Service Center



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