

GAO

Report to the Chairman, Committee on
Science and Technology, House of
Representatives

June 2007

PROPERTY MANAGEMENT

Lack of Accountability and Weak Internal Controls Leave NASA Equipment Vulnerable to Loss, Theft, and Misuse





Highlights of [GAO-07-432](#), a report to the Chairman, Committee on Science and Technology, House of Representatives

Why GAO Did This Study

For years, GAO and others have reported that the National Aeronautics and Space Administration (NASA) does not maintain effective control over the \$35 billion of property, plant, and equipment (PP&E) and materials that it reports on its financial statements. GAO's report, the first in a planned series, addresses whether NASA's control environment and internal controls over NASA-held equipment provide reasonable assurance that (1) these assets are not vulnerable to loss, theft, and misuse and (2) all equipment costs are appropriately recorded in the agency's financial statements. GAO evaluated the design of NASA's property management controls by reviewing agencywide and local policies, obtaining equipment loss reports for all NASA centers, and evaluating actions taken to hold employees accountable. To confirm its understanding of the design of NASA's property controls, GAO conducted on-site visits at two NASA centers and interviewed property management officials at the remaining seven NASA centers.

What GAO Recommends

GAO is recommending 10 actions aimed at strengthening users' accountability for equipment loss and improving internal controls over equipment. NASA concurred with 8 of GAO's 10 recommendations and partially concurred with 2. NASA also provided technical comments that have been incorporated as www.gao.gov/cgi-bin/getrpt?GAO-07-432.

To view the full product, including the scope and methodology, click on the link above. For more information, contact McCoy Williams at (202) 512-9095 or williamsm1@gao.gov.

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Lack of Accountability and Weak Internal Controls Leave NASA Equipment Vulnerable to Loss, Theft, and Misuse

What GAO Found

Over the past 10 years, NASA reported that it lost over \$94 million of equipment. The high equipment losses are due mainly to a weak internal control environment. Although some equipment was located during subsequent physical inventories, NASA's failure to keep track of these items leaves them vulnerable to theft and misuse. When faced with high equipment losses, instead of tightening controls, NASA raised its threshold for tracking and controlling equipment. Also, NASA management was unresponsive to prior equipment management recommendations, frequently did not investigate equipment losses, and was reluctant to hold employees accountable for loss—as shown in the following examples.

Explanations Provided for Equipment Loss in Which No One Was Held Accountable		
Equipment description	Equipment value (dollars)	Explanation provided
Desktop computer and laser printer	4,855	My wife needed a computer at home to perform her work as a real estate broker so I checked one out from the surplus stock available. I turned the computer back in when she was done using it but never received a receipt.
Laptop computer	4,265	This computer, although assigned to me, was being used on board the International Space Station. I was informed that it was tossed overboard to be burned up in the atmosphere when it failed.
Various missing property, 65 items	850,321	A thorough and reasonable search was conducted but we were unable to locate the missing property. In general, the missing items consist of older equipment that has been replaced or is no longer necessary for standard operations.

Source: GAO analysis of NASA's fiscal year 2006 equipment loss reports.

NASA also lacks the integrated systems and processes needed to provide reasonable assurance that equipment purchases are recorded in the property management system. As a result, over the past 10 years, NASA reported that it failed to enter \$199 million of equipment purchases into its property management system. Equipment not tracked in NASA's property management system is not subject to the same physical inventory procedures as other controlled equipment items and, as a result, is at much higher risk of being lost or stolen without NASA being aware of it. Because NASA uses the amounts recorded in its property records as the basis for reporting equipment amounts in its financial statements, NASA did not report the full cost of this equipment on its financial statements. Although NASA expects its system modernization effort to improve controls for ensuring that equipment purchases are recorded in the property system, NASA cannot rely on technology alone to solve its equipment management problems. These problems are deeply rooted in an agency culture that does not demand accountability or fully recognize the value of effectively managing government assets.

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Abbreviations

ASTM	American Society of Testing and Materials
COTS	commercial off-the-shelf
ECN	equipment control number
ERP	enterprise resource planning
FMR	Federal Management Regulation
GSA	General Services Administration
IAM	integrated asset management
IEMP	Integrated Enterprise Management Program
LMD	Logistics Management Division
NASA	National Aeronautics and Space Administration
NEMS	NASA Equipment Management System
NPD	NASA Policy Directive
NPR	NASA Procedures and Requirements
OCFO	Office of the Chief Financial Officer
OIG	Office of the Inspector General
PDA	personal digital assistant
PP&E	property, plant, and equipment
RAIF	Research Aircraft Integration Facility
SEMO	Supply Equipment Management Officer

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United States Government Accountability Office
Washington, DC 20548

June 25, 2007

The Honorable Bart Gordon
Chairman
Committee on Science and Technology
House of Representatives

Dear Mr. Chairman:

For years, we and others have reported that the National Aeronautics and Space Administration (NASA) has not maintained effective control over the \$35 billion of property, plant, and equipment (PP&E) and materials that it reports on its financial statements. More specifically, NASA is not able to link the money it spends on the purchase or construction of its property to discrete property items and, therefore, is unable to provide independent control over these assets. Concerned that weaknesses in NASA's internal controls over PP&E and materials have made these assets vulnerable to loss, theft, and misuse, you asked us to determine whether NASA maintains appropriate accountability over its physical assets and properly accounts for all costs associated with the acquisition of its physical assets. NASA's PP&E and materials are physically located throughout the world, at locations including NASA centers, contractor facilities, other private or government-run facilities, and in space. In addition, the processes and controls over NASA's PP&E and materials vary depending on a wide variety of factors including the property's value, useful life, purpose, and location. As agreed with your staff, given the scope of the work required to audit the various types of NASA property, we plan to issue a series of reports that will address issues unique to each property category.

This first report focuses on equipment items held by NASA. Specifically, this report addresses whether NASA's control environment and internal controls over NASA-held equipment provide reasonable assurance that (1) these assets are not vulnerable to loss, theft, and misuse and (2) all equipment costs are appropriately recorded in the agency's financial management system and subsequently reported on its financial statements. NASA defines equipment to include special tooling and test equipment and agency-peculiar property, such as the Space Shuttle, rockets, engines, and scientific components unique to NASA space

programs. According to its fiscal year 2006 financial statements, NASA reported that it owned \$623 million¹ in NASA-held equipment. In addition to the amounts reported on its financial statements, in accordance with NASA's accounting policy, the agency also purchases hundreds of millions of dollars of equipment each year that it does not report on its financial statements. Although not reported in the agency's financial statements, it is NASA's policy to track and control equipment that meets the agency's definition of controlled property. NASA defines controlled equipment as (1) sensitive equipment—items that are pilferable or possibly hazardous—with an acquisition cost of \$500 or more; (2) all weapons and hazardous devices, regardless of acquisition cost; and (3) all nonsensitive equipment with an acquisition cost of \$5,000 or more that has an estimated service life of 2 years or more, which will not be consumed or expended as part of an experiment.

To determine whether NASA's control environment and internal controls over NASA-held equipment provide reasonable assurance that these assets are not vulnerable to loss, theft, and misuse, we (1) evaluated management's responsiveness to observations and recommendations made in prior audit reports and internal management reports, (2) documented agency-wide trends in equipment losses and evaluated actions taken by management to hold employees accountable, and (3) evaluated the design of NASA's internal controls by reviewing and analyzing agencywide and local equipment management policies and procedures and comparing NASA's policies and procedures with federal and other standards for controlling property. We also interviewed the agency's top property management officials to obtain their views on NASA's property management policies and processes and previously identified property management weaknesses. We conducted walkthroughs at two NASA centers and interviewed property management officials at the remaining seven NASA centers to confirm our understanding of the design of NASA's property management process and controls. To determine whether equipment items purchased by NASA are properly recorded in NASA's property management system and, therefore, subject to physical inventory inspection, we selected a statistical sample of equipment purchases made during fiscal years 2005 and 2006 that, based on our analysis, did not appear to be recorded in NASA's property management system. We also obtained and analyzed other internal property management reports.

¹This amount represents the reported book value of NASA-held equipment, which is the reported acquisition cost of \$2.3 billion less accumulated depreciation of \$1.6 billion.

To determine whether equipment costs are appropriately recorded in the agency's financial management system and subsequently reported on its financial statements, we reviewed a nonrepresentative selection of equipment purchases and traced these transactions to their source documents and assessed whether all costs related to the purchases we reviewed were accurately recorded in the property management system. We interviewed officials with the Office of the Chief Financial Officer (OCFO) and property officials and documented NASA's process for recording equipment transactions in the agency's financial management system and general ledger. We determined that the data were sufficiently reliable for the purpose of this report. We performed our work from April 2006 through March 2007 in accordance with U.S. generally accepted government auditing standards. Details on our objective, scope, and methodology are in appendix I.

We requested comments on a draft of this report from the NASA Administrator or his designee. Written comments from the Deputy Administrator are reprinted in appendix II. NASA also provided separate technical comments, which have been incorporated into our report as appropriate.

Results in Brief

Over the past 10 years, NASA has reported that it lost over \$94 million in equipment and for 6 of those years, its equipment loss rate has exceeded its annual performance goal of 0.5 percent. Although, according to NASA, some of this equipment was eventually located during subsequent physical inventories,² NASA's failure to keep track of these items leaves them vulnerable to theft and misuse. The high equipment losses are due, in large part, to a weak internal control environment. NASA's internal control environment is characterized by management's (1) lack of responsiveness to prior equipment management recommendations, (2) reluctance to hold employees accountable for equipment loss, and (3) decision to remove from control (decontrol) millions of dollars of equipment, when faced with equipment losses that exceeded the agency's annual performance goal. Instead of tightening controls, as recommended by the agency's 2002

²During the course of our audit, NASA was unable to provide us with information we requested on the total amount of equipment located during subsequent inventories for the 10-year period. In technical comments on a draft of this report, NASA stated the agency recovered \$34.5 million in previously lost equipment over the 10-year period. However, the agency did not provide documentation to support these amounts, and we were unable to verify the reliability of these reported recovery amounts.

equipment loss study, when faced with equipment losses, NASA raised its threshold for tracking and controlling nonsensitive³ equipment items from \$1,000 to \$5,000. This essentially eliminated control over all nonsensitive equipment costing less than \$5,000. In addition, NASA has yet to address previously reported weaknesses in its process for reviewing and investigating equipment losses or strengthen its policy related to users' accountability for equipment losses. As a result, NASA employees are rarely held accountable for equipment losses. Of the 1,136 equipment loss reports completed during fiscal year 2006 that NASA provided to us, only 282—or about 25 percent—were investigated. Of those investigated, only 2 reports indicated that employees would be disciplined or held financially accountable.

Weaknesses in the design and operation of NASA's systems, processes, and policies over the receipt and acceptance of equipment do not provide reasonable assurance that equipment purchases that meet NASA's definition of controlled property are routinely entered into NASA's property management systems and, therefore, subject to physical inventory control. Specifically, NASA's equipment management policy allows employees to bypass the agency's central receiving function—which should serve as the primary control point for receipt and acceptance—and does not limit the amount or type of equipment purchases that may be sent directly to an end-user. Further, end-users are not adequately trained and, therefore, do not take the steps necessary to ensure that equipment is entered into the property management system. Finally, the agency lacks an integrated financial management system that could mitigate the problems associated with bypassing central receiving. As a result, over the past 10 years, NASA reported⁴ that it failed to enter \$199 million of controlled equipment purchases into its property management system. In addition, we estimated that NASA failed to track at least another \$13 million of controlled equipment purchased during fiscal years 2005 and 2006, which represents approximately 4 percent of NASA's total reported controlled equipment purchased during the same period. Equipment not tracked in NASA's property management system is not subject to the same physical inventory procedures as other controlled equipment items and as a result, is at much higher risk of being lost or

³NASA defines nonsensitive equipment as items that are not pilferable or possibly hazardous.

⁴NASA, *Agency Annual Report of Controlled Equipment-Equipment by Center* for fiscal years 1997 through 2006.

stolen without NASA being aware of it. Although NASA plans to implement a new integrated asset management (IAM) system in October 2007, the new system, as currently planned, will not significantly improve NASA's ability to provide reasonable assurance that all equipment purchases are appropriately recorded in the agency's property management system. Based on our assessment of NASA's IAM system requirements and other planning documents, NASA's planning effort thus far has been focused primarily on equipment that it reports on its financial statements. According to NASA officials, for external financial reporting purposes, IAM will identify the cost of capital equipment as those costs are incurred. However, for controlled equipment that NASA does not report on its financial statements, the system is not being designed with front-end controls that would identify or flag purchases as equipment when the item is ordered. Instead, NASA will continue to rely heavily on end-users to ensure that equipment is entered into the property management system after it has been received.

In accordance with NASA's accounting policy, NASA reports only equipment items valued at \$100,000 or more and with a useful life of 2 years or more on its financial statements. Although these items represent only a portion of NASA's total equipment inventory, NASA is unable to accurately account for and report the value of this equipment. Because NASA uses the amounts recorded in its property records as the basis for reporting equipment amounts in its financial statements, the weaknesses in NASA's receipt and acceptance process also affect the agency's financial reporting capabilities. As a result, during fiscal years 2005 and 2006, NASA failed to accurately account for and report at least \$2.3 million of the total equipment items purchased that cost \$100,000 or more. In addition, although NASA often purchases components for the purpose of fabricating an equipment item, it does not have an effective way to identify and link the cost of the components with the end-item being produced. As a result, NASA often does not capture and report the full cost of these items on its financial statements. Without the systems and processes needed to identify all equipment costs as they are incurred, NASA must continue to rely on a retrospective review of transactions entered into NASA's property management system to determine which costs should be capitalized—a process that has proven to be ineffective.

We are making 10 recommendations aimed at strengthening NASA's internal control environment and improving its property management controls. These recommendations are focused on designing an effective system of controls that includes, among other things, strengthening agencywide policy on user accountability for equipment loss, and improved financial and physical control over equipment. In written

comments, which are reprinted in appendix II, NASA concurred with 8 of our 10 recommendations and partially concurred with the remaining 2 recommendations related to (1) strengthening NASA's policy on user accountability for equipment loss and (2) defining and enforcing reasonable workload standards for property custodians. In its comments, NASA also stated that many of GAO's recommendations related to efforts currently under way.

With respect to our recommendation related to strengthening NASA's policy on user accountability, NASA disagreed with the portion of that recommendation that would require employees to acknowledge in writing, for all personal use equipment, their responsibility for maintaining NASA equipment. Instead, NASA cited plans to implement other measures to reinforce user accountability requirements. These measures, if effectively implemented, would help establish user accountability for lost or missing property, which was the intent of our recommendation. In addition, although NASA agreed with the intent of our recommendation related to defining and enforcing reasonable workload standards for property custodians, the agency expressed concern that implementation of such a recommendation would be difficult to achieve. We continue to believe that reasonable parameters could be established and are a critical step in ensuring that the custodians are able to effectively carry out their responsibilities. NASA also provided separate technical comments, which have been incorporated into our report as appropriate.

Background

NASA's mission is to pioneer the future in space exploration, scientific discovery, and aeronautics research. To accomplish its mission, NASA procures, fabricates, and maintains billions of dollars of PP&E and operating materials and supplies. According to its fiscal year 2006 financial statements, NASA reported \$35 billion in PP&E and operating materials and supplies, which represents more than 77 percent of the agency's total assets. In accordance with NASA's capitalization policy, however, the amount reported on NASA's financial statements reflects PP&E and operating materials and supplies with a unit cost of \$100,000 or more and a useful life of 2 years or more. NASA also purchases and expenses billions of dollars of equipment and materials each year, which are not reflected in the amount reported above.

NASA's ability to effectively manage its PP&E and operating materials and supplies will continue to be important going forward. On January 14, 2004, the President announced a new exploration policy—*A Renewed Spirit of Discovery: The President's Vision for U.S. Space Exploration (Vision)*—

that directs NASA to focus its efforts on returning humans to the moon by 2020 in preparation for future, more ambitious missions. Over the next two decades NASA plans to spend nearly \$230 billion implementing the new exploration policy. Implementing the *Vision* will require that the agency procure, fabricate, and maintain significant amounts of PP&E and operating materials and supplies. As such, it is important that the agency have the processes, systems, and controls in place that are needed to manage and control this property.

NASA's Equipment Management Policies

NASA's PP&E and materials are physically located at many locations throughout the world, including NASA centers, contractor facilities, other private or government-run facilities, and in space. As discussed previously, this report focuses specifically on NASA-held equipment. According to its fiscal year 2006 financial statements, NASA reported that it owned \$623 million⁵ in NASA-held capital equipment. NASA defines capital equipment, in accordance with its capitalization criteria, to include special tooling and test equipment and agency-peculiar property, such as the Space Shuttle, rockets, engines, and scientific components unique to NASA space programs. However, according to NASA's equipment management policy, NASA also tracks and controls certain equipment such as laptop computers, cameras, cell phones, and other items that fall under its \$100,000 capitalization threshold but meet its definition of controlled equipment. NASA defines controlled equipment as (1) sensitive equipment—items that are pilferable or possibly hazardous—with an acquisition cost of \$500 or more; (2) all weapons and hazardous devices, regardless of acquisition cost; and (3) all nonsensitive equipment with an acquisition cost of \$5,000 or more that has an estimated service life of 2 years or more, and that will not be consumed or expended as part of an experiment. NASA defines noncontrolled items as sensitive items under \$500 and nonsensitive items under \$5,000.

NASA's equipment management policy requires that the agency assign a unique equipment control number (ECN), as shown in figure 1, to each controlled equipment item and that NASA use the NASA Equipment Management System (NEMS) to track and control these items.

⁵This amount represents the reported book value of NASA-held equipment, which is the reported acquisition cost of \$2.3 billion less accumulated depreciation of \$1.6 billion.

Figure 1: NASA Equipment Control Number (ECN) Tag Attached to Controlled Property



Source: GAO.

NEMS contains information on controlled equipment such as the item's name, purchase price, manufacturer's information, item location and condition, property custodian, and end user and serves as the basis for performing periodic physical inventory procedures.

NASA's Property Management Organizational Responsibilities

According to NASA's property management policy⁶ and procedural guidance,⁷ property management at NASA involves five key players—the Logistics Management Division (LMD), the supply equipment management officer (SEMO), property custodians, end users, and central receiving. A description of their roles and responsibilities is as follows:

- The LMD, which is located at NASA headquarters in Washington, D.C., is responsible for establishing policies and procedures that govern the agency's equipment management activities. The LMD is also responsible for (1) assisting NASA centers⁸ in the development and operation of internal processes, procedures, and systems to ensure their compatibility with agency programs; (2) establishing necessary agency performance measures and reports on the overall

⁶NASA, *Equipment Management*, NASA Policy Directive (NPD) 4200.1B (rev. Jan. 23, 2006).

⁷NASA, *Equipment Management Procedural Requirements*, NASA Procedures and Requirements (NPR) 4200.1F (Nov. 14, 2006).

⁸NASA activities are performed largely at its headquarters location in Washington, D.C., and its nine centers, as follows: Ames Research Center, Dryden Flight Research Center, Glenn Research Center, Goddard Space Flight Center, Johnson Space Center, Kennedy Space Center, Langley Research Center, Marshall Space Flight Center, and Stennis Space Center.

implementation of equipment management programs; (3) conducting reviews and assessments of equipment management activities; and (4) defining training requirements to ensure properly trained property personnel across the agency.

- The SEMO is responsible for managing the centers' equipment program—providing functional management, leadership, and necessary resources to ensure the implementation of an effective equipment management program. The SEMO is also responsible for (1) ensuring that loss, damage, or destruction of equipment is promptly reported, investigated, and reviewed to prevent recurrences, and taking corrective actions as recommended by the Property Survey Officer or Board; (2) implementing the necessary equipment control procedures to ensure proper accountability for center equipment; (3) ensuring that prescribed physical inventories of controlled equipment are taken and adjustments are made to property and financial records; and (4) establishing a process to ensure that all personnel associated with the utilization of government equipment receive documented, up-to-date property users training (with special emphasis on the consequences of poor stewardship and negligent use).
- Property custodians are designated by the Division Director or chief for each property management area or program. Full-time property custodians may be appointed by the SEMO. Custodians' responsibilities include maintaining records for all controlled equipment assigned to them; educating employees that equipment is used for official purposes only; reporting untagged controlled equipment including fabricated equipment found in their assigned area to the SEMO, and assisting in identifying the circumstances relating to untagged items; cooperating in physical inventories and assisting in follow-up actions; identifying controlled equipment no longer needed and coordinating disposition with users; ensuring that missing or stolen equipment is investigated, documented, and reported promptly to the center logistics and property management and center security office; assigning sensitive items to a primary user; and ensuring that prior to retirement, transfer, or resignation of an employee, all equipment is properly transferred.
- An individual end user has a duty to protect and conserve government property and should not use such property, or allow its use, for other than authorized purposes. The user should also report any missing or untagged equipment, transfer, location change, or user change of equipment to the property custodian immediately. Other responsibilities include notifying the property custodian, supervisor, and the center security officer immediately if theft of government

property is suspected. The user should also ensure that equipment is used only in pursuit of approved NASA programs and projects and notify the property custodian of equipment not actively being used for determination of proper disposition. The individual is responsible for ensuring that equipment is returned through the property custodian when no longer needed.

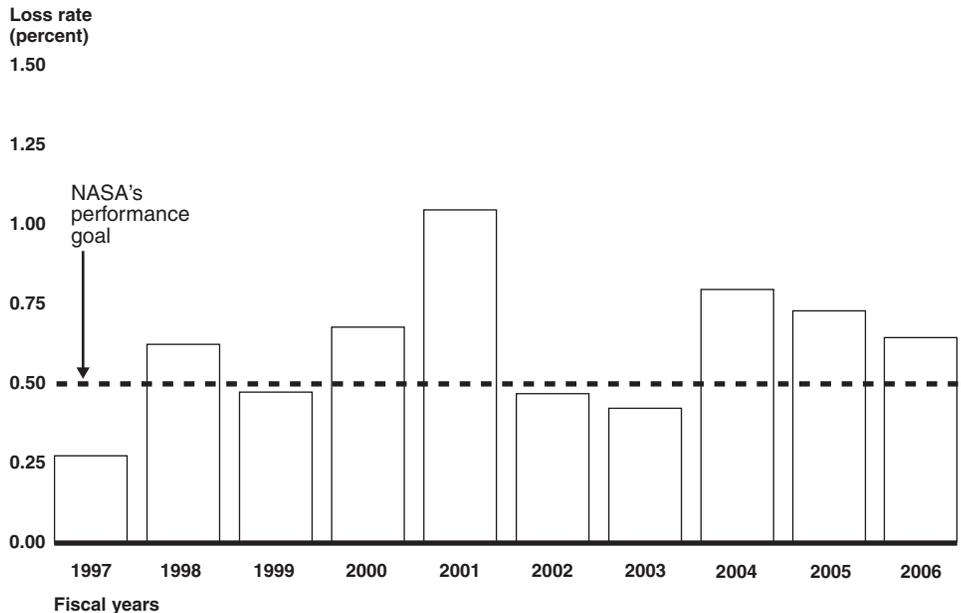
- Each center is required to establish a centralized receiving location for processing equipment purchases. The equipment, along with receiving documents, is delivered to a centralized receiving warehouse location, which may be managed by NASA contractors. Upon receipt, warehouse personnel inspect the equipment for possible damage or defects and ensure that the items received are consistent with the requirements of the acquisition documents before accepting the items. Using receiving documents and, when necessary, by consulting with the end user, warehouse officials determine whether the equipment meets NASA's definition of controlled property and if so, they attach an ECN tag and enter the equipment into NEMS. According to NASA's property management guidance, employees may bypass the central receiving warehouse and have equipment shipped directly to the end user, or NASA employees may also purchase equipment directly from local merchants using a government purchase card. In such cases, the employee receiving the equipment is required to notify the center's central receiving warehouse officials that they have received or purchased equipment that should be controlled in NEMS.

Lack of Accountability and Weak Internal Controls Leave NASA Equipment Vulnerable to Loss, Theft, and Misuse

Over the past 10 years, NASA has reported that it has lost over \$94 million in equipment. Although, according to NASA, some of this equipment was eventually located during subsequent physical inventories,⁹ NASA's failure to keep track of these items leaves them vulnerable to theft and misuse. As shown in figure 2, NASA's reported equipment loss rate exceeded its annual performance goal of 0.5 percent for 6 of the past 10 years—hitting a high of 1.046 percent in fiscal year 2001.

⁹During the course of our audit, NASA was unable to provide us with information we requested on the total amount of equipment located during subsequent inventories for the 10-year period. In technical comments on a draft of this report, NASA stated the agency recovered \$34.5 million in previously lost equipment over the 10-year period. However, the agency did not provide any documentation to support these amounts, and we were unable to verify the reliability of the reported recovery amounts.

Figure 2: NASA's Equipment Loss Rates for Fiscal Years 1997 through 2006



Source: GAO analysis of NASA data.

According to NASA's own studies and our assessment of the agency's equipment management policies, procedures, and control environment, the high equipment loss rates NASA has reported over the past decade are due, in large part, to a general lack of accountability and weak internal control environment. In addition, weaknesses in NASA's financial management system and property management processes and controls do not provide reasonable assurance that equipment is routinely tracked and controlled in NASA's property management system. As a result, over the past 10 years, NASA also reported¹⁰ that it did not enter \$199 million of controlled equipment purchases into the agency's property management system. In addition to the \$199 million of equipment NASA reported, we estimated that NASA failed to track at least another \$13 million of controlled equipment purchased during fiscal years 2005 and 2006—leaving these items vulnerable to theft or misuse, which represents approximately 4 percent of NASA's total reported controlled equipment purchased during the same period. Because this equipment was not

¹⁰NASA, *Agency Annual Report of Controlled Equipment—Equipment by Center* for fiscal years 1997 through 2006.

tracked in NASA's property management system, it is not subject to the same physical inventory procedures as other controlled equipment items and, therefore, is at much higher risk of being lost or stolen without NASA being aware of it.

Weaknesses in NASA's Internal Control Environment Continue to Drive High Equipment Loss Rates

According to GAO's standards for internal control¹¹, an agency's internal control environment is essentially the organizational climate or culture in which job processes and internal controls operate and is shaped by the values maintained and demonstrated by management through its written policies, words, and actions. NASA's internal control environment is characterized by management's (1) lack of responsiveness to prior equipment management recommendations, (2) reluctance to hold employees accountable for equipment loss, and (3) decision to remove from control (decontrol) millions of dollars of equipment, when faced with high equipment loss rates.

NASA Management Was Unresponsive to Prior Equipment Management Recommendations

Although we and other auditors have reported for decades that weaknesses in NASA's equipment management systems, processes, and internal control environment leave NASA vulnerable to loss, theft, and misuse, NASA has done little to address the weaknesses identified. Many of the issues we raise in this report mirror those we reported on as far back as 1976, including failure on the part of NASA management to address known weaknesses in its property management control environment. More recently, in 1998, NASA's Office of Inspector General (OIG) reported¹² that NASA frequently did not investigate the loss of equipment, as required by NASA's equipment management policy. Further, the OIG reported that when NASA did investigate equipment losses, it rarely imposed disciplinary actions or pursued monetary recovery, although, in many cases, according to the OIG report, the property loss resulted from employee negligence. As discussed later, NASA has yet to address these weaknesses.

Although a 2002 NASA study¹³ identified the agency's weak internal control environment as the underlying cause of high equipment loss rates, NASA management has yet to establish an effective control environment and

¹¹GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD 00-21.3.1 (Washington, D.C.: November 1999).

¹²NASA OIG, *Assessment of NASA Property Survey Boards and Officers Final Report*, G-96-020 (Washington, D.C., February 1998).

¹³NASA, *NASA Headquarters Equipment Loss Analysis* (Washington, D.C., Aug. 22, 2002).

make property accountability a top priority. In response to high 2001 equipment loss rates, NASA conducted this equipment loss review in August 2002 to (1) determine what factors led to the excessive equipment losses and (2) evaluate the possibility of raising its accountability threshold—which, at the time, was set at \$1,000. According to the 2002 equipment loss study, NASA’s high equipment loss rates were driven by weaknesses in NASA’s control environment, which stemmed from a general lack of emphasis on equipment accountability and control. For example, the study cited factors such as a lack of security measures to prevent equipment theft, failure on the part of management to hold employees accountable for lost items, and span of control issues that made it difficult for property custodians to effectively track and manage equipment items.

To address these weaknesses, the study recommended a number of property management improvements including (1) instituting a variety of initiatives aimed at increasing property accountability awareness, (2) replacing the triennial inventory process with a biennial process, (3) reducing the amount of equipment assigned to property custodians, and (4) strengthening the agency’s policy on users’ accountability for lost items. However, according to NASA’s LMD director, the recommendations included in the 2002 equipment loss study were not so much recommendations as they were suggestions for improvement. He stressed that implementation of these recommendations by the centers was optional. Consequently, while some of the centers instituted initiatives aimed at increasing property accountability awareness, only four of NASA’s nine centers converted from a triennial to either a biennial or annual inventory schedule and none of the centers addressed the issue of reducing the amount of property assigned to property custodians.

According to NASA’s property management guidance, property custodians play a key role in controlling equipment at NASA. However, NASA’s 2002 equipment loss study stated that property custodians were given responsibility for too many equipment items, making it difficult for them to effectively track and manage the items. Based on our analysis of NASA’s fiscal year 2005 and 2006 property data, the number of equipment items assigned to each property custodian varied widely—with some property custodians responsible for as many as 4,000 items and others responsible for as few as one item. It is important to note that for most, the duties of property custodians are in addition to their primary job responsibilities. For example, at one center, a full-time engineering technician is also the property custodian for about 4,000 pieces of equipment. At another center,

an administrative program analyst is also responsible for managing about 1,200 pieces of equipment.

According to NASA officials, NASA's new property management guidance, issued in November 2006, strengthened the agency's policy on user accountability for equipment loss. However, NASA officials were unable to provide us the specific changes to the guidance that they believed strengthened the policy. Based on our review, the current language in NASA's equipment management guidance related to user accountability is the same as the previous version, and we believe the policy could be strengthened. For example, although NASA's equipment loss policy provides the authority to take disciplinary action or hold employees financially accountable for equipment losses that result from employee negligence, as discussed later, the policy does not clearly describe the minimum level of care that NASA expects employees to exercise over equipment. According to the LMD director, negligence is difficult to define and, therefore, each center should have the flexibility to define it as they see fit. As discussed further below, GAO does not share this view.

Management Does Not Enforce Accountability for Equipment Losses

One of the most effective ways for management to communicate the importance of maintaining accountability over government property is to hold employees accountable for equipment losses that result from negligence.¹⁴ However, even when employee negligence may have led to equipment loss, we found that most centers did not hold employees accountable for equipment loss. According to NASA's property management policy and procedural guidance, when accountable government property is lost, damaged, or destroyed, the user is to immediately notify his or her property custodian and initiate the preparation of NASA Form 598—Property Survey Report—by providing a description of the circumstances surrounding the loss of property. According to NASA's policy, each survey report will be fully investigated and written findings provided by an independent Property Survey Board or Officer.¹⁵ However, we found that equipment losses were not always reported promptly and when reported, losses were not always

¹⁴An accepted definition of negligence is a determination, after a review of all the relevant facts, that a person who had a duty of care toward property failed to exercise the level of care that a reasonable person would have exercised under the circumstances and that failure caused the loss or damage of property.

¹⁵Each center director is responsible for appointing a Property Survey Officer and the Property Survey Board.

investigated. Of the 1,136 survey reports initiated during fiscal year 2006,¹⁶ 465, or 41 percent, involved equipment lost in fiscal years 2005 and prior. In addition, of the 1,136 survey reports NASA provided us, only 282—or about 25 percent—were investigated by either a Survey Board or Officer. For the remaining 854 survey reports, there was no evidence that these reports were investigated as required by NASA policy. Of those investigated, only 2 reports indicated that employees would be disciplined or held financially accountable.

Although NASA's equipment loss policy provides the authority to take disciplinary action or hold employees financially accountable for equipment losses that result from employee negligence, as discussed previously, the policy does not clearly describe the minimum level of care that NASA expects employees to exercise. According to NASA's property management policy guidance, NASA employees have the duty to protect and conserve government property but the policy does not provide any additional information about what it means to protect or conserve property or describe the minimum level of care that it expects employees to exercise over equipment. For example, NASA does not provide guidance such as (1) assigned government property should not be stored in an unlocked vehicle or (2) laptop computers should be stored in a locked room or otherwise secured in such a way to deter theft when not in the possession of the employee. As a result, it was not surprising that our review of NASA's property survey reports revealed a widespread lack of accountability with few adverse consequences for equipment losses. Table 1 provides examples from our review of NASA property survey reports initiated during fiscal year 2006, which show little accountability and no disciplinary actions taken for controlled equipment losses.

¹⁶According to NASA's property management metrics, employees submitted 1,452 survey reports during fiscal year 2006; however, NASA provided us with only 1,136 reports.

Table 1: Excerpts from Selected NASA Survey Reports Describing the Circumstances Surrounding Equipment Losses

Equipment description	Equipment value (dollars)	Statement of circumstance	Disciplinary action taken
Desktop computer and laser printer	\$4,855	Around 8 years ago, my wife was in desperate need for a computer system at home to perform her work as a real estate broker. I could not afford a computer at the time because of my wife's medical expenses. I knew that surplus computers were available in the warehouse for checkout so I checked one out. It was already old and outdated but it helped my wife work at home, which was greatly appreciated. She used the computer for about 2 ½ years and then I turned the computer back in. This occurred about 5 years ago. I never received a receipt but I believe the computer was excessed and given to a school.	None
Laptop computer	4,265	This computer, although assigned to me, was being used on board the International Space Station. I was informed that it was tossed overboard to be burned up in the atmosphere when it failed.	None
Projector	7,525	User loaned the projector to another employee but does not recall when or to whom it was loaned.	None
Micro computer	3,072	As system administrator, I had several items in my name. I gave the computer to someone and because I didn't keep good records, I do not remember who this was given to.	None
Research Aircraft Integration Facility (RAIF) missing property, 65 items	850,321	A thorough and reasonable search was conducted but we were unable to locate the missing property. Prior users were contacted to establish the whereabouts of the property. These items are normally located in the lab and office areas of the RAIF. Normal security procedures are in place; however, we are unable to lock down and control access to these RAIF areas at all times. In general, the missing items consist of older equipment that has been replaced or is no longer necessary for standard operations.	None
DVD recorder, television set, two desktop computers	6,087	I signed for these items when two employees retired. It was my belief that these items would show up during our next scheduled inventory but they did not. I feel we have exhausted all known efforts to locate these items.	None
Five desktop computers	10,527	I have no recollection of the whereabouts of this equipment. It has probably been excessed since for the past year I have not been able to find it.	None
Notebook computer	3,399	This notebook was transferred into my name in 2004 but I never had a use for it. It was old and very outdated. It sat in my office for 6 to 8 months until I moved to my new office. I honestly don't know when I last saw the computer.	None
Six computers, three display units, recorder	\$26,827	A property custodian, who was assigned almost 100 items, retired but did not properly transfer accountability for the equipment. After many months of searching for the equipment, most of the equipment was located, but the listed items could not be found. Signing this form for these items does not signify that I am taking responsibility for the lost equipment.	None

Source: GAO analysis of NASA data.

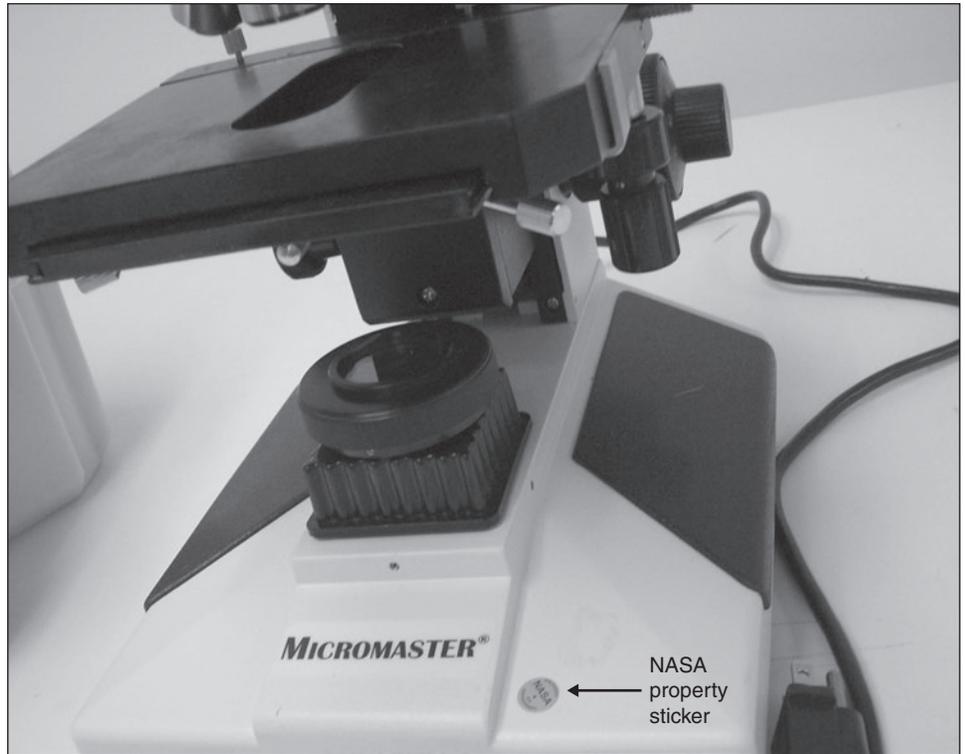
Note: Data are from NASA survey reports for fiscal year 2006.

When Faced with High
Equipment Loss Rates, NASA
Removed Control over Millions
of Dollars of Equipment

When faced with high equipment loss rates, instead of tightening controls as recommended by the agency's 2002 equipment loss study, in April 2003, NASA raised its threshold for tracking and controlling nonsensitive equipment items from \$1,000 to \$5,000—eliminating control over nonsensitive equipment costing less than \$5,000. According to the analysis used to justify this decision, NASA estimated that raising the accountability threshold would remove control over \$472 million of nonsensitive equipment—or 13 percent of the value of its total equipment inventory. Although NASA officials originally told us that they did not keep track of the actual quantity or dollar amount of equipment decontrolled due to the policy change, they subsequently told us that they decontrolled 75,576 items valued at \$148 million. However, NASA did not provide us with documentation to support these figures. Further, according to the 2002 study, raising the threshold would allow the agency to prioritize its property management control activities. The study suggested that by raising the threshold, NASA could reduce the overall property management workload, which would allow property custodians to focus on higher-value equipment and sensitive items. Although NASA reduced its overall property management workload by raising its nonsensitive equipment accountability threshold, the agency has done little to prioritize its remaining workload to ensure that it is using its property management resources in a cost-effective way.

NASA's 2002 equipment loss study warned that if NASA raised its accountability threshold, it should also implement the study's recommended improvement measures to mitigate the risk that raising the threshold could result in decreased oversight and thus, increased equipment losses. However, as discussed previously, NASA has not implemented most of the study's recommended property management improvements. In addition, NASA has not followed through on many of the tenets outlined in its April 2003 policy memo announcing the new capitalization threshold for nonsensitive equipment. Specifically, the memo indicated that the new policy did not reduce the responsibility for proper stewardship of assets costing less than \$5,000. The policy letter goes on to state that the Logistics Management Office will revise NASA's equipment management guidance to include the proper care, management, and protection of all NASA equipment, including noncontrolled equipment. However, when NASA issued its revised property guidance over 3 years later in November 2006, the only requirement related to noncontrolled equipment is the requirement that a sticker be placed on noncontrolled items that reads "Property of U.S. Government," as shown in figure 3.

Figure 3: Noncontrolled Microscope Costing \$1,700



Source: GAO.

Prior to April 2003, NASA would have controlled the microscope shown in figure 3 as well as the multimedia projector shown in figure 4. However, NASA removed these items from its sensitive equipment list in April 2003, even though NASA's 2002 equipment loss study identified laboratory instruments and equipment and video projectors as high-loss equipment.

Figure 4: Noncontrolled Multimedia Projector Costing \$2,450



Source: GAO.

Note: The projector shown in figure 4 was in a box for 12 months after receipt. The NASA property sticker was not attached—increasing the projector’s vulnerability to theft.

According to NASA’s equipment management policy, with the exception of weapons and hazardous devices, it also does not track or manage items that it considers pilferable, such as cell phones, digital cameras, or personal digital assistants (PDA), if these items cost less than \$500. Based on our analysis of NASA’s procurement data for fiscal years 2005 and 2006, NASA purchased over \$14 million of equipment that met NASA’s definition of sensitive equipment but fell under NASA’s \$500 sensitive equipment threshold. Tracking information on these items would be useful for maintenance/supply purposes or to ensure that the items are returned by employees upon their departure. However, NASA currently has no way of knowing to whom it has supplied cell phones, cameras, or other electronic devices costing less than \$500.

To gain a better understanding of who had these devices and how they were used, and to verify that the purchase price was less than \$500, at one NASA center we spoke with the purchasers and users of recently purchased items. Using NASA’s fiscal years 2005 and 2006 accounting records, we selected six items purchased with agency purchase cards. Although NASA did not maintain property records for the items we selected, all of the purchase card holders were able to recall for whom they had purchased the items. As shown in table 2, four of the six items were actually over the \$500 sensitive equipment threshold—when the cost of other equipment peripherals was included in the purchase price—and

should have been tracked as controlled equipment items. Of the remaining two items that fell below NASA’s sensitive equipment threshold, one could not be located and the other was at the employee’s home because, according to the employee, he no longer had a business use for it.

Table 2: Disposition of Recently Purchased Sensitive Equipment Costing Less Than NASA’s Sensitive Equipment Threshold

Equipment description	Cost (dollars) ^a	Disposition of equipment
Axim™ X50 personal digital assistant (PDA)	\$493.16	This PDA meets NASA’s control criteria for sensitive equipment when the cost of the accompanying memory card (\$68) and carrying case (\$30) is added to the total cost of the PDA. According to the employee, the property was at home and is not used at work. The item was not tracked in NEMS.
Camera	488.38	This camera meets NASA’s criteria for controllable equipment items when the telephoto lens costing \$999.99 is added to the total cost of the camera. Neither the camera nor the lens was tracked or controlled in NEMS.
Canon PowerShot™ Camera	474.99	This camera meets NASA’s control criteria for sensitive equipment when the cost of the accompanying memory card (\$140) is added to the total cost of the camera. This item was located in the employee’s possession, but was not tracked in NEMS.
Dell Axim™ X51V PDA	449.00	This PDA meets NASA’s control criteria for sensitive equipment when the cost of the accompanying battery (\$89) and aluminum case (\$32) is added to the total cost of the PDA. This item was located in the employee’s possession, but was not tracked in NEMS.
Digital Camera	459.97	NASA was unable to locate the property during our visit.
Palm LifeDrive™ Handheld	\$449.00	According to the employee, although he had the device for less than 6 months, NASA provided him with a newer model; therefore, he no longer had a business need for this equipment—which was at the employee’s home.

Source: GAO Analysis of NASA data.

^aThe cost listed is the price of the equipment item, excluding the cost of any accompanying accessories.

The examples provided in table 2 are based on a nonrepresentative selection of recent purchases because, as discussed previously, with the exception of weapons and hazardous devices, NASA does not maintain information on sensitive items under \$500 and therefore, could not provide us with a complete population of these items from which to select a statistical sample.

As discussed previously, more frequent inventories provide a valuable tool for maintaining control over property and other assets vulnerable to theft and loss, but physical inventory inspections take time and cost money. To balance the need to control equipment with the cost of performing physical inventories, agencies should prioritize these activities—focusing more attention on high-dollar equipment, sensitive or pilferable items, and property of strategic importance to the agency. NASA justified raising its accountability threshold based on the premise that doing so would allow

property custodians to focus on higher-value equipment and sensitive items. However, NASA has not prioritized its remaining workload to ensure that it is using its property management resources in a cost-effective way. Instead, NASA has adopted an all-or-nothing approach to property management. With the exception of weapons and hazardous devices, NASA applies the same level of control to all equipment meeting its definition of controlled property. For example, NASA does not inventory sensitive or pilferable items or more valuable items more frequently than other equipment items. As discussed previously, most centers perform physical inventories on a triennial or biennial basis. Although NASA's property management guidance provides NASA centers with the option of performing a separate or more frequent inventory of sensitive equipment, according to each of the nine SEMO directors we spoke with, none have elected to do so.

In designing an effective system of property management controls, an entity must weigh the cost of tracking, controlling, and inventorying equipment with the risk that the equipment may be lost, stolen, or damaged. Although comprehensive federal personal property management guidance does not exist,¹⁷ the General Services Administration (GSA) has established several principles intended to govern the management of federal personal property. These include maximizing return on investment, managing inventory effectively, and minimizing the cost of management systems. GSA also encourages federal agencies to refer to other private sector authoritative property management resources such as the American Society for Testing and Materials (ASTM).

According to ASTM, one commonly used method for prioritizing property management control activities involves Pareto's¹⁸ principle—or the

¹⁷GSA has not issued a specific Federal Management Regulation (FMR) on the management of federal personal property. The FMR prescribes policies concerning property management and related administrative activities. Although GSA has reserved a section of the FMR, which is codified at 41 C.F.R. pt.102, entitled management of personal property, there currently is no specific regulation governing the management of personal property.

¹⁸Pareto's principle is named for a turn-of-the-century Italian economist and sociologist, Vilfredo Pareto, who is known for his theory on the distributions of wealth in different countries, concluding that a fairly consistent minority—about 20 percent—of people controlled the large majority—about 80 percent—of a society's wealth. This same distribution has been observed in other areas and has been termed the Pareto effect or Pareto's principle.

80/20 rule. Pareto's principle suggests that 80 percent of the value of an organization's property will be concentrated in 20 percent of its assets. As such, Pareto's principle can be an effective tool for analyzing, classifying, and prioritizing property control activities, as shown in the following example.

- Equipment group A: the top 80 percent of the value concentrated in 20 percent of the property.
- Equipment group B: the next 15 percent of the value concentrated in another 35 percent of the property.
- Equipment group C: the last 5 percent of the value concentrated in another 45 percent of the property.

Based on these groupings, an organization is able to prioritize its property control activities—spending more time and effort on equipment group A and less effort on equipment groups B and C. In addition, other risk factors should be considered when determining how much time and effort should be spent tracking and controlling property—including whether an item is considered sensitive or pilferable.

NASA Failed to Track and Control Millions of Dollars of Equipment Due to Weaknesses in Its Property Management System, Processes, and Policies

NASA's systems, processes, and policies over its receipt and acceptance function do not provide reasonable assurance that purchases meeting NASA's definition of controlled equipment are routinely entered into NASA's property management systems. Specifically, NASA's property management guidance allows employees to bypass its central receiving function—which should serve as the primary control point for the receipt and acceptance of equipment—and does not limit the amount or type of equipment that is sent directly to the end user. Further, when equipment is sent to end users, they often do not understand their role in the receipt and acceptance process and fail to take the steps necessary to ensure that equipment is entered into NASA's property management system. Because this equipment is not tracked in NASA's property management system, it is not subject to the same physical inventory procedures as other controlled-equipment items and, as a result, is at much higher risk of being lost or stolen without NASA being aware of it. Finally, NASA lacks an integrated financial management system that, if designed and implemented appropriately, could mitigate the problems associated with NASA's practice of bypassing its central receiving function.

As discussed previously, over the past 10 years, NASA reported that it failed to enter \$199 million of controlled equipment purchases into its property management system. To identify other equipment items not recorded in the property management system, in addition to those reported by NASA, we compared equipment purchases recorded in NASA's core financial system for fiscal years 2005 and 2006 with detailed property records contained in NASA's property management system. Based on this comparison, we identified 12,128 transactions in NASA's core financial system that were coded as equipment and met NASA's criteria for controlled equipment but that were not found in NASA's property management system. However, based on our assessment of the reliability of NASA's accounting and property data, we were concerned that coding errors in either system could result in false positives. For example, a nonequipment item that NASA mistakenly coded as equipment in its core financial system could falsely appear to be controlled equipment not recorded in NASA's property management system.

Because of these data reliability issues, we tested a stratified random sample of the population of 12,128 transactions resulting from our comparison of the accounting and property data. Based on the results of our sample, we estimate that in addition to the \$199 million of equipment NASA found and reported, at least another \$13 million of the equipment NASA purchased during fiscal years 2005 and 2006 was not entered into its property management system. See appendix II for the detailed results of our sample. In addition, we found that NASA does not report all the untagged equipment that it discovers. According to NASA's property management guidance, when property officials discover equipment that has not been entered into its property management system, they are supposed to assign it a code in the property management system that identifies the equipment as "found on center." In some cases, however, we found that property officials enter this equipment into the property management system as if it were a new procurement. Specifically, we identified at least 41 controlled equipment purchases during fiscal years 2005 and 2006—totaling \$1.8 million—that were inappropriately coded as new procurements when in fact they should have been coded as "found on center." By miscoding these items, NASA is underreporting the problem of controlled equipment not being recorded in the property management system at the time of purchase.

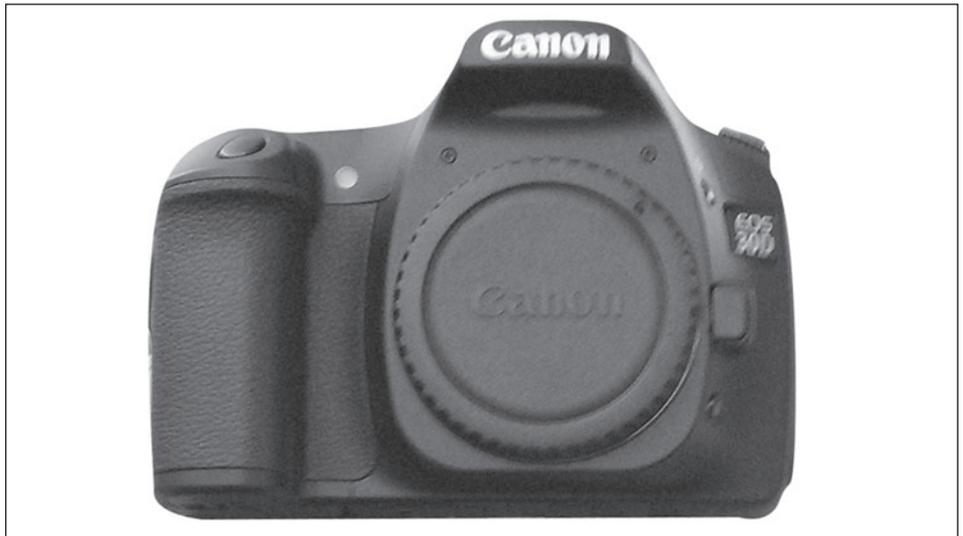
NASA Does Not Place Restrictions on the Amount or Type of Equipment Purchases Sent Directly to the End User

According to NASA's property management guidance, all NASA centers are required to have a central receiving function—which should serve as the primary control point for the receipt and acceptance of equipment. However, NASA's property management guidance provides no further

information on when the central receiving function should be used. As a result, we found that equipment was often sent directly to the end user, bypassing the central receiving function. We found this to be the case with both lower-cost items purchased by purchase card holders as well as high-dollar-value equipment purchased by procurement officials. When equipment is sent directly to the end user, according to NASA's property guidance, the end user must immediately notify central receiving personnel so that they can assign the equipment a unique control number and enter it into NASA's property management system.

Based on our sample results and our site visits, we found that when equipment was sent directly to the end user, he or she often did not take the steps required to ensure that the equipment was entered into the property management system. For example, although the camera shown in figure 5 meets NASA's definition of controlled equipment, it was not controlled in NASA's property management system because, according to the end user, he had not gotten around to notifying the SEMO that he had purchased the camera 3 months earlier.

Figure 5: Camera Costing \$1,500 Not Controlled in NASA's Property Management System



Source: GAO.

In some cases, although the equipment vendor sent the equipment to NASA's central receiving warehouse, receiving officials forwarded the item to the end user without first entering it into the property management

system. For example, according to NASA officials at two NASA centers, central receiving does not open packages if they are purchase card orders or if the purchase order is not properly displayed on the front of the package. Instead, these items are sent unopened to the end user. Table 3 illustrates the type of equipment that bypassed NASA’s central receiving function or was sent unopened to the end user by central receiving. As a result, these items were not entered into NASA’s property management system until we brought them to NASA’s attention.

Table 3: Examples of Equipment Not Controlled in NASA’s Property Management System

Equipment description	Equipment value (dollars)	Elapsed time before control (months)
Positioner with remote controller	\$198,000	21
Microscope	18,256	12
3 computer servers	6,328 (each)	11
Abrasive jet-table	167,563	2
Kodak camera	4,475	20
Balloon flight detector system	23,800	13
Hardware modeler	15,000	14
Cryopump compressor	\$6,077	8

Source: GAO analysis of NASA data.

NASA Lacks Effective Equipment Management Training

Although NASA relies heavily on end users to ensure that property is entered into its property management system, NASA has not established or enforced agencywide or local training requirements. According to NASA’s equipment management guidance, the LMD is responsible for defining agencywide training requirements and the SEMO is responsible for establishing a process to ensure that all personnel associated with the utilization of government equipment receive documented, up-to-date property training. Although most of NASA’s centers reported implementing some type of property training and awareness initiatives, the LMD has yet to establish agencywide training requirements. Consequently, the training provided by most centers was not mandatory.

Based on our site visits and the responses provided as part of our testing, some of NASA’s employees are still unfamiliar with agency equipment policies and procedures. For example, we found that some officials—including an official from the property management office—mistakenly thought that NASA did not control any property under \$5,000, to include

sensitive items. They were not familiar with the agency listing of sensitive items and did not know that it is NASA's policy to tag and control this equipment. As shown in figure 6, a computer meeting NASA's definition of controlled equipment was not in NASA's property management system because, according to the end user, he was not aware of the requirement to control sensitive equipment under \$5,000.

Figure 6: Macintosh G5 Computer with a Cost of \$2,449 Not Controlled in the Property Management System



Source: GAO.

In another example, NASA did not tag or control an item costing \$129,920 because, according to the SEMO director, the item in question—which is used to convert force into a measurable electrical output—was a

NASA Lacks an Integrated Financial Management System That Could Mitigate the Problems Associated with Bypassing Central Receiving

component of a larger end-item. However, according to NASA's property management guidance, components of a larger system—costing \$5,000 or more—should be controlled in NASA's property management system.

A well-designed, integrated financial management system could mitigate the problems associated with NASA's practice of bypassing its central receiving function by facilitating the flow of information among the property, procurement, and accounting functions. Although NASA currently lacks an integrated financial management system, NASA's ongoing system modernization effort, known as the Integrated Enterprise Management Program (IEMP), includes plans to improve its equipment management capabilities. Specifically, NASA plans to implement its IAM module in October 2007. However, IAM, as currently planned, may not effectively mitigate the problems associated with NASA's practice of bypassing its central receiving function.

The accurate flow of information between an entity's property, procurement, and accounting functions can support its ability to maintain physical control over its property. With such a system, receipt and acceptance information would only be entered once and it would allow property officials to establish operational control over equipment, accounting officials to accurately account for the cost of the equipment, and payment officials to pay equipment-related vendor and contractor invoices. Currently, because NASA's property, procurement, and accounting functions are not integrated, when equipment is received either by central receiving or an end user, receipt and acceptance must be acknowledged separately in the property management system and the accounting/vendor payment system. Because payment officials must match receipt and acceptance documentation with a vendor invoice before the invoice is paid, this provides a means of identifying instances when receipt and acceptance has not been properly acknowledged and updated in the vendor payment system. However, property officials have no such control mechanism, and therefore, have no effective way of knowing that equipment was received and accepted but not appropriately recorded in the property management system. As discussed later, NASA's current systems and processes also do not provide reasonable assurance that accounting officials accurately capture the cost of equipment and report it on the agency's financial statements.

Traditionally, entities have relied on manual and automated interfaces to facilitate the flow of information among separate property, procurement, and accounting systems. More recently, both private sector and government entities—including NASA—have begun to replace their

procurement, accounting, property, and other systems with commercial-off-the-shelf (COTS) Enterprise Resource Planning (ERP) systems. ERP software integrates all departments and functions across an entity onto a single computer system, using a single database that serves the needs of all departments. As such, ERP systems, if implemented properly, eliminate the need to update information in the procurement, property, and accounting systems using manual and automated interfaces. Instead, the system must be designed to ensure that the data contained in the ERP database serve the needs of the procurement, property, and accounting departments.

To maximize the success of any business system modernization effort, organizations need to consider the redesign of their existing business processes. In fact, the Clinger-Cohen Act of 1996 requires agencies to analyze the missions of the agency and, according to the analysis, revise mission-related and administrative processes, as appropriate, before making significant investments in information technology used to support those missions.¹⁹ Moreover, as we noted in our *Executive Guide: Creating Value Through World-class Financial Management*,²⁰ leading finance organizations have found that the key to successfully implementing COTS systems and best practices is reengineering business processes to fit new software applications. This is because COTS software, including that used for IEMP, is designed to employ best practices for carrying out standard business processes.

Business processes are the various steps that must be followed to perform a certain activity. For example, the procurement or acquisition process would start when the agency defines its needs, and issues a solicitation for goods or services, and would continue through contract award, receipt of goods and services, and would end when the vendor properly receives payment. Using the agency's new COTS software and the business process supported by the software, a user would request the need for new equipment, the appropriate manager would approve the purchase request, the equipment would be purchased through the purchasing department, and an equipment account would be created and the vendor invoice paid when receipt and acceptance was acknowledged.

¹⁹See 40 U.S.C. § 11303(b)(2)(C).

²⁰GAO, *Executive Guide: Creating Value Through World-class Financial Management*, GAO/AIMD-00-134 (Washington, D.C.: April 2000).

By adopting the standard processes supported by NASA's COTS software, the software would identify purchases as controlled equipment when ordered, which would provide reasonable assurance that the agency's equipment records are updated upon receipt and acceptance of the property. Because acknowledging receipt and acceptance is a prerequisite to paying a vendor invoice, when receipt and acceptance is acknowledged as part of the vendor payment function, the system will automatically establish the appropriate equipment account for the purpose of establishing operational control over the property. Although still in the early planning stages, based on our assessment of NASA's IAM system requirements and other planning documents, NASA's planning effort thus far has been focused primarily on capital equipment items. According to NASA officials, IAM will identify the cost of capital equipment items as those costs are incurred. However, for noncapital controlled equipment, NASA will continue its practice of recording these purchases after they are received and accepted by NASA.

NASA Does Not Report All Equipment Costs on Its Financial Statements

NASA's controls over equipment do not provide reasonable assurance that all capital equipment costs are appropriately recorded in the agency's financial management system and subsequently reported in its financial statements. Because NASA's systems and processes are not designed to allow the agency to identify and record capital costs as they are incurred, we found that NASA did not account for and report all of the capital equipment items it purchased during fiscal years 2005 and 2006 and often did not capture the full cost of the equipment items it did capitalize.

In accordance with NASA's accounting policy, NASA reports only equipment items valued at \$100,000 or more and having a useful life of 2 years or more on its financial statements. In its fiscal year 2006 financial statements, NASA reported approximately \$623 million, net of depreciation, in NASA-owned/NASA-held equipment. Although these items represent only a portion of NASA's total equipment inventory, NASA remains unable to accurately account for and report the value of this equipment in its financial statements. Just as we have reported in the past, NASA's independent auditor reported for fiscal year 2006²¹ that until NASA successfully implements an integrated system for reporting PP&E, and develops a methodology to identify costs that need to be capitalized

²¹NASA, *Performance and Accountability Report 2006* (Washington, D.C., November 2006).

starting at the budget/procurement cycle through to the processing and disbursing of funds as the transaction is processed, NASA will continue to experience difficulties in recording property-related balances and transactions.

Currently, NASA expenses all costs (except for certain construction of NASA-held real property) and then performs a retrospective review of transactions entered into NASA's property management system to determine which costs should be capitalized. The subsequent review increases the risk that related costs will not be properly captured and capitalized. Because NASA uses the amounts recorded in its accountable property records as the basis for reporting capital equipment amounts in its financial statements, the problems discussed previously that resulted in millions of dollars of equipment not being recorded in the property management system also limit NASA's ability to properly identify and report capital assets on its balance sheet. As part of our sample of fiscal years 2005 and 2006 equipment purchases, discussed previously, we identified 11 equipment items each costing \$100,000 or more, with a total cost of \$2.3 million, that were not recorded in NASA's property management system and therefore, not subject to being reported in NASA's financial statements.

We also found that NASA often did not capture the full cost of the equipment items it did capitalize. According to NASA policy and federal accounting standards, capitalized costs should include all costs incurred to bring the property to a form and location suitable for its intended use. However, we found that NASA does not have an effective way of identifying these costs. As a result, NASA does not consistently identify all shipping and installation costs associated with the capital assets it purchases. Moreover, if NASA purchased components for the purpose of fabricating a piece of equipment, it often did not aggregate the cost of all components to arrive at the total cost of the end-item and, instead, capitalized only the cost of the components costing more than \$100,000. In some cases, if all the components were under \$100,000, none of the costs were capitalized even if the aggregate cost of the components was over \$100,000. For example:

- In fiscal year 2005, NASA purchased and received a strain and motion analysis system costing \$203,590. The system consisted of five components each costing less than \$100,000. Although each component was tagged and entered into NASA's property management system, because none of the components exceeded \$100,000, they were not identified in the property management system as capital equipment.

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- Also in fiscal year 2005, NASA purchased and received a microscope system costing \$298,669. Although the system consisted of four components, only one component, which cost \$187,459, was over \$100,000. Therefore, the remaining three components with a combined cost of \$111,210 were not identified in NASA's property management system as capital equipment.

Without the systems and processes needed to identify all equipment costs as they are incurred, NASA must continue to rely on a retrospective review of transactions entered into NASA's property management system to determine which costs should be capitalized—a process that has proven to be ineffective. As discussed previously, NASA's ongoing systems modernization effort includes plans to implement IAM capabilities in October 2007. Although NASA is still in the early planning stages, according to NASA officials, IAM will identify the capital costs as they are incurred. To maximize the success of NASA's effort, as discussed previously, it will be important that NASA adopt the standard business processes supported by the IAM software it has selected.

Conclusion

While modernizing NASA's financial management system—which includes implementing a new asset management system—is essential for strengthening controls over the agency's equipment, NASA cannot rely on technology alone to solve its equipment management problems. Many of NASA's equipment management problems are deeply rooted in an agency culture that does not enforce accountability, which undermines its ability to carry out its stewardship responsibilities for managing millions of dollars of government equipment. Transforming NASA's culture and strengthening the agency's control environment will require the sustained attention and commitment of NASA's top leadership. This commitment must be demonstrated through both the words and actions of the agency's leadership. To send a clear message that equipment accountability is a priority, NASA management must start by holding employees accountable for equipment losses.

Recommendations for Executive Action

To strengthen NASA's control environment and internal controls, we recommend that NASA's Administrator direct the Assistant Administrator for the Office of Infrastructure and Administration to take the following eight actions:

- Strengthen and enforce NASA's policy on user accountability for equipment loss, to include the following:

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- Providing guidance on the minimum level of care NASA expects employees to exercise over equipment and the circumstances under which employees will be held accountable for equipment loss.
 - Requiring employees to acknowledge in writing, for all personal use equipment, their responsibility for maintaining NASA equipment including an acknowledgment of the minimum level of care NASA expects employees to exercise over equipment and the circumstances in which they will be held accountable for equipment loss.
 - Requiring that employees be held financially accountable or subject to other disciplinary actions when equipment is lost due to user negligence.
 - Enforce the existing policy to prepare survey reports immediately when accountable property is lost, damaged, or destroyed.
 - Enforce the existing policy to fully investigate all survey reports and provide written findings to an independent Property Survey Board or Officer.
 - Define and enforce reasonable workload standards for property custodians.
 - Establish a sound methodology for prioritizing property management control activities, such as physical inventory inspections and investigations of equipment loss, to ensure that more time and effort is spent on high-dollar and sensitive or pilferable equipment.
 - Clarify property management guidance to maximize the use of NASA's central receiving function and at a minimum, require that all equipment sent through central receiving is properly tagged and entered into the property management system by warehouse personnel.
 - Require that all packages sent through central receiving are opened and tagged accordingly—regardless of whether they are procured with a purchase card or by purchase order.
 - Establish and enforce property management training requirements for all personnel involved in the use, stewardship, and management of equipment, including central receiving warehouse personnel, end users, purchase card holders, and property custodians.

As part of NASA's ongoing system modernization effort, we recommend that NASA's Administrator direct the Assistant Administrator for the Office of Infrastructure and Administration to take the following two actions to work in coordination with the OCFO and the Director of NASA's IEMP to adopt the standard business process supported by its software to ensure that the new system will be capable of the following:

- Identifying capital costs as they are incurred for all capital equipment items, starting at the budget/procurement cycle through to the processing and disbursing of funds as the equipment transaction is processed.
- Identifying purchases as controlled equipment when ordered, which would provide reasonable assurance that the agency's equipment records are updated upon receipt and acceptance of the property.

Agency Comments and Our Evaluation

In written comments, which are reprinted in appendix II, NASA concurred with 8 of our 10 recommendations and partially concurred with the remaining 2 recommendations related to (1) strengthening NASA's policy on user accountability for equipment loss and (2) defining and enforcing reasonable workload standards for property custodians. In its comments, NASA also stated that many of GAO's recommendations related to efforts currently under way.

With respect to our recommendation related to strengthening NASA's policy on user accountability, NASA disagreed with the portion of that recommendation that would require employees to acknowledge in writing, for all personal use equipment, their responsibility for maintaining NASA equipment. Instead, NASA cited plans to implement other measures to reinforce user accountability requirements. Specifically, NASA stated that it would (1) make viewing of its existing property management training video mandatory, (2) establish a process to be used at NASA centers in determining whether an employee will be held accountable for property that is lost, stolen, damaged, or destroyed, and (3) establish a process as part of its implementation of IAM to acknowledge receipt and accountability for property. These steps, if effectively implemented, would help establish user accountability for lost or missing property, which was the intent of our recommendation. In addition, although NASA agreed with the intent of our recommendation related to defining and enforcing reasonable workload standards for property custodians, the agency expressed concern that implementation of such a recommendation would be difficult to achieve. According to NASA, it would be difficult to dictate the number of items a property custodian should be responsible for

controlling. While we agree that defining workload standards for property custodians may be difficult, we continue to believe that reasonable parameters could be established and are a critical step in ensuring that the custodians are able to effectively carry out their responsibilities. NASA also provided separate technical comments, which have been incorporated into our report as appropriate.

As agreed with your office, unless you announce its contents earlier, we will not distribute this report further until 30 days from its date. At that time, we will send copies to interested congressional committees, the NASA Administrator, and the Director of the Office of Management and Budget. We will make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions concerning this report, please contact me at (202) 512-9095 or williamsm1@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are acknowledged in appendix III.

Sincerely,

A handwritten signature in black ink that reads "McCoy Williams". The signature is written in a cursive, flowing style.

McCoy Williams
Director, Financial Management and Assurance

Appendix I: Objectives, Scope, and Methodology

To determine whether the National Aeronautics and Space Administration's (NASA) control environment and internal controls over NASA-held equipment provide reasonable assurance that these assets are not vulnerable to loss, theft, and misuse, we evaluated management's responsiveness to observations and recommendations made in prior audit reports and internal management reports related to NASA's property management. Specifically, we (1) reviewed prior NASA internal, Office of the Inspector General (OIG), and independent public accountants' reports as well as prior GAO reports and report recommendations, (2) interviewed the agency's top property management officials to obtain their views on previously identified property management weaknesses, and (3) obtained documentation to support improvement claims made by agency officials. In addition, we documented trends in equipment losses and other equipment management problems by reviewing and analyzing NASA's equipment loss and other equipment management reports for fiscal years 1997 through 2006. We evaluated actions taken by management to hold employees accountable for equipment loss by requesting all NASA survey reports for fiscal year 2006 and reviewing and analyzing those reports provided to us by NASA.

We evaluated the design of NASA's internal controls by reviewing and analyzing agencywide and local equipment management policies and procedures and comparing NASA's policies and procedures with federal and other standards for controlling property—including GAO's standards for internal control,¹ the General Services Administration's (GSA) principles for managing personal property, American Society for Testing and Materials (ASTM) property standards,² and GAO's best-practice guide for performing physical inventory counts.³ We also obtained and reviewed the procedures used and results of fiscal year 2006 physical inventory inspections for headquarters and nine centers and NASA's internal control improvement initiatives. To confirm our understanding of NASA's property management process and controls, we conducted walkthroughs at two

¹GAO, *Standards for Internal Control in the Federal Government*, GAO/AIMD-00-21.3.1 (Washington, D.C.: November 1999)

²ASTM International for the National Property Management Association, *Standards for Moveable and Durable Property Management* (West Conshohocken, Pa, 2005).

³GAO, *Executive Guide: Best Practices in Achieving Consistent, Accurate Physical Counts of Inventory and Related Property*, GAO-02-447G (Washington, D.C.: March 2002).

NASA centers.⁴ We also interviewed NASA officials responsible for equipment management and reporting, including the Director of the Logistics Management Division (LMD), LMD Management Analyst, Asset Manager, Agency Equipment Program Manager, and the supply equipment management officer (SEMO) at headquarters and each of NASA's nine centers, warehouse officials, NASA Equipment Management System (NEMS) property managers, property custodians, purchasers, property users, and officials from the Office of the Chief Financial Officer.

To determine whether equipment items purchased by NASA are properly recorded in NASA's property management system and, therefore, are subject to physical inventory inspection, we selected a stratified random sample of equipment purchases made during fiscal years 2005 and 2006 that, based on our analysis, were not recorded in NASA's property management system. First, we interviewed NASA's NEMS program manager and equipment program manager for the core financial system, to gain a thorough understanding of NEMS and the core financial system. Next, we obtained NASA's property management database—NEMS—as of September 30, 2006, and all purchase transactions recorded in the agency's core financial system for fiscal years 2005 and 2006. Finally, to identify equipment items not recorded in the property management system, using a common data field, we compared equipment purchases recorded in NASA's core financial system with detailed property records contained in NASA's property management system.

Based on this comparison, we identified 12,128 transactions in NASA's core financial system that were coded as equipment and met NASA's criteria for a controllable item but that were not found in NASA's property management system. However, based on our assessment of the reliability of NASA's accounting and property data, we were concerned that coding errors in either system could result in false positives. For example, a nonequipment item that NASA mistakenly coded as equipment in its core financial system could falsely appear to be controllable equipment not recorded in NASA's property management system.

Because NASA's accounting and property data contained significant coding errors—which could result in false positives—we tested a stratified random sample of 172 transactions from the population of transactions

⁴We conducted walkthroughs at Marshall Space Flight Center and Langley Research Center.

resulting from our comparison of the accounting and property data. We stratified the population into three groups based on the unit cost of the transactions and selected all transactions with a unit cost of \$100,000 or more. With this probability sample, each transaction in the population had a known, nonzero probability of being selected. Each selected transaction was subsequently weighted in the analysis to account statistically for all transactions in the population, including those that were not selected.

Table 4: Description of the Population and Sample of Transactions

Strata: unit cost	Transactions population	Transactions sample
\$500–4,999.99	10,335	100
\$5,000–99,999.99	1,761	40
\$100,000 and over	32	32
Total	12,128	172

Source: GAO.

Because we selected a sample of transactions, our results are estimates of the population and thus are subject to sample errors that are associated with samples of this size and type. Our confidence in the precision of the results from this sample is expressed in 95 percent confidence intervals, which are expected to include the actual results in 95 percent of the samples of this type.

We tested 172 sample transactions to determine whether they were equipment that met NASA’s criteria for a controlled item but were not in NASA’s property management system. Based on information provided by NASA, we determined that 121 of the sample transactions were either miscoded as equipment in NASA’s financial records or miscoded in NASA’s property management system. In other words, these transactions were false positives. The remaining 51 transactions tested were, in fact, equipment items that met NASA’s definition as controlled equipment but were not recorded in the agency’s property management system.

To estimate the dollar amount of controlled equipment purchases that NASA did not record in the population, we multiplied the unit cost by the number of items for each transaction that was determined to be a controlled equipment item. We used a ratio estimator to generate an estimate of the total dollar amount and calculated the one-sided 95-percent confidence lower bound. Based on our sample results, we are

95-percent confident that during fiscal years 2005 and 2006, NASA did not record at least \$13 million of controlled equipment purchases.

To gain a better understanding of the controls over sensitive equipment costing less than \$500, at one NASA center we spoke with the purchasers and users of recently purchased items. Because, with the exception of weapons and hazardous devices, NASA does not maintain information on sensitive items under \$500, and could not provide us with a complete population of transactions from which to sample, we selected a nonrepresentative sample of six items purchased using a purchase card.

To determine whether all equipment costs are appropriately recorded in the agency's financial management system and subsequently reported on its financial statements, we reviewed all the capital (i.e., \$100,000 or more) equipment transactions from our stratified random sample. We traced selected transactions to their source documents and to NEMS. We assessed whether all costs were accurately recorded in NEMS. We reviewed NASA's financial management and reporting policies and procedures, reports by NASA's OIG, and fiscal years 2005 and 2006 internal control weaknesses reported by NASA's independent auditors. We also interviewed NASA OCFO and property officials to determine the process for recording capital equipment transactions in the agency's financial management system and general ledger. The scope of our work did not include an assessment of whether the equipment amounts reported on NASA's financial statements were fairly stated. Accordingly, our scope also did not address the materiality of the equipment amounts NASA failed to report on its fiscal year 2005 and 2006 financial statements.

To assess the current status of NASA's effort to implement its integrated asset management (IAM) system, we interviewed the IAM project manager and obtained and analyzed relevant planning documents, including IAM system requirements documentation.

We conducted our work from April 2006 through March 2007 in accordance with U. S. generally accepted government auditing standards. We requested comments on a draft of this report from the NASA Administrator or his designee. Written comments from the NASA Deputy Administrator are presented and evaluated in the "Agency Comments and Our Evaluation" section of this report and are reprinted in appendix II.

Appendix II: Comments from the National Aeronautics and Space Administration

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

National Aeronautics and
Space Administration
Office of the Administrator
Washington, DC 20546-0001



June 7, 2007

Mr. McCoy Williams
Director
Financial Management and Assurance
United States Government Accountability Office
Washington, DC 20548

Dear Mr. Williams:

NASA welcomes the opportunity to comment on your draft report entitled "Property Management: Lack of Accountability and Weak Internal Controls Leave NASA Equipment Vulnerable to Loss, Theft, and Misuse" (GAO-07-432).

In June 2005, the National Aeronautics and Space Administration (NASA) Administrator directed a review and rebaseline of the Agency's plans for asset management as part of an overall effort to improve the Agency's financial management practices. In response to this direction, NASA undertook an effort to identify near-term and long-term strategies for improvement, including: policy, process, and technological changes.

In the draft report, the Government Accountability Office (GAO) makes ten recommendations to the NASA Administrator to strengthen NASA's property control environment and internal controls. Many of the GAO recommendations relate directly to the ongoing, integrated efforts being taken by the Integrated Enterprise Management Program (IEMP), the Office of Chief Financial Officer (OCFO), and the Office of Infrastructure and Administration (I&A).

Recommendation 1: Strengthen and enforce NASA's policy on user accountability for equipment loss, to include:

- Providing guidance on the minimum level of care NASA expects employees to exercise over equipment and the circumstances under which employees will be held accountable for equipment loss.

- Requiring employees to acknowledge in writing, for all personal use equipment, their responsibility for maintaining NASA equipment including an acknowledgement of the minimum level of care NASA expects employees to exercise over equipment and the circumstances in which they will be held accountable for equipment loss.

- Requiring that employees be held financially accountable and/or describing other disciplinary actions that will be taken when equipment is lost due to user negligence.

See comment 1.

Response: NASA partially concurs with this recommendation. We concur with all the recommendations to strengthen and enforce NASA's policy on user accountability with the exception of the second requirement. We do not concur with that portion of the recommendation that requires employees to acknowledge, in writing, the minimum level of care in which they will be held liable. Instead, we intend to implement the following:

- 1) Viewing of the existing property management training video will be made mandatory for all NASA employees and onsite contractors. This video is currently online in NASA's SATERN (System for Administration, Training, and Educational Resources for NASA).
- 2) The Associate Administrator for the Office of Infrastructure and Administration will work with the Office of the General Counsel to establish a process to be used at NASA Centers in determining whether an employee will be held accountable for property that is lost, stolen, damaged, or destroyed.
- 3) The implementation of the Integrated Asset Management (IAM), Property, Plant, and Equipment (PP&E) module will include a process to acknowledge receipt and accountability for property.

NASA is reengineering an integrated process for asset management. Financial and logistics teams are developing integrated functional requirements dedicated to improve the financial health of the Agency while, at the same time, identifying cross-functional processes to ensure proper accountability of all property items. As part of formal change management planning, NASA will implement all changes to processes, policy, and training implemented upon PP&E Module "go live" scheduled for April 2008.

Recommendation 2: Enforce the existing policy to prepare survey reports immediately when accountable property is determined to be lost, damaged, or destroyed.

Response: NASA concurs with the recommendation. NASA will enforce the existing policy to prepare survey reports immediately when accountable property is lost, damaged, or destroyed. Survey reports will be submitted to the Supply and Equipment Officer (SEMO) within 30 working days of the discovery of loss, damage, or the destruction of the property.

Recommendation 3: Enforce the existing policy to fully investigate all survey reports and provide written findings to an independent property survey board or officer.

Response: NASA concurs with the recommendation. NASA will enforce the existing policy to fully investigate all survey reports and provide written findings to an independent property survey board or officer.

Recommendation 4: Define and enforce reasonable workload standards for property custodians.

Response: NASA partially concurs with this recommendation. We concur with the intent of the recommendation, but implementation of such a recommendation would be difficult to achieve. Workload decisions are made by division directors or equivalent managers responsible for the property items assigned to their organization. It would be difficult to dictate the number of items a property custodian should be responsible for controlling. Additionally, NASA installations and internal organizations differ in scope and mission, and the number of assets utilized by those activities can vary significantly based upon geographic location, number of employees, and facility configuration. NASA policy delineated in NASA Procedural Requirements (NPR) 4200.1F, paragraphs 1.2.5, 1.2.5.1, and 1.2.6.1, respectively, states that:

“The division director is the principal official in the NASA Equipment Management Program responsible for all equipment, controlled and non-controlled, assigned to the organization and in use by personnel within the organization, including all aspects of equipment condition and use. The division director shall:

Appoint appropriate property custodians and ensure the appointees have proper oversight and knowledge of the equipment used within their areas.

Property custodians are designated for each property area or program by the head of the organization, usually the division director or chief, with the approval of the SEMO. Full time employees may be appointed by the SEMO.”

Recommendation 5: Establish a sound methodology for prioritizing property management control activities, such as physical inventory inspections and investigations of equipment loss, to ensure that more time and effort is spent on high dollar and sensitive or pilferable equipment.

Response: NASA concurs with the recommendation. NASA’s Logistics Management Division will work with each Center SEMO to establish the appropriate methodology for prioritizing property management.

Recommendation 6: Clarify property management guidance to maximize the use of NASA’s central receiving function and, at a minimum, require that all equipment sent through central receiving is properly tagged and entered into the property system by warehouse personnel.

See comment 1.

Response: NASA concurs with the recommendation. NASA will clarify property management guidance to maximize the use of NASA's central receiving function, ensuring that all controlled assets are properly tagged and entered into the respective property system(s).

Recommendation 7: Require that all packages sent through central receiving are opened and tagged accordingly--regardless of whether they are procured with a purchase card or by purchase order.

Response: NASA concurs with the recommendation. NASA will require that all packages sent through central receiving are opened and tagged accordingly, regardless of whether they are procured with a purchase card or by purchase order.

Recommendation 8: Establish and enforce property management training requirements for all personnel involved in the use, stewardship, and management of equipment, including central receiving warehouse personnel, end users, purchase card holders, and property custodians.

Response: NASA concurs with the recommendation. NASA will establish and enforce property management training requirements for all personnel involved in the use, stewardship, and management of equipment, including central receiving warehouse personnel, end users, purchase card holders, and property custodians. As mentioned in our response to Recommendation 1 above, the current on-line training course will be made mandatory when the IAM PP&E module is implemented. This will ensure that all new process changes are incorporated at the "go live" milestone. Additionally, NASA will ensure that all installations conduct local training as required by current NASA policy.

Recommendation 9: Identify capital costs as they are incurred for all capital equipment items, starting at the budget/procurement cycle through to the processing and disbursing of funds as the equipment transaction is processed.

Response: NASA concurs with the recommendation. The tracking of capital equipment costs from the planning cycle through the disbursement of funds is part of the current OCFO corrective action plan. NASA's OCFO, Office of Procurement, IEMP Program Office, and Logistics Management Division will work to adopt standard business processes developed by the OCFO and supported by its software to ensure that the new Asset Management module of NASA's ERP (SAP), currently under development, will be capable of identifying, tracking, and reporting capital costs as they are incurred for capital equipment items.

Recommendation 10: Identify purchases as controlled equipment when ordered, which would provide reasonable assurance that the agency's equipment records are updated upon receipt and acceptance of the property.

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Response: NASA concurs with the recommendation. NASA's OCFO, Office of Procurement, IEMP Program Office, and Logistics Management Division will work to adopt the standard business process supported by its software to ensure that the new system will be capable of identifying purchases as controlled equipment when ordered, which would provide reasonable assurance that the Agency's equipment records are updated upon receipt and acceptance of the property.

Thank you for the opportunity to review and comment on this draft report. While we noted several statements in the draft report that were either inaccurate or require further clarification, we accept the report for the critical insight it provides. We have provided technical comments separately to your staff in an effort to resolve these issues prior to the release of the final report. If you have any questions, please contact Mr. Dale Hupp, Acting Director of Logistics, on (202) 358-2304, or at dale.r.hupp@NASA.gov.

Sincerely,



Shana Dale
Deputy Administrator

See comment 2.

GAO Comments

The following are GAO's comments on the NASA letter dated June 7, 2007.

1. See the "Agency Comments and Our Evaluation" section of this report.
2. While we have made technical clarifications as appropriate, we do not agree that the draft included inaccurate statements.

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

McCoy Williams, (202) 512-9095 or williamsm1@gao.gov

Acknowledgments

Staff members who made key contribution to this report were Diane Handley, Assistant Director; James Ashley; Fannie Bivins; Francine DelVecchio; Yvonne Dorcas; Jody Ecie; Carmen Harris; and Inna Livits.

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