



U.S. Department of Energy  
Office of Inspector General  
Office of Inspections

# Interim Inspection Report

Inspection of Internal Controls Over Personal  
Computers at Los Alamos National Laboratory

DOE/IG-0597

April 2003



## Department of Energy

Washington, DC 20585

April 24, 2003

### MEMORANDUM FOR THE SECRETARY

FROM:

*Gregory H. Friedman*  
Gregory H. Friedman  
Inspector General

SUBJECT:

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

### BACKGROUND

The Department of Energy's (DOE) Los Alamos National Laboratory (Los Alamos) maintains approximately 5,000 laptop and 30,000 desktop computers for processing a broad range of classified and unclassified information. These computers are considered "sensitive property" due in part to their susceptibility to theft. It is an expected practice that management controls over computers throughout the DOE complex remain robust and consistent.

The purpose of this inspection was to determine the adequacy of internal controls over laptop and desktop computers at Los Alamos. The primary focus of this interim report is on accountability of laptop computers. A broader assessment of controls over laptop and desktop computers will be included in a subsequent report.

### RESULTS OF INSPECTION

Through our fieldwork to date, we determined that controls over classified and unclassified laptop computers at Los Alamos were inadequate. We identified control weaknesses that undermined confidence in the Laboratory's ability to assure that laptop computers were appropriately controlled; were adequately safeguarded from loss or theft; and, that laptop computers used to process and store classified information were controlled in accordance with existing security requirements.

Specifically, we found that:

- Los Alamos could not accurately account for its single user, stand-alone, classified laptop computers;
- Laptop computers reported as "unlocated" were written-off of the Laboratory's Property Inventory without a formal inquiry;
- Thefts of laptop computers were sometimes not reported to the Laboratory's Office of Security Inquiries, as required;



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- The “purchase card process” did not assure that required inventory controls were followed when new computers were purchased;
- Laptop and desktop computers were acquired using purchase cards after the Laboratory prohibited such purchases without special authorization; and,
- Employees were not held financially liable for the loss of their assigned Government computer(s) in accordance with Laboratory requirements.

### MANAGEMENT REACTION

Management, while not formally concurring, expressed general agreement with the report. Management stated that the issues presented in the report would be factored into the corrective action efforts currently underway by the University of California, Los Alamos National Laboratory, Los Alamos Site Office, and appropriate National Nuclear Security Administration (NNSA) Headquarters staff offices.

Because of the weaknesses identified, specifically those relating to computers used for processing classified data, we do not believe that Los Alamos can provide adequate assurance that classified, sensitive, or proprietary information is appropriately protected. As a consequence, we have referred our findings and recommendations to the Department’s Offices of Counterintelligence and Independent Oversight and Performance Assurance and the NNSA Office of Defense Nuclear Counterintelligence for review and appropriate action.

### Attachment

cc: Deputy Secretary  
Acting Administrator, National Nuclear Security Administration  
Under Secretary for Energy, Science and Environment  
Director, Office of Counterintelligence  
Director, Office of Independent Oversight and Performance Assurance  
Chief, Office of Defense Nuclear Counterintelligence  
Director, Policy and Internal Controls Management (NA-66)

# INSPECTION OF INTERNAL CONTROLS OVER PERSONAL COMPUTERS AT LOS ALAMOS NATIONAL LABORATORY

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# Overview

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## **INTRODUCTION AND OBJECTIVE**

Computers are used extensively in the full range of operations at the Los Alamos National Laboratory (LANL), including processing classified national security information. LANL reported an inventory of approximately 5,000 laptop and 30,000 desktop computers at the end of Fiscal Year (FY) 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. It is an expected practice that management controls over computers throughout the DOE complex remain robust and consistent.

The Office of Inspector General’s recent *Special Inquiry on Operations at Los Alamos National Laboratory (DOE/IG-0584, January 2003)* reported 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.

The objective of this inspection is to determine the adequacy of internal controls over laptop and desktop computers at LANL. While this interim report addresses some concerns relevant to desktop computers, its primary focus is on accountability of laptop computers. A broader assessment of controls over desktop and laptop computers will be included in a subsequent report.

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**OBSERVATIONS  
AND CONCLUSIONS**

We have determined through our field work to date, that internal controls over classified and unclassified laptop computers at LANL are inadequate. We identified control weaknesses that undermine confidence in LANL's ability to assure that laptop computers are appropriately controlled; are adequately safeguarded from loss or theft; and that laptop computers used to process and store classified information are controlled in accordance with existing security requirements.

Specifically, we found that:

- The "purchase card process" did not assure that required inventory controls were followed when new computers were purchased;
- Laptop and desktop computers were acquired using purchase cards after LANL prohibited such purchases without special authorization;
- LANL could not accurately account for its single user, stand-alone, classified laptop computers;
- Laptop computers reported as "unlocated" were written-off of the LANL Property Inventory without a formal inquiry;
- Thefts of laptop computers were sometimes not reported to the Office of Security Inquiries, as required; and,
- Employees were not held financially liable for the loss of their assigned Government computer(s) in accordance with LANL requirements.

Additionally, there were indicators of similar problems regarding desktop computers.

## Details of Findings

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### **PURCHASE CARD ACQUISITIONS OF COMPUTERS**

LANL's purchase card process<sup>1</sup> did not assure that required inventory controls were followed when new computers were purchased.

#### **Property Numbers**

We identified new computers that had not been assigned property numbers within the LANL Property Inventory System and instances where computer property numbers were not entered into the LANL Purchase Card Database, as required. During FYs 2001 and 2002, LANL acquired approximately 1,093 new computers, including laptops and desktops, using purchase cards. LANL's property management policy identifies computers as "sensitive items." As such, a property number must be assigned so that the item can be tracked through LANL's Property Inventory System. The property number assigned to all sensitive items acquired using a purchase card must be entered into the Purchase Card Database.

The purchase card process requires all cardholders to inform the appropriate Property Administrator when a sensitive item is ordered. There are many Property Administrators at LANL. The Property Administrator assigns a property number and provides a bar-coded property tag. The Administrator then requests that the Property Accounting Office activate the number within the LANL Property Inventory System. The purchase card holder is responsible for entering the assigned property number for the acquired sensitive item into the Purchase Card Database.

We found instances where no property numbers were assigned to computers. In other instances, we discovered that property numbers were not assigned for more than a year after the computer was acquired. We determined that the reason for these oversights was that purchase card holders had not informed Property Administrators of the computer purchases or that they had received the shipment of computers. Property numbers were not assigned at a central receiving point.

The Purchase Card Database did not contain a property number for approximately 762 (70%) computers purchased during FYs 2001 and 2002. The requirement to include the property number in the database serves to ensure that purchases of sensitive items and equipment are subject to appropriate property controls.

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<sup>1</sup> In December 2002, an External Review Team retained by LANL concluded that LANL's Purchase Card Program had internal control weaknesses that left LANL vulnerable to fraud and abuse. The Team noted that there was a failure in the Purchase Card Program to properly account for sensitive controlled property, which includes computers.

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**Inventory Reconciliation**

Computer purchases listed in LANL's Purchase Card Database could not be reconciled with computers listed in LANL's Property Inventory System, due to:

- Inaccurate or incomplete descriptions of the computers;
- Differences in cost entries for the same items listed in the Purchase Card Database and the Property Inventory System;
- Purchase transactions of multiple computers with only one assigned property number; and,
- No property numbers or incorrect property numbers entered into the Purchase Card Database.

Using a small sample of computers that were listed in the Purchase Card Database without property numbers, we determined that 23 of 26 computers, in fact, had property numbers that had been entered into the LANL Property Inventory System. However, obtaining this information was accomplished with difficulty, requiring interviews of purchase card holders, requesters, and Property Custodians<sup>2</sup>.

**CONTINUED USE OF PURCHASE CARDS**

Laptop and desktop computers were acquired using purchase cards after LANL prohibited such purchases without special authorization. This occurred following a change in LANL policy requiring such authorizations. A LANL memorandum changing LANL purchase card use procedures, effective August 26, 2002, states that all property-controlled items, which include sensitive items such as laptop and desktop computers, may not be purchased with purchase cards unless authorized and approved by the LANL Property Manager or Deputy Property Manager.

Los Alamos officials asserted that purchase card holders were not notified by management of these changes until September 11, 2002. During the period August 26 to September 11, 2002, cardholders purchased 20 laptop and desktop computers. We found that one laptop and one desktop computer were purchased after September 11, 2002. The Deputy Property Manager advised that no LANL employee had requested nor was granted approval

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<sup>2</sup> At the request of the Office of Inspector General, LANL is currently attempting to reconcile computers acquired by Purchase Cards with the LANL Property Inventory.



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for the acquisition of a laptop computer using a purchase card after August 26, 2002.

## **DISCREPANCIES IN LIST OF CLASSIFIED COMPUTERS**

LANL could not accurately account for its single user, stand-alone classified laptop computers. At our request, LANL's Office of Cyber Security provided a list of classified single user, stand-alone laptop computers that we subsequently found was inaccurate. We were told that the primary purpose of the Office of Cyber Security's list was to identify the laptop computers that were accredited for processing classified information. 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<sup>3</sup>. Accreditation is required in accordance with DOE M 471.2-2. During our inspection fieldwork, we identified laptop computers that were not on the Office of Cyber Security's list, were not accredited, and were being used to process classified information. The use of a laptop computer to process classified information before it is accredited circumvents the controls in place to ensure that national security interests are protected.

We found the following discrepancies:

- Four laptop computers being used for classified processing were not on the Office of Cyber Security's list;
- Two of the four laptop computers were not accredited;
- One of those two unaccredited computers had been used to process classified information for at least 1 ½ years prior to our fieldwork and identification of the problem (NOTE: Upon learning of the accreditation issue regarding the laptop computers, LANL officials took corrective action);
- Four laptop computers on the Office of Cyber Security's list were not on LANL's property inventory;
- One laptop computer on the Office of Cyber Security's list did not have a valid property number;

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<sup>3</sup> Accreditation of a laptop computer requires that it be operated under a current Classified Information Systems Security Plan within the responsibility of a Classified Information Systems Security Officer, or an Organizational Computer Security Representative.

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- Three laptop computers had been excessed, but were still on the Office of Cyber Security’s list; and
  - Two laptop computers on the Office of Cyber Security’s list were no longer being used for classified processing. We learned that they should have been excessed.

We observed that these discrepancies could have been identified by the Office of Cyber Security through a physical inventory of classified laptop computers. LANL’s Property Management Manual requires that a physical inventory and reconciliation of “sensitive property numbered Government items” be conducted annually. Office of Cyber Security officials advised us that inventories are conducted using a self-assessment process, whereby each division self-reports on its inventory of classified media, including classified laptop computers. In view of the discrepancies we identified, the self-assessment process for conducting inventories of classified computers was not sufficient to assure strict accountability for classified laptop computers.

## **UNLOCATED COMPUTERS**

Laptop computers reported as “unlocated” were written-off of the LANL Property Inventory without a formal inquiry. Unlocated computers, while not specifically defined in LANL’s property policy, are defined by LANL as those that cannot be found following a property inventory at the end of the fiscal year. For FYs 2001 and 2002, LANL reported 22 laptop computers as unlocated<sup>4</sup>. These computers were purchased at a cost of \$80,778. Although LANL’s Office of Security Inquiries (OSI) conducted inquiries into “lost” and “stolen” items<sup>5</sup>, including laptop computers, no formal inquiry was conducted on these “unlocated” laptop computers.

For example, at the end of its FY 2002 inventory, Protection Technology Los Alamos (PTLA), the physical security subcontractor at LANL, identified four laptop computers as unlocated. PTLA took action to have the four laptop computers, which were purchased at a cost of \$17,705, written-off of the property inventory and no OSI inquiry was conducted. Aspects of PTLA’s mission are classified and highly sensitive. PTLA

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<sup>4</sup> The January 2003 Office of Inspector General Special Inquiry reported that during FYs 2000, 2001, and 2002, 42 laptop computers purchased at a cost of \$151,821 were lost, stolen, or unlocated.

<sup>5</sup> Prior to January 2002, OSI conducted inquiries of stolen items only.

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officials advised that the computers were not used for classified work.

## **REPORTING OF STOLEN LAPTOP COMPUTERS**

Thefts of laptop computers were sometimes not reported to LANL OSI, as required<sup>6</sup>.

We determined that three stolen laptop computers at LANL were not reported to OSI. The computers disappeared from a “drop-point” at Technical Area 54 in June 2001. OSI officials advised that they had no record of this incident and had not conducted an inquiry.

As early as November 1998, LANL’s policy disallowed the use of drop-points for delivery of laptop computers. Instead, policy required that laptop computers be picked-up by the customer at the Customer Service Center. We learned that this policy stemmed from an understanding that the use of drop-points increased the potential for theft.

## **FINANCIAL LIABILITY**

LANL employees were not held financially liable for the loss of their assigned Government computers. In addition to the 22 unlocated laptop computers reported for FYs 2001 and 2002, LANL reported 16 laptop computers, purchased at a cost of \$53,267, as lost; 10 laptop computers, purchased at a cost of \$32,899, as stolen; and 4 laptop computers, purchased at a cost of \$11,589, as possible theft.

The LANL Property Management Manual states that when equipment is lost, damaged, destroyed, or stolen, the Government may hold the property custodian financially liable for repair or replacement if it is proven that the cause resulted from willful misconduct or gross negligence. LANL’s Property Manager, Deputy Property Manager, and former Purchase Card Administrator advised that for the past two fiscal years no one has been held financially liable for any unlocated, lost, or stolen computers.

## **SUMMARY**

In our judgment, this review identified significant weaknesses in LANL management controls over laptop computers. Laptop computers have been acquired using purchase cards and were not assigned property numbers or bar-code tags, or were delayed in receiving such control numbers. Laptop computers not accredited

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<sup>6</sup> The January 2003 OIG Special Inquiry found that LANL had a substantial degree of dysfunction in its communication and assignment of responsibilities for the handling of property loss and theft concerns.

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to process classified information were, in fact, used to do so. Stolen laptop computers were not reported to appropriate authorities and computers reported as unlocated were written-off of the LANL property inventory without a formal inquiry.

Because of these weaknesses, we were especially concerned about the control over classified, sensitive, and proprietary information. As a consequence, our findings and recommendations were referred to the Department's Offices of Counterintelligence and Independent Oversight and Performance Assurance and to the National Nuclear Security Administration's (NNSA's) Office of Defense Nuclear Counterintelligence for review and appropriate action.

## **RECOMMENDATIONS**

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

1. Officials take prompt action to ensure that all property and security policies regarding computers are fully implemented;
2. Conduct a full and complete accounting of laptop computers at LANL and strengthen security controls over laptop computers used to process classified information;
3. Purchase card holders adhere to LANL policies regarding the use of purchase cards for the acquisition of sensitive items, and that an appropriate system of checks and balances is implemented to ensure compliance;
4. Officials initiate a formal inquiry when computers are reported as unlocated;
5. Officials report all lost and stolen computers to the appropriate Laboratory organization; and
6. Employees are held financially liable for lost, stolen, and unlocated computers, in accordance with the Laboratory's Property Management Manual.

## **MANAGEMENT COMMENTS**

Management, while not formally concurring, expressed general agreement with the report. Management stated that the issues presented in the report would be factored into the corrective action efforts currently underway by the University of California, Los

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Alamos National Laboratory, Los Alamos Site Office, and appropriate NNSA Headquarters staff offices.

**INSPECTOR  
COMMENTS**

Management has acknowledged the existence of internal control weaknesses at LANL. During recent discussions with University of California, LANL, and NNSA officials, management described corrective actions being implemented to address the recommendations in our report.

## Appendix A

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### **SCOPE AND METHODOLOGY**

The fieldwork portion for this interim report was conducted during the period December 2002 to March 2003. This review included interviews with DOE officials from the Albuquerque Service Center and officials from LANL, PTLA and other LANL subcontractors. We reviewed applicable policies and procedures pertaining to sensitive property and property management, including:

- Department of Energy Property Management Regulations, Title 41 Code of Federal Regulations, Chapter 109.
- “LANL Property Management Manual.”

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

APR 21 2003

MEMORANDUM FOR Christopher R. Sharpley  
Acting Assistant Inspector General  
for Inspections

FROM: Anthony R. Lane   
Associate Administrator  
for Management and Administration

SUBJECT: Comments to LANL Computer Controls Draft  
Inspection Report

The Office of Inspections conducted an inspection to determine the adequacy of internal controls over laptop and desktop computers at Los Alamos National Laboratory. NNSA has reviewed the draft report and will have the facts, as presented, factored into the corrective action efforts currently underway by the University of California, Los Alamos National Laboratory, Los Alamos Site Office, and appropriate NNSA Headquarters staff offices. Additionally, NNSA will factor the corrective actions associated with the draft report's recommendations into the ongoing efforts. NNSA appreciates all of the work that the Inspector General has accomplished through their Audit, Investigations, Inspections, Special Inquiry, and Management Referral functions related to the Internal Controls problems the Laboratory.

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

cc: Ralph Erickson, Manager, Los Alamos Site Office  
Robert Braden, Senior Procurement Executive, NA-63  
David Marks, Director, Field Financial Management, SvcCen/NV



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