

SEMIANNUAL REPORT

April 1-September 30, 2007





TABLE OF CONTENTS

5					
Significant Audits and Investigations					
7					
9					
10					
15					
17					
20					
23					
24					
26					
Appendices					
31					
32					
42					



FROM THE INSPECTOR GENERAL

Robert W. Cobb Inspector General

In 2008, NASA will commemorate five decades of achievements in aeronautics, science and technology, and human spaceflight. As NASA plans for future endeavors on Earth and in space, the Agency faces great challenges. The NASA Office of the Inspector General (OIG) will continue to identify these challenges, promote the economy and efficiency of the Agency, and root out fraud, waste, abuse, and mismanagement.

Operating the world's preeminent aerospace organization is a great challenge. NASA is making significant progress in addressing institutional and programmatic weaknesses and challenges it faces. The Agency has been responsive to and taken advantage of the substantial body of OIG work addressing long-standing institutional challenges and other weaknesses. While the Agency's efforts to date have been noteworthy, weaknesses remain. In the 6-month period ending September 30, 2007, the OIG has issued several reports identifying weaknesses in Agency programs and operations and made recommendations to fix the problems.

In this semiannual period, the OIG has also continued to demonstrate that those who abuse NASA through fraud, waste or abuse will be brought to account, whether those persons have submitted false certifications for aerospace parts, stolen from the Government, misused Government equipment, or otherwise abused the public trust placed in them.

I would like to commend and express my appreciation to the employees of the NASA OIG for their efforts and contributions to our recent accomplishments. This report demonstrates the commitment of these dedicated civil servants and their success in executing the OIG mission.

Additionally, I would like to thank NASA management, Congress and the Office of Management and Budget. The results reflected in this report would not be possible without their interest and support. It is with great pleasure that I present the NASA OIG Semiannual Report, which outlines OIG significant accomplishments, activities, and recommendations for the second half of fiscal year 2007.

This report fairly summarizes the activities of the NASA OIG during this reporting period.

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Robert W. Cobb Inspector General

ORGANIZATION



THE NASA OFFICE OF INSPECTOR GENERAL (OIG) conducts audits, reviews, and investigations of NASA programs and operations to prevent and detect waste, fraud, abuse, and mismanagement and to assist NASA management in promoting economy, efficiency, and effectiveness. The OIG's fiscal year (FY) 2007 budget of \$32.2 million supports the work of audit, investigative, and administrative activities.

INSPECTOR GENERAL (IG) Robert W. Cobb provides policy direction and leadership for the NASA OIG and serves as an independent voice to the Administrator and Congress by identifying opportunities and promoting solutions for improving the Agency's performance. The Deputy Inspector General provides overall direction to the Assistant Inspectors General and Counsel to the Inspector General in the development and implementation of diverse audit, investigative, legal, and support operations of the OIG. The Executive Officer serves as the OIG liaison to Congress and other Government entities, conducts OIG outreach both within and outside of NASA, and manages special projects. 5

THE OFFICE OF COUNSEL TO THE INSPECTOR GENERAL provides advice and assistance on a variety of legal issues and matters relating to OIG review of NASA's programs and operations. The legal staff reviews legislation, regulations, Freedom of Information Act (FOIA) requests, and congressional matters that require OIG attention. Additionally, the staff provides advice and assistance on legal matters to OIG senior management, auditors, and investigators and serves as counsel in administrative litigation in which the OIG is a party or has a substantial interest. The staff also assists the Department of Justice (DOJ) in litigation in which the OIG participates as part of the prosecution or civil team or in which the OIG is a witness or defendant.

THE OFFICE OF AUDITS (OA) is responsible for conducting independent and objective audits, reviews, and other examinations to improve the economy, efficiency, and effectiveness of NASA programs, projects, operations, and contractor activities. In addition, OA oversees the work of the independent public accountant firm that is under contract by the OIG to conduct the annual audit of NASA's financial statements.

THE OFFICE OF INVESTIGATIONS (OI) investigates allegations of crime, cybercrime, fraud, waste, abuse, and misconduct that could have an impact on NASA programs, projects, operations, and resources. The OI refers its findings either to the DOJ for criminal prosecution and civil litigation or to NASA management for administrative action. Through its investigations, the OI identifies crime indicators and recommends measures for NASA management that are designed to reduce NASA's vulnerability to criminal activity.

THE OFFICE OF MANAGEMENT AND PLANNING (OMP) provides financial, procurement, human resources, administrative, and information technology (IT) services support to the OIG staff. The OMP develops, executes, and controls the OIG budget; acquires supplies and services through NASA contracting officers; and provides personnel services that include recruitment, performance management, qualifications and classification, and employee-relations functions. The OMP provides state-of-the-art IT capabilities for the OIG and coordinates the preparation of the strategic plan and the OIG Semiannual Report to Congress.

SIGNIFICANT AUDITS AND INVESTIGATIONS

Safety

NASA performs some of the most technologically complex tasks of any organization in the world, and it must do so without compromising safety. The OIG's Office of Audits and Office of Investigations work closely with NASA management to ensure appropriate attention to and resolution of safety issues.

Effective Inspection Program Key to Improving Laboratory Safety at Glenn Research Center

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-032.pdf

OA found that the Glenn laboratory inspection program was not effectively identifying, or following up on, all incidents of noncompliance. Specifically, the auditors identified incidents of noncompliance in each of the 22 laboratories that they reviewed. The auditors determined that the Safety, Health, and Environmental Division (SHED) was not inspecting all of the Glenn laboratories because its laboratory universe was not comprehensive; its list contained 192 fewer laboratories than identified by the Glenn Facilities Division. In addition, although Glenn guidance required corrective action plans for safety violations remaining open after 30 days, 87 violations that should have had plans did not, and 9 violations had the potential to cause injury or damage to personnel or equipment. After the auditors' review, SHED initiated a comprehensive review of its chemical management and laboratory safety programs and effectively mitigated any immediate health and/or safety threats by issuing stop-work orders.

The auditors made four recommendations to improve the effectiveness of the Glenn laboratory inspection program: comprehensively define the laboratory universe; identify all laboratories inspected; monitor the violations database and notify management of past-due violations and corrective action plans; and coordinate a stand-down day, during which laboratory personnel conduct a safety self-assessment, then use the results to issue violation notices and identify systemic safety issues. Glenn concurred and provided a corrective action plan with planned completion dates.

Audit of the Management of Aircraft Operations

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-016.pdf

OA found that NASA was not periodically reviewing aircraft mission requirements to determine whether its aircraft fleet was optimally sized to support Agency missions. The auditors also found that Johnson Space Center's Safety and Mission Assurance office had not fully implemented policies and processes to effectively carry out its aircraft oversight role. In addition, the auditors found that NASA's policies and procedures did not require that Inter-Center Aircraft Operations Panel (IAOP) review teams, which conduct biennial reviews of Center aircraft operations, include at least one non-NASA member.

During the audit, NASA's Aircraft Management Division addressed the majority of the findings in one significant NASA Procedural Requirements (NPR) revision and proposed an alternative course of action to

issue a written, standing invitation to the NASA Aerospace Safety Advisory Panel (ASAP) to attend every IAOP functional review. We considered the proposal responsive and closed the recommendation in May 2007 upon receipt of a letter to the ASAP extending the invitation.

The OIG also received a hotline complaint during the audit concerning bird strikes at Kennedy Space Center. OA determined that the complaint was largely unsubstantiated, but that NASA had not established a formal Wildlife Hazard Management Plan to mitigate wildlife hazards at NASA airfields. NPR 7900.3B, "Aircraft Operation Management Manual," now requires that Center Flight Operations Offices develop and implement such a plan.

Aerospace Subcontractor Employee Sentenced

A former sales manager of an aerospace subcontractor was sentenced to 33 months in prison and ordered to pay \$213,402 in restitution for his involvement in the submission of fraudulent certifications related to metal sold to NASA contractors. The metal was to be used on the leading edge of the wings for the Space Shuttle Atlantis. (Related indictments previously reported September 30, 2005, page 20; related convictions previously reported September 30, 2006, page 15; and related sentencings reported March 31, 2007, page 15.)

Space Operations and Exploration

NASA's most highly visible challenges have to do with space operations and exploration, areas that encompass programs and projects contained within two of the four NASA Mission Directorates—Space Operations and Exploration Systems. The OIG continues to focus its efforts on issues essential to the broader space mission of exploration and research.

Marshall Space Flight Center's Approach to Establishing Product Data Management and Mechanical Computer-Aided Design Software Tools as Standard Center-Wide

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-013.pdf

OA found that Marshall had assessed three Product Data Management (PDM)¹ products in April 2002. The assessment included an analysis of the technical, integration, and licensing factors for each product and resulted in recommending and selecting Windchill, a Parametric Technology Corporation product, as the primary PDM for Marshall engineering. However, the auditors also found that the July 2005 selection of Parametric Technology Corporation's Pro/Engineer as the standard Mechanical Computer-Aided Design (MCAD)² software for new flight system designs was made without an assessment or risk analysis. In addition, the selection process did not take into account customer and other stakeholder requirements and operational requirements. The auditors found this to be in conflict with established Agency policy requiring a robust assessment and risk analysis of alternatives. Therefore, the auditors recommended that Marshall suspend efforts to establish Parametric Technology Corporation products as standard and allow design engineers to continue to use UniGraphics Solutions, Inc., PDM and MCAD software pending an assessment and risk analysis of the Windchill PDM and Pro/Engineer MCAD software implementation, in accordance with applicable NASA guidance.

Management nonconcurred with the recommendations, stating that the suspension of archiving and migration activities and the continued use of UniGraphics Solutions, Inc., software tools impact schedule and risk. Management also stated that further risk analysis of the Windchill and Pro/Engineer implementation is not required because NPR 7150.2, "NASA Software Engineering Requirements," September 27, 2004, and NPR 8000.4, "Risk Management Procedural Requirements," April 25, 2002, were not applicable. Although we recognize that a completed technical assessment and risk analysis may result in showing that the selection of Parametric Technology Corporation's MCAD software as the standard for Marshall is appropriate, we did not consider management's comments responsive and requested that management reconsider its position and provide additional comments in response to the final memorandum.

Recovery of Manned Space Flight Artifacts

An OI investigation resulted in the recovery of two sets of "space gloves" valued at \$18,614. The gloves, which were used by astronauts during the Apollo, Skylab, and Apollo-Soyuz Test Programs, were found in the possession of a private citizen. After recovery, the gloves were provided to the Virginia Air and Space Center for public exhibition.

¹ A PDM is an information system used to manage data (e.g., plans, MCAD drawings, and images, as well as all related project data, notes, and documents) for a product as it passes from engineering to manufacturing.

² MCAD is a computer-based toolset that assists engineers, architects, and other design professionals in their mechanical design activities.

Financial Management

Improved financial management continues to be a significant management challenge for NASA. During this semiannual period, the OIG continued to monitor NASA's progress in this area and made recommendations to management to improve financial management practices.

Audit of NASA's Management and Funding of Fiscal Year 2006 Congressional Earmarks

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-028.pdf

OA determined that there were 199 earmarks included in NASA's budget for FY 2006. Those earmarks had congressionally directed funding of \$568.2 million, or 3.4 percent of the Agency's budget. The total cost of the 199 FY 2006 earmarks was \$576.2 million, which included the \$568.2 million in congressionally directed funding plus \$8 million in Agency oversight and administration costs. We reviewed 42 of the 199 earmarks, valued at \$321.4 million.

The audit found that all 42 earmarks selected for our review aligned with NASA's mission; however, not all earmarks aligned with the Agency's priorities for advancing its mission and goals. Based on the results of the auditors' review of the 42 earmarks, the auditors estimated that \$481.7 million, or 85 percent of FY 2006 earmarks, aligned with NASA's priorities, while \$86.5 million, or 15 percent, did not align with those priorities.

Because the FY 2006 appropriation did not provide additional funding for the 199 earmarks, NASA redirected funding included in the President's budget submission to fund the earmarks. The auditors were unable to link redirections to a specific earmark because NASA redirected funds in the approved budget by considering earmarks, rescissions, and NASA programmatic changes as an overall revision to the budget rather than as separate, individual revisions. The report did not contain any recommendations.

System Integration Testing of the Systems, Applications, and Products Version Update Project Needed Improvement

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-031.pdf

The Integrated Enterprise Management Program (IEMP) conducted system integration testing of the Systems, Applications, and Products (SAP) Version Update (SVU) Project to ensure that SAP's related systems (e.g., Core Financial, Contract Management Module, Travel Manager, and Business Warehouse) operate in accordance with design specifications and work together as an integrated whole. The SVU Project Office developed a test plan to provide guidance on conducting system integration testing. The auditors' objective was to determine whether testing was adequately planned and performed. The auditors found that although the SVU Project Office developed a test plan, the plan was inadequate and its execution was undisciplined. Specifically, the auditors found that SVU software requirements were not adequately stabilized until 4 months after system integration testing began, baselines of test procedures to be executed during each system integration testing were never established, an adequate process for assigning and changing defect severity levels or accurately reporting the number of very high defects was not developed, a regression test was not successfully completed, and the independent assessment did not adequately trace requirements to test

procedures or provide confidence that all appropriate requirements were adequately tested. The combination of these factors delayed SVU system implementation and resulted in software deficiencies that had to be corrected after implementation. As of September 2007, the SVU Project Office continued to resolve system issues, and at least one Business Warehouse report was not expected to be corrected until October 2007.

Throughout the audit, management considered or took action in response to our recommendations. Therefore, recommendations in the report were intended to improve testing procedures for future IEMP projects. Management concurred with almost all of the recommendations but was not responsive to our recommendation to hold off conducting the Operational Readiness Review until testing is completed and defects are resolved. We requested additional comments from management on that recommendation.

Audit of Space Shuttle Program Costs

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-026.pdf

In accordance with NASA requirements, the Space Shuttle Program (SSP) uses the IEMP Core Financial module as its financial system of record. However, the SSP's ability to use the Core Financial module to track its costs and make informed program decisions based on financial data was limited. Because Core Financial does not produce financial reports in the format needed by the SSP, the program developed a transfer process to extract cost data from Core Financial and input it into SSP's management information system—One NASA Management Information System (NMIS). That transfer process is manually intensive and time-consuming and, according to SSP Business Office staff, because of the delay caused by the transfer process, program and project managers make little use of the NMIS financial data to manage their projects.

During the audit, the IEMP office initiated a "gap analysis" to identify areas where IEMP does not provide the functionality to adequately meet NASA's program and project managers' needs. The auditors recommended that NASA include "timely reporting of financial data" as one of the IEMP functionality gaps and consider development of a system interface between IEMP and NMIS as a possible solution to that functionality gap. Also, because of timeliness issues related to SSP's data transfer process, the auditors recommended that NASA determine whether NMIS cost data can be updated in a more timely manner and, if not, evaluate the utility of continuing to update NMIS on a monthly basis. Management's responses and corrective actions taken were responsive to the report's recommendations.

NASA Could Improve Controls and Lower the Costs of the Intergovernmental Personnel Act Mobility Program

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-019.pdf

OA found that NASA's internal controls for evaluating and approving costs associated with the Intergovernmental Personnel Act (IPA) Mobility Program were inadequate to ensure that expenditures of about \$20.5 million annually were properly recorded and accounted for. While NASA's IPA policy provides guidance and procedures on initiating, processing, and approving IPA agreements, it does not provide guidance to ensure that IPA expenditures were supported, reasonable, and allowable. In addition, NASA did not adopt practices used by other Federal agencies to lower IPA Mobility Program costs; specifically, requiring cost-sharing, disallowing indirect costs, and placing a

time limit on extended per diem. The auditors concluded that NASA might be able to reduce the cost of the IPA program over the next 3 years by adopting practices used by other Federal agencies.

Management concurred with our recommendations to improve NASA's internal controls for evaluating and approving costs associated with the IPA Mobility Program. In addition, the changes to IPA guidance proposed in response to our recommendation on cost control practices could result in potential monetary benefits of more than \$6.9 million over the next 3 years.

NASA Has Not Met Intermediate Target Dates for Implementing its FFMIA Remediation Plan

Report pursuant to Section 5(a)(13) of the Inspector General Act, as amended

The Federal Financial Management Improvement Act (FFMIA) requires that agencies establish a remediation plan when their financial systems do not comply with the Act's provisions for systems requirements. Those provisions require each agency to implement and maintain financial management systems that comply substantially with Federal financial management systems requirements, applicable Federal accounting standards, and the U.S. Government Standard General Ledger at the transaction level. Agencies are given 3 years to implement their remediation plans, which must include resources, remedies, and intermediate target dates to bring agency systems into compliance. FFMIA Section 804(b) and implementing guidance require Inspectors General to report when their agency has not met the intermediate target dates established in its remediation plan.

In the *FY 2006 Performance and Accountability Report*, NASA management and the Agency's independent public accountant firm, Ernst & Young LLP, stated that NASA's financial management system did not comply substantially with FFMIA. IEMP and the Office of the Chief Financial Officer (CFO) are responsible for taking corrective actions. The Office of the CFO submitted a remediation plan to the Office of Management and Budget (OMB) addressing the FFMIA-related material weaknesses disclosed in Ernst & Young's "FY 2006 Report on Compliance with Laws and Regulations."

During FY 2007, NASA had not met intermediate milestones for four remedial actions. Although two remedial actions were completed during this 6-month period, they were completed after the planned due dates. As of September 2007, NASA was still in the process of taking the following remedial actions to correct the system integration nonconformance:

- Continue to implement manual controls to prevent, or detect and correct, errors when recording property journal vouchers in the accounting system.
- Establish a Configuration Control Board to ensure that any necessary system or process changes or enhancements are properly tested and implemented.

According to NASA officials, the Office of the CFO is incorporating quality assurance steps to conduct supervisory reviews of property journal vouchers prior to posting to the accounting system. In addition, resources still need to be reviewed to determine when NASA can support the testing of new process changes and enhancements to the financial management system. The complete review and validation of the current posting model in the system will require a significant commitment of Government and contractor resources.

Audit of NASA's Compliance with Federal Internal Control Reporting Requirements

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-025.pdf

OA found that NASA's FY 2006 guidance for assessing and reporting on internal controls, the effectiveness of the tools (i.e., training and communication) for implementing the guidance, and the adequacy of the documentation supporting NASA's Statement of Assurance and similar guidance being drafted for FY 2007 were incomplete or lacked sufficient clarification and were not distributed in a timely manner. Also, while both FY 2006 and draft FY 2007 guidance required that program managers include an internal control matrix, neither was clear as to why the matrix was required or how it would be used; sample matrices were insufficient. The auditors also found that the training was not comprehensive or attended by all key personnel and that lines of communication among management and reporting bodies were not clearly established. Further, the auditors found that there was not a clear audit trail of documentation supporting the FY 2006 statements of assurance submitted by NASA offices and Centers, which were the basis for NASA's Statement of Assurance signed by the Administrator.

The auditors made eight recommendations to correct the deficiencies, including that NASA implement a quality control process for the Agency's internal control program. Management concurred with all recommendations.

Audit of Federal Emergency Management Agency Mission Assignments for Hurricane Katrina Disaster Relief

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-018.pdf

We found that NASA had properly accounted for funding related to a \$12.6 million interagency agreement with the Federal Emergency Management Agency (FEMA). We also reviewed NASA's accounting for FEMA funding authorizations for four mission assignments. NASA properly accounted for one of the reimbursable mission assignments that incurred costs. One reimbursable mission assignment did not incur any costs and was closed. For the two remaining mission assignments that incurred costs, NASA improperly accounted for the costs as direct costs. Also, the mission assignments' costs were not separately tracked and were allowed to exceed the funding authorization amount. This occurred primarily because Headquarters personnel did not follow NASA guidance for establishing separate work breakdown structure (WBS)³ codes for reimbursable projects. In addition, NASA did not provide monthly progress reports, as required by FEMA, until September 2006.

As a result, NASA lost visibility over the costs for two of the reimbursable mission assignments and exceeded the FEMA funding authority by approximately \$1.7 million. In an effort to seek reimbursement prior to the expiration of funds, NASA attempted to review and separate approximately \$2 million of costs incurred for the two mission assignments. Of the \$2 million, NASA was only able to separate and obtain reimbursement of \$1.3 million. NASA could not provide separated costs to recoup the remaining \$700,000 for these two mission assignments prior to expiration of FY 2005 funds. Management concurred with both recommendations and planned actions are responsive.

³ A WBS code is used to track project costs. A WBS code can be divided into different levels that can be used to identify reimbursable projects.

Internal Controls over NASA's Transit Subsidy Program at Headquarters and Goddard Space Flight Center Needed Improvement

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-022.pdf

NASA Headquarters Human Resources Management Division (HRMD)'s Standard Operating Procedure (SOP) provides guidance on eligibility requirements for the Transit Subsidy Program; however, the controls used to ensure compliance with eligibility requirements needed improvement. Specifically, for the period that the auditors reviewed, April through June 15, 2006, they found that 428 of the 1,058 Transit Subsidy Program participants were not eligible to receive the subsidy. The Transit Subsidy Program included ineligible participants because HRMD did not apply the eligibility requirements in accordance with its SOP. HRMD also did not have internal controls to account for fare cards purchased, on hand, and distributed or to account for Smart Cards used for electronic subsidy distribution. HRMD concurred with our recommendations to improve controls.

Overall, the internal controls that Goddard established were effective; however, the auditors found instances where controls for reconciling fare cards, updating the Transit Subsidy Program database, and safeguarding the fare cards either were nonexistent or could be improved. The auditors also found that Goddard was not adequately safeguarding the fare cards. During the audit, Goddard's Management Operations Directorate, which administers the Transit Subsidy Program at Goddard, took immediate corrective actions to resolve the issues that were identified.

Information Technology Security

NASA'S IT leadership has been addressing many of the IT security and internal control issues we raised in past audits and reviews. IT security and internal controls are crucial to the protection of NASA'S IT systems and data and to NASA's achieving its overall mission. Some of the reports featured here are not publicly available because of the sensitivity surrounding IT security vulnerabilities.

Annual OIG Federal Information Security Management Act (FISMA) Report

Summary available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-034summary.pdf

The OIG submitted to the Administrator our annual report, "Federal Information Security Management Act: Fiscal Year 2007 Report from the Office of Inspector General" (IG-07-034, September 28, 2007), which provides the OMB with OA's independent assessment of NASA's IT security posture. The Inspector General (IG) noted that NASA identified its IT security program as a material weakness reportable in accordance with the Federal Managers' Financial Integrity Act. NASA's IT security program will remain as a material weakness until IT security weaknesses, identified during this fiscal year and in previous years, are mitigated. We also plan to identify IT security as a management and performance challenge in the Agency's *FY 2007 Performance and Accountability Report*.

Controls over the Detection, Response, and Reporting of Network Security Incidents Needed Improvement at Four NASA Centers Reviewed

Summary available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-014summary.pdf

The auditors found that the controls in place at the four Centers they visited did not provide reasonable assurance that network security incidents were detected, resolved, and reported in a timely fashion. The auditors made six recommendations that, when implemented, would provide that assurance. NASA management concurred and initiated appropriate corrective actions for four of the six recommendations. For the other two recommendations, management provided additional comments in response to our final report, which we considered to be responsive.

Assessment of NASA's Certification and Accreditation Process

Summary available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-035summary.pdf

FISMA requires agencies to report annually on the effectiveness of the agency's IT security program and requires IGs to perform independent evaluations of their agency's information security programs and practices. For FY 2007, OMB asked IGs to provide a qualitative assessment of their agency's process for certifying and accrediting IT systems. OMB and the NASA Office of the Chief Information Officer (CIO) requested that the OIG provide, as a part of the FY 2007 FISMA compliance review, an early assessment of NASA's process for certification and accreditation (C&A) of unclassified NASA systems categorized as moderate- and high-risk impact. Overall, OA found that the Office of the CIO's policies and procedures for the C&A process for unclassified systems were in compliance with FISMA requirements; however, the quality assurance function of the process could be improved. Specifically, the auditors found inaccuracies and inconsistencies in C&A

documentation for 11 of 13 security assessment reports that they reviewed. Inaccurate and inconsistent information in the security assessment report reduces the assurance that authorizing officials have the information they need to make a credible, risk-based decision about system accreditation—i.e., whether to authorize operation of an information system. The Office of the CIO immediately began taking corrective actions to address the auditors' concerns. Management also concurred with the auditors' recommendations to improve the quality assurance function and compliance with FISMA requirements.

NASA's Implementation of the Privacy Provisions of the Electronic Government Act

Summary available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-024summary.pdf

OA reviewed NASA's implementation of the privacy provisions of the Electronic Government Act of 2002 (E-Government Act). The auditors found that NASA was in partial compliance with OMB guidance in that NASA had conducted privacy impact assessments (PIAs) for electronic information systems and collections and made PIAs publicly available on its Web site. However, privacy policies were not posted on 20 percent of NASA's publicly accessible Web sites and not translated into a standardized machine-readable format on 75 percent of NASA's publicly accessible Web sites. As a result, NASA could not be assured that privacy risks have been appropriately assessed by Web site officials, and users accessing those sites may not have received sufficient information to make informed decisions about whether to interact with the site.

The auditors recommended that NASA (1) annually review the Agency's publicly accessible Web sites to ensure sites are current and in compliance with existing requirements and (2) develop and report a timetable for translating privacy policies into a standardized machine-readable format. Management's comments were responsive to the recommendations.

NASA's Reporting of Performance Measure Data for FISMA Needed Improvement at Four Centers and NASA Headquarters

Summary available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-023summary.pdf

Our audit of NASA's reporting of FISMA performance measure data for FY 2006, reviewed selected IT systems at four Centers and NASA Headquarters to determine whether they had satisfied FISMA performance measure reporting requirements. The auditors found that the four Centers and NASA Headquarters had not fully complied with the standards and guidance established by the National Institute of Standards and Technology (NIST), as required by FISMA. Of the 18 systems that they reviewed, 15 systems lacked a NIST-compliant C&A, 13 systems had not undergone a security control review in the past year, and 6 systems lacked a tested contingency plan. Additionally, the auditors found that NASA's databases contained inaccurate data on the systems that they reviewed and, when the databases were compared with NASA's FISMA report for the March 2006 quarter, we found discrepancies. As a result, the auditors concluded that NASA's FY 2006 FISMA performance measure data were unreliable indicators of the overall status of the Agency's IT security program.

The auditors recommended that Center and Headquarters CIOs ensure compliance with NIST requirements and that the NASA CIO validate the performance measure data reported in the FISMA quarterly reports and retain documentary support for the reported data. Management concurred with the report's recommendations, and management's planned and completed corrective actions were responsive to the report's recommendations.

Procurement

Given that NASA expends most of its budget through contracts and other procurement vehicles, effective and efficient acquisition processes and contract management are critical to NASA's success in achieving its overall mission. Through audits and investigations, the OIG seeks to assist the Agency in improving its acquisition and contract practices as well as to detect and prevent fraud in these areas.

NASA Mission Management and Program Support Aircraft A-76 Studies

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-015.pdf

OMB Circular No. A-76, "Performance of Commercial Activities," provides requirements that Federal agencies must use to periodically review the cost-effectiveness of their aircraft operations. NASA hired an independent contractor, Conklin and de Decker Associates, to analyze operations for NASA's mission management aircraft (MMA) at Johnson Space Center, Kennedy Space Center, and Marshall Space Flight Center and program support aircraft (PSA) at Dryden Flight Research Center and Wallops Flight Facility. The A-76 studies, issued in August 2006, concluded that NASA's best source for low-cost aviation services was NASA's three MMA and two PSA. We reviewed those A-76 studies to determine whether conclusions of the studies were reasonable and supported by accurate and reliable data and whether the costs utilized in the studies were correctly calculated and fully justified.

The auditors found that the requirements NASA stipulated for the MMA analysis unnecessarily restricted options for private sector scenarios and made the private sector cost prohibitive. Also, for Marshall, some of the operating cost data were not supported. After the auditors communicated those issues to NASA, the Agency determined that the August 2006 A-76 MMA studies should be revised and the use of private sector providers reevaluated. The revised studies, issued in February 2007, indicated that Marshall's use of a private sector provider could save NASA \$3.5 million over 5 years, or 23 percent of current costs, and recommended that Marshall dispose of the aircraft and pursue the use of a private sector provider. The studies also recommended that NASA evaluate costs and benefits of replacing all three MMA programs with a single program such as a private sector provider.

NASA issued a request for information for commercial aviation transportation services from private sector providers. Responses to the request for information were received in July 2007. NASA will use the responses to evaluate the price and mission effectiveness of commercial transportation services in lieu of operating NASA's own aircraft at any or all of the MMA Centers. Because the Agency had already taken action and addressed the issues we identified, our audit report contained no recommendations.

Audit of NASA Education and Training Grants

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-029-R.pdf

We reviewed 22 of NASA's education and training grants, awarded to 18 institutions, to determine whether the students and faculty receiving funding were U.S. citizens and whether grantees were using grant funds in accordance with applicable regulations. The auditors found that training grants awarded by NASA were generally being used to support U.S. citizens as required by law, and grantees were generally using the grant funds appropriately. The auditors were unable to verify the citizen status of 25 out of 270 students and faculty due to their non-availability or non-response to written requests for citizenship verification data. While the auditors did not identify any non-U.S. citizen students receiving grant funding, they did identify three non-U.S. citizen faculty receiving financial support through grant funding.

The auditors recommended that NASA continue its attempts to verify the citizenship of the remaining 25 students and faculty; revise grant guidance to require students and faculty to include with their grant application notarized proof of their U.S. citizenship; and issue guidance reemphasizing that grant specialists scrutinize applications and question generic line items in grant proposal budgets. Management's comments were responsive.

Audit of Marshall Space Flight Center's Administration of Government Property Held Off-Site by Contractors

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-030.pdf

The OIG received allegations that (1) Marshall contracting officers (COs) did not ensure proper property administration delegation for Government-owned property held off-site by contractors, (2) procurement personnel and contracting officer's technical representatives (COTRs) were not properly trained in managing Government property, and (3) contractors had custody of property that they were not authorized to have. We substantiated the allegation that the COs did not always properly delegate or obtain a letter of acceptance from the Contract Administration Office for property administration, which could impact NASA's ability to properly safeguard property or ensure that its use is in accordance with contracts terms and conditions. The auditors also found that COs had not ensured accurate reporting and accounting for property in accordance with the contract and regulatory guidance which may have resulted in reporting errors totaling an overstatement of \$2.2 million in the Agency's FY 2006 financial statements. With regard to the other allegations, the auditors found that Government property management training was not required for COTR certification nor was it a primary function of their duties. In addition, the auditors found that all contractor-held Government property, within the scope of our review, was authorized by contract.

The auditors made four recommendations focused on developing internal controls to provide recurring follow-up and validation of compliance with relevant regulations. While management concurred with all four recommendations, management's comments were not fully responsive, and we requested additional comments.

Contractor Company and Owners Debarred from U.S. Government Contracts for False Certifications

The NASA Office of Investigations, the Defense Criminal Investigative Service, and the U.S. Air Force Office of Special Investigations conducted a joint criminal fraud investigation into a contractor's performance on the Large Payload Test Fixture, a three-story steel tubing structure used to mount simulated orbiter payloads.

In June 2007, the U.S. Government debarred the contractor and its owners for 3 years from contracting with the U.S. Government. The debarment was based on investigative findings that the contractor violated the terms of one or more of the contracts and/or subcontracts and that the improper conduct was so serious and compelling that it affected the contractor's present and future ability to be a U.S. Government contractor or subcontractor.

Aerospace Company and Owner Face Additional Charge

An aerospace company and its owner were charged with an additional count of exporting a defense article without obtaining approval from the State Department. They were initially indicted on one count each of exporting defense articles without a license, fraud involving aircraft parts, and making a false statement. The charges resulted from a joint investigation by the NASA Office of Investigations, the U.S. Army Criminal Investigation Command, the Federal Bureau of Investigation (FBI), the Internal Revenue Service, the Defense Criminal Investigative Service, and U.S. Immigration and Customs Enforcement that revealed export violations and fraud related to parts used in *Black Hawk* helicopters, three of which are used under a joint research program known as the Army/NASA Rotocraft Division. (Indictment previously reported March 31, 2007, page 12.)

NASA Employee Convicted of Theft

A former NASA Resource Program Specialist was charged with and pled guilty to theft related to her fraudulent use of a NASA-provided purchase card. Following a referral by the NASA OIG Office of Audits, an OI investigation revealed that the specialist had executed 426 fraudulent transactions with her NASA purchase card that totaled \$157,000. The employee resigned her position with NASA.

Other Audit and Investigative Matters

Observations on the Review and Approval of Glenn Research Center's Relocation of the Cryogenic Components Laboratory Facility

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-027.pdf

OA conducted an audit in response to an OIG hotline complaint concerning the management of Space Act Agreements between Glenn Research Center and the City of Cleveland, Ohio, relating to Cleveland's airport expansion project.

The auditors found that when Glenn entered into the agreement with the City for the construction of the Cryogenic Components Laboratory (CCL) facility at Plum Brook Station, Sandusky, Ohio, in August 2003, Glenn had no plans to use the new CCL facility once it was operational and did not have a valid operational requirement, as required by NASA policy. Requirements for the CCL facility did not materialize until 4 years after the decision to construct it. The auditors also found that Glenn had accepted the CCL facility, knowing that Cell #1 and Cell #2 of the facility were not complete. The CCL facility sat idle from December 2004, when the City granted Final Acceptance to the contractor, until September 2006, when Glenn brought in contractors to restart work on the facility. Glenn had not fully inspected the CCL facility to determine the extent of work needed to complete it before the contractors restarted work.

As of August 2007, Cell #1 and Cell #2 of the facility were still not completed. Glenn estimated that \$909,000 was needed to complete both cells by January 2008. However, Glenn has not fully inspected the entire CCL facility to determine the extent of work needed. If Glenn determines that there is a need to complete the entire CCL facility, it will have to use appropriated funds because the remaining City funds are not sufficient to complete all of the airport expansion project's outstanding tasks. Currently, there are City funds available to complete Cell #2 based on known deficiencies. However, there is insufficient City funding to complete Cell #1 of the CCL facility. The auditors recommended that the Glenn Director fully inspect the CCL facility to determine the extent of work needed to complete it and the estimated cost for completion. In addition, the auditors recommended that the Glenn Director prepare a functional requirements statement for any future facility projects. Although management concurred with our recommendations, the comments were not fully responsive, and we requested additional comments.

Audit of Requirements for Testing Facilities at Plum Brook Station

Available on the Web at http://oig.nasa.gov/audits/reports/FY07/IG-07-033.pdf

OA conducted an audit to determine whether NASA had a requirement for its testing facilities at Plum Brook Station. The audit was initiated because the Real Property Mission Analysis Team produced a draft report on June 14, 2005, which recommended that NASA assess closing Plum Brook Station and disposing of the property because "there are no prospects to improve the utilization of Plum Brook Station's facilities. . . . There is minimal workload at Plum Brook and no evident prospect for increasing that workload." The auditors found that NASA expends approximately \$10.4 million annually to retain testing and storage facilities at Plum Brook Station. During our audit, NASA identified requirements for three of the five testing facilities in support of the Constellation Program. Specifically, the Crew Exploration Vehicle Project Office made plans to use the Space Power Facility to conduct environmental testing and the Spacecraft Propulsion Research Facility to conduct stage testing for the Constellation Program. In addition, the Launch Systems Project Office at Glenn intends to use the CCL facility (Cell #2) to conduct developmental testing of the Crew Launch Vehicle Upper Stage purge system and hazardous gas detection system starting in January 2008 for 6 months. Also, the Constellation Program Test and Verification Office continues to analyze whether additional tests can be done in those facilities.

NASA determined that it does not have a current or future mission need for the Hypersonic Tunnel Facility and directed it to be mothballed. NASA and the Department of Defense determined that other facilities, at the Arnold Engineering Development Center and Langley Research Center, will meet their needs. NASA also determined that there was no customer base for the foreseeable future for the Cryogenic Propellant Tank Facility (K Site) and directed that the K Site be abandoned by the end of FY 2007 and that all support staff associated with the K Site be reassigned or released. Given the status of NASA's plans for the testing facilities at Plum Brook Station, we did not make any recommendations.

Indictment for Theft of Aerospace Metals

A former contractor employee was indicted for theft of Government property. Our investigation disclosed that the former employee allegedly stole \$77,571 worth of rare and valuable metals used in applications on aircraft, spacecraft, and the Space Shuttle.

Administrative Assistant Pleads Guilty to Mail Fraud

A former NASA contractor employee, an administrative assistant, pled guilty to mail fraud. The charges related to fraudulent claims submitted to NASA for payments totaling \$120,578.

Guilty Pleas in NASA Theft Cases

A former NASA contract security guard and his accomplice were indicted for theft of NASA property. The joint investigation by the NASA OIG and the NASA Protective Services Office revealed that the security guard committed thefts of electronic equipment during his shift work at Johnson Space Center and sold many of the items to an accomplice who intended to re-sell the stolen items. Over \$46,000 in stolen property was recovered during the investigation. Both have pled guilty to the indictment and are awaiting sentencing.

In an unrelated case, another former NASA contract employee pled guilty to one count of theft of \$5,000 worth of Government computer hardware. That individual was sentenced to 1 year of probation and ordered to pay a fine of \$1,215.88. The majority of the computer hardware was recovered.

Criminal Complaint Filed Against Former NASA Contractor for Possession of Child Pornography

Following an investigation by the NASA OIG Computer Crimes Division, a criminal complaint was filed in the U.S. District Court, Northern District of California. The two-count complaint alleges that a former NASA contractor possessed thousands of images and video files of child pornography.

Two Aerospace Engineers Indicted for Possession of Child Pornography

In separate indictments, two aerospace engineers who were formerly employed at NASA Ames Research Center were indicted for possessing images of child pornography on their Government computers.

Media Relations Specialist Pleads Guilty and Is Sentenced

A former NASA contract Media Relations Specialist pled guilty to possession and receipt of child pornography and was sentenced to two 97-month terms (to be served concurrently) and fined \$15,000.

Two NASA Contractor Employees Convicted and Indicted for Firearm Possession

A NASA contractor employee was convicted of possessing a firearm at the NASA Stennis Space Center. The employee was sentenced to serve 12 months' probation and pay a \$500 fine. In another incident at Stennis, a contractor employee was recently indicted for illegal possession of a firearm.

LEGAL MATTERS

Acquisition Integrity Program

OIG legal and investigations staff assisted NASA in the design of the NASA Acquisition Integrity Program (AIP). An initial introduction of the AIP to NASA managers and supervisors throughout NASA Centers and Headquarters addressed what the OIG does, identified local contacts, and provided case examples of recent activity. The OIG continues to work with NASA to develop formal training for NASA attorneys, COs, and COTRs, as well as develop general Web-based fraud awareness training.

Summer Intern Program for Law Students

The Office of Counsel to the IG provided introductory training to law students on the IG concept and history. These students come from law schools throughout the country and are assigned as summer interns at various OIG offices. We also hosted an OIG attorneys' roundtable discussion for the interns on legal practice differences between the public sector and the private sector.

Inspector General Reform

With the 30th anniversary of the IG Act approaching next year, the Office of Counsel to the IG has analyzed a variety of bills designed to improve the IG organizations in Government and promote greater accountability and flexibility in performing OIG functions.

REGULATORY REVIEW

During this reporting period, the OIG reviewed and commented on 13 NASA-wide and Headquarters directives. Of those reviewed, the following were of particular significance to the OIG: NASA Policy Directive 2521.1, "Communications Material Review," and "Policy on Prevention of and Response to Workplace Violence."

SIGNIFICANT OUTREACH ACTIVITIES

During this reporting period, the NASA OIG engaged in a number of significant outreach activities that involved coordinating with the Agency, other Offices of Inspector General, and other Federal agencies.

- The IG is the PCIE liaison to the Chief Acquisition Officers Council (CAOC). The CAOC is the principal interagency forum for monitoring and improving the Federal acquisition system. The IG participates in discussions and forwards relevant information on existing and emergent acquisition issues to other members of the PCIE.
- The IG is a member of the PCIE Information Technology Committee. The Committee was established to facilitate effective IT audits, evaluations, and investigations by IGs and to provide a vehicle for the expression of the IG community's perspective on Government-wide IT operations.
- The IG is a member of the PCIE Human Resources Committee (HRC). The HRC provides
 educational opportunities for members of the PCIE and Executive Council on Integrity
 and Efficiency (ECIE) communities and assists in ensuring the development of competent
 personnel. In 2007, the IG served on a subcommittee to design a new OIG Leadership
 Development course for current and future OIG leaders. After taking recommendations from
 the working group, the subcommittee and HRC selected American University as the provider of
 the course. The inaugural session to train 20 OIG staff members will begin in October 2007.
- OA provided support to the Homeland Security Roundtable of the PCIE and the ECIE. The Roundtable was established to coordinate OIG reviews of Federal relief efforts in the aftermath of Hurricane Katrina. We attended Roundtable meetings and provided NASArelated information that was periodically submitted to Congress. Also, we continue to support the Roundtable's efforts to identify how the IG community can be better organized and prepared for catastrophic disasters.
- In April 2007, the Assistant Inspector General for Auditing and the Counsel to the IG presented the OIG's approach to addressing export control issues to attendees of NASA's export control conference.
- In June 2007, the IG and the NASA CIO met with OMB staff to discuss the status of NASA's IT Security Program.
- On June 13, and August 29, 2007, OA participated in meetings with the Office of the CIO and OMB to discuss the status of Agency corrective actions to improve FISMA compliance and the accuracy and completeness of Exhibit 300 (Capital Asset Plan and Business Case) data.
- In July 2007, the NASA OIG hosted the Interagency Investigative Data Mining Working Group quarterly meeting at NASA Headquarters. The Working Group was established to facilitate effective data mining techniques and tools and to provide a vehicle for the expression of the IG and investigative communities' perspectives on data mining.
- In August 2007, the OIG briefed congressional staff members on the status of the ongoing investigation and audit relating to the suppression of scientific research.

- On August 2, 2007, OA met with representatives from the Department of Defense OIG and discussed our approach to and best practices of monitoring the work of contract auditors.
- On August 13, 2007, OA provided NASA management with our review of relevant findings applicable to NASA in the "Memorandum on the Social Security Administration's Office of Inspector General's Report, 'Federal Employees' Compensation Act: A Nationwide Review of Federal Employees Who Received Compensation for Lost Wages for Periods When "Earned Wages" Were Reported on the Social Security Administration's Master Earnings File' (SSA OIG Report No. A 15 of 16037)." The Social Security Administration OIG performed an analysis to identify recipients with a death indicator or annotated date of death who received potential excess payments in calendar year 2004. NASA was identified as having two recipients with an annotated date of death who received excess payments of \$5,706.

AWARDS

OIG Employees Recognized for Group Achievement

On June 5, 2007, NASA OIG Office of Investigations employees John Corbett, Anthony Pavlik, Edwin Gumban, Michael Mataya, and Jacqueline Spiller were recognized by the NASA Administrator for their quick actions, bravery, and coordinated efforts to resolve a hostage situation that occurred at Johnson Space Center. The award was presented to Special Agent in Charge John Corbett.



John Corbett with the Johnson Space Center Director and Deputy Director (left to right): Former Deputy Director Robert Cabana, John Corbett, and Director Michael Coats.

NASA OIG Recognizes Certification and Accreditation Milestone

C&A is a process required by FISMA that ensures that systems and major applications adhere to formal and established security requirements that are well documented and authorized. All systems and applications that reside on U.S. Government networks must go through a formal C&A process before being put into production, and every 3 years thereafter. When an information system operates at an acceptable risk level, based on the implementation of an approved set of technical, managerial, and procedural safeguards, an agency authorizing official issues an Authority to Operate Letter. Tom Howard, the NASA Deputy Inspector General and Authorizing Official, and Lawrence Anderson, NASA OIG Information System Owner and C&A Program Manager, recognized the milestone of the OIG's first Authority to Operate Letter, along other NASA employees, with a signing ceremony and luncheon hosted at NASA Headquarters.



Recognizing OIG's first C&A (left to right): OIG Director of Information Technology Services Lawrence Anderson and Deputy Inspector General Thomas Howard.

APPENDICES

B. STATISTICAL REPORTS

С

. STATISTICAL REPORTS	
Table 1 —Audit Reports and Impact	32
Table 2 —Audits with Questioned Costs	35
Table 3 — Audits with Funds Put to Better Use	35
Table 4 —Prior Significant Audit Recommendations Yet to Be Implemented	36
Table 5 —Status of A-133 Findings and Questioned Costs Related to NASA Awards	37
Table 6 –Legal Activities and Reviews	37
Table 7 —Investigations Activities	38
Table 8 –Investigations Impact	38
Table 9 – DCAA Audits with Questioned Costs and Recoveries	40
Table 10—DCAA Audits with Recommendations that Funds Be Put to Better Use and Agreed to	41
GLOSSARY AND ACRONYMS	42

APPENDIX A

Inspector General Act Reporting Requirements

INSPECTOR GENERAL ACT CITATION	REQUIREMENT DEFINITION	CROSS-REFERENCE PAGE NUMBER(S)
Section 4(a)(2)	Review of Legislation and Regulations	23
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies	3, 7-22
Section 5(a)(2)	Recommendations for Corrective Actions	3, 7–22
Section 5(a)(3)	Prior Significant Audit Recommendations Yet To Be Implemented	36
Section 5(a)(4)	Matters Referred to Prosecutive Authorities	38
Sections 5(a)(5) and 6(b)(2)	Summary of Refusals To Provide Information	None
Section 5(a)(6)	OIG Audit Reports Issued—Includes Total Dollar Values of Questioned Costs, Unsupported Costs, and Recommendations that Funds Be Put to Better Use	32
Section 5(a)(7)	Summary of Significant Audit Reports	7-22
Section 5(a)(8)	Total Number of Reports and Total Dollar Value for Audits with Questioned Costs	35
Section 5(a)(9)	Total Number of Reports and Total Dollar Value for Audits with Recommendations that Funds Be Put to Better Use	35
Section 5(a)(10)	Summary of Prior Audit Reports for which No Management Decision Has Been Made	None
Section 5(a)(11)	Description and Explanation of Significant Revised Management Decisions	None
Section 5(a)(12)	Significant Management Decisions with which the Inspector General Disagreed	None
Section 5(a)(13)	Reporting in Accordance with Section 05(b) of the Federal Financial Management Improvement Act of 1996 Remediation Plan	12

APPENDIX B

Statistical Reports

During the period April 1 through September 30, 2007, the Office of Audits issued 25 products.

Table 1: Audit Reports and Impact

REPORT NO./ DATE ISSUED	REPORTTITLE	IMPACT
	Audit Area: Safety	
IG-07-016 05/17/07	Audit of the Management of Aircraft Operations	Improvements in the Agency's management of its aircraft fleet.
IG-07-032 09/24/07	Effective Inspection Program Key to Improving Laboratory Safety at Glenn Research Center	Improved laboratory inspection program to reduce the risk of injury to personnel and damage to assets and facilities resulting from laboratory operations.
	Audit Area: Space Operations and Exploration	
IG-07-013 07/24/07	Marshall Space Flight Center's Approach to Establishing Product Data Management and Mechanical Computer-Aided Design Software Tools as Standard Center-Wide	Compliance with NASA guidance and mitigation of risks associated with establishing standard Center-wide Product Data Management and Mechanical Computer- Aided Design Software tools.
	Audit Area: Financial Management	
IG-07-017 06/19/07	Audit of NASA's Workers' Compensation Program for the Office of Inspector General	Assurance that only eligible OIG employees receive workers' compensation payments.
IG-07-018 07/05/07	Audit of Federal Emergency Management Agency Mission Assignments for Hurricane Katrina Disaster Relief	Enhance compliance with NASA guidance and proper accounting for reimbursable projects.
IG-07-019 07/18/07	NASA Could Improve Controls and Lower the Costs of the Intergovernmental Personnel Act Mobility Program	Improved controls over the Intergovernmental Personnel Act Mobility Program may result in cost avoidance of about \$6.9 million over the next 3 years.
IG-07-022 07/20/07	Internal Controls over NASA's Transit Subsidy Program at Headquarters and Goddard Space Flight Center Needed Improvement	Improvements in the Agency's management controls of the Transit Subsidy Program.
IG-07-028 08/09/07	Audit of NASA's Management and Funding of Fiscal Year 2006 Congressional Earmarks	Independent assessment of congressional earmarks and their alignment with the Agency's priorities. Assurance that NASA complied with oversight requirements of earmarks awarded as grants and contracts.

Table 1: Audit Reports and Impact (continued)

REPORT NO./ DATE ISSUED	REPORTTITLE	ІМРАСТ
	Audit Area: Financial Management (continued)	
IG-07-025 08/14/07	Audit of NASA's Compliance with Federal Internal Control Reporting Requirements	Improvements in the quality of NASA's process for complying with Federal internal control requirements, to include more complete guidance, a comprehensive training program, increased lines of communication among management and reporting bodies, and adequate supporting documentation.
IG-07-026 09/19/07	Audit of Space Shuttle Program Costs	Assurance that IEMP will provide Space Shuttle Program managers with the financial data that they need in a timely manner.
IG-07-031 09/28/07	System Integration Testing of the Systems, Applications, and Products Version Update Project Needed Improvement	Improved process for system integration testing for future IEMP projects.
	Audit Area: Information Technology (IT) Securit	ty
IG-07-014 06/19/07	Controls over the Detection, Response, and Reporting of Network Security Incidents Needed Improvement at Four NASA Centers Reviewed	Improved IT security controls to detect, resolve, and report network security incidents in a timely manner.
IG-07-024 08/28/07	NASA's Implementation of the Privacy Provisions of the Electronic Government Act	Compliance with OMB guidance and assurance that privacy risks have been appropriately assessed and users have received sufficient information to make informed decisions.
IG-07-023 09/06/07	NASA's Reporting of Performance Measure Data for the Federal Information Security Management Act (FISMA) Needed Improvement at Four Centers and NASA Headquarters	Compliance with FISMA requirements and increased reliability of performance measure data used to assess the status of the Agency's IT security program.
IG-07-035 09/26/07	Assessment of NASA's Certification and Accreditation Process	Assurance that authorizing officials have the information they need to make a credible, risk- based decision about whether to authorize a system to operate.
IG-07-034 09/28/07	Federal Information Security Management Act: Fiscal Year 2007 Report from the Office of Inspector General	Identified areas for improving NASA's overall IT security posture.
	Audit Area: Procurement	
IG-07-015 05/17/07	NASA Mission Management and Program Support Aircraft A-76 Studies	Assurance that the mission management aircraft and program support aircraft cost analysis is supported by accurate and reliable data.

Table 1: Audit Reports and Impact (continued)

REPORT NO./ DATE ISSUED	REPORTTITLE	ІМРАСТ
	Audit Area: Procurement (continued)	
IG-07-029 09/18/07	Audit of NASA Education and Training Grants	Assurance that grant recipient institutions are obtaining appropriate proof of U.S. citizenship from students and faculty receiving NASA education and training grants.
IG-07-030 09/28/07	Marshall Space Flight Center's Administration of Government Property Held Off-Site by Contractors	Accurate reporting of property on the financial statements and assurance that property is properly safeguarded.
	Audit Area: Other	
Q-06-005-00 05/29/07	Post-Closure Follow-Up Review for Audit Recommendations Closed During FYs 2001- 2005	Ensure compliance with OMB guidance that corrective actions sufficiently mitigate OIG-identified deficiencies.
ML-07-010 07/20/07	NASA's Compliance with Federal Export Control Laws and Risks Associated with the Illegal Transfer or Theft of Sensitive Technologies	Improved controls and reduced risks associated with the illegal transfer or theft of sensitive technologies.
IG-07-027 09/28/07	Observations on the Review and Approval of Glenn Research Center's Relocation of the Cryogenic Components Laboratory Facility	Improved process for evaluating operational requirements for facilities and options for meeting requirements. Improved management of Space Act Agreements for facilities.
IG-07-033 09/28/07	Audit of Requirements for Testing Facilities at Plum Brook Station	Improved basis for evaluating Agency operational requirements for facilities and evaluating options to meet the identified requirements.
	Audit Area: Quality Control Reviews	
IG-07-020 07/06/07	Quality Control Review of Macias Gini & O'Connell LLP Audits of Ames Exchange Financial Statements for FYs Ended September 30, 2005, and September 30, 2006	Assurance that certified public accountant firms comply with generally accepted government auditing standards when auditing exchange financial statements.
IG-07-021 08/28/07	Quality Control Review of [a Company's] Audit of Goddard Employees' Welfare Association Financial Statements for Fiscal Year Ended September 30, 2006	Assurance that certified public accountant firms comply with generally accepted government auditing standards when auditing exchange financial statements.
Table 2: Audits with Questioned Costs

	NUMBER OF AUDIT REPORTS	TOTAL QUESTIONED COSTS
No management decision made by beginning of period	0	0
Issued during period	1	\$34,927
Needing management decision during period	0	0
Management decision made during period	1	\$34,927
Amounts agreed to by management	1	\$34,927
Amounts not agreed to by management	0	0
No management decision made by end of period	0	0
Less than 6 months old	0	0
More than 6 months old	0	0

Table 3: Audits with Funds Put to Better Use

	NUMBER OF AUDIT REPORTS	TOTAL FUNDS PUT TO BETTER USE
No management decision made by beginning of period	0	0
Issued during period	1	\$6,940,000
Needing management decision during period	0	0
Management decision made during period	1	\$6,940,000*
Amounts agreed to by management	1	\$6,940,000*
Amounts not agreed to by management	0	0
No management decision made by end of period	0	0
Less than 6 months old	0	0
More than 6 months old	0	0

* At this time management is unable to determine the actual amounts of funds put to better use.

Table 4: Prior Significant Audit Recommendations yet to Be Implemented

REPORT NO./ DATE ISSUED	REPORT TITLE	DATE RESOLVED	NUMBER OF REC OPEN	OMMENDATIONS CLOSED	LATEST TARGET CLOSURE DATE
	NEW SINCE L	AST REPORTI	NG PERIOD		
	Audit Area: Space Operations and Ex	kploration			
IG-07-005 01/29/07	NASA's Plan for Space Shuttle Transition Could Be Improved by Following Project Management Guidelines	05/07/07	2	1	05/31/08
	Audit Area: Financial Management				
IG-07-002 11/20/06	NASA Implemented the Project Management Information Improvement (PMI ²) Initiative but Crosswalk and Training Need to Be Completed	11/20/06	1	2	12/31/07
IG-07-003 11/21/06	Governance of the Systems, Applications, and Products Version Update Project Needs Improvement	11/21/06	5	1	09/30/09
	REPORTED IN PRE	VIOUS SEMIA	NNUAL REPORTS		
	Audit Area: Information Technology				
IG-06-010 05/09/06	NASA Should Improve Employee Awareness of Requirements for Identifying and Handling Sensitive But Unclassified Information	05/09/06	1	0	11/30/07
IG-06-017 03/17/06	NASA's Information Technology Capital Planning and Investment Control	09/14/06	2	1	02/24/071
Memorandum 12/19/05	NASA Lacks Procedures to Define, Recognize, and Protect Meta-Data	12/19/05	1	1	12/31/07
IG-05-025 09/16/05	NASA's Performance Measure Data Under the Federal Information Security Management Act	09/16/05	1	4	09/30/08
IG-05-016 05/12/05	NASA's Information Technology Vulnerability Assessment Program	05/12/05	1	3	09/30/09

1 The OIG is reviewing management's request, dated September 19, 2007, to close the recommendations.

REPORT NO./ DATE ISSUED	REPORT TITLE	DATE RESOLVED	NUMBER OF REC	OMMENDATIONS CLOSED	LATEST TARGET CLOSURE DATE
	REPORTED IN PREV	/IOUS SEMIA	NNUAL REPORTS		
	Audit Area: Other				
IG-06-020 09/12/06	NASA Can Improve Its Mitigation of Risks Associated with International Agreements with Japan for Science Projects	09/12/06	2	2	11/30/07
IG-06-016 08/29/06	NASA's Implementation of the National Incident Management System	08/29/06	4	2	11/01/07

Table 4: Prior Significant Audit Recommendations yet to Be Implemented (continued)

Table 5: Status of A-133 1 Findings and Questioned Costs Related to NASA Awards

Total audits reviewed ²	0
Audits with recommendations	0
Total disallowed/questioned costs	0
Total disallowed/questioned costs recovered/sustained	\$51,608
Recommendations:	
Beginning balance	106
New recommendations	15
Recommendations dispositioned	75
Ending balance	46

Table 6: Legal Activities and Reviews

FOIA matters	26
Inspector General Subpoenas Issued	26
Regulations Reviewed	13

¹ OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations," requires Federal award recipients to obtain audits of their Federal awards.

² NASA point of contact and the NASA OIG agreed not to refer any additional audit recommendations during this and the previous reporting periods due to backlog of prior audit recommendations in resolution. NASA OIG will resume the referral of audit recommendations during the next reporting period.

Table 7: Investigations Activities

Cases opened	37
Cases closed	32
Cases pending	140
Hotline complaints received	75
Referred to OA	5
Referred to OI	34
Referred to NASA management	31
Referred to other agencies	1
No action required	4

Table 8: Investigations Impact

Indictments/informations	16
Convictions/plea bargains/pretrial diversions	9
Cases referred for prosecution	57
Cases declined	34
Cases referred to nasa management for action	12
Against NASA employees	3
Against contractor employees	0
Against firm(s)	5
Other	4
Case recommendations referred to management for action	26
Against NASA employees	13
Against contractor employees	8
Against firm(s)	2
Other	3
Cases referred to other agencies for action	7
Suspensions/debarments from government contracting	10

Table 8: Investigations Impact (continued)

Individuals	8
Firms	2
Administrative/disciplinary actions ¹	9
Against NASA employees	5
Against contractor firm(s)	2
Reported actions taken by contractor against contractor employees	2
Total recoveries (in dollars)	\$779,908
NASA ²	\$245,735
NASA Property	\$170,520
Other ³	\$363,653

1 Includes terminations, suspensions, demotions, reassignments, reprimands, and resignations or voluntary retirements.

2 Includes administrative recoveries and contract credits.

3 Includes fines, penalties, restitutions, and settlements from criminal and civil investigations, some of which were conducted jointly with other law enforcement agencies. Also includes miscellaneous receipts received by NASA and returned to the Treasury.

DEFENSE CONTRACT AUDIT AGENCY AUDITS OF NASA CONTRACTORS

The Defense Contract Audit Agency (DCAA) provides various audit services to NASA on a reimbursable basis. DCAA provided the following information during this period on reports involving NASA contract activities, actions on those reports, and reports that have not been completely resolved.

DCAA Audit Reports Issued

During this period, DCAA issued 296 audit reports on contractors who do business with NASA. Corrective actions taken in response to DCAA audit report recommendations usually result from negotiations between the contractor and the Government contracting officer with cognizant responsibility (e.g., Defense Contract Management Agency and NASA). The following tables show the number of DCAA audit reports with questioned costs and recommendations that funds be put to better use, and the total amounts of questioned costs, for the reporting period. The cognizant agency responsible for administering the contract makes the decision to accept or reject the questioned costs or funds put to better use, and negotiates recoveries with the contractor.

Table 9: DCAA Audits with Questioned Costs and Recoveries^{1, 2}

	NUMBER OF AUDIT REPORTS ³	COSTS
No decision made by beginning of period ⁴	246	\$346,640,000
Issued during period	93	\$18,823,000
Needing decision during period	339	\$365,463,000
Decision made during period	86	\$112,494,000
Dollar value of contract recoveries	n/a	\$89,522,000
Dollar value of costs not recovered	n/a	\$22,972,000
No decision made by end of period	253	\$252,969,000

¹ This data is provided to the NASA OIG by the DCAA and includes incurred costs, Cost Accounting Standards, and defective pricing claims. Because of limited time between availability of management information system data and legislative reporting requirements, there is minimal opportunity for the DCAA to verify the accuracy of reported data. Accordingly, submitted data is subject to change based on subsequent DCAA authentication.

2 None of the data presented includes statistics on audits that resulted in contracts not awarded or in which the contractor was not successful. The data in "No decision made by end of period" may include some audit reports that will ultimately meet this same circumstance but are not yet recorded as such.

3 The number of reports includes only those with questioned costs and, therefore, differs from the total number of reports noted in the paragraph "DCAA Audit Reports Issued."

4 Beginning April 1, 2007, adjusted for (a) contracts not awarded; (b) audit reports issued prior to April 1, 2007, that did not meet the reporting criteria as of the date of the prior report; and (c) revised audit findings and recommendations.

	NUMBER OF AUDIT REPORTS ³	COSTS
No decision made by beginning of period ⁴	78	\$616,658,000
Issued during period	60	\$798,187,000
Needing decision during period	138	\$1,414,845,000
Decision made during period	35	\$61,751,000
Amounts agreed to	n/a	\$22,554,000
Amounts not agreed to	n/a	\$39,197,000
No decision made by end of period	103	\$1,353,094,000

Table 10: DCAA Audits with Recommendations That Funds Be Put to Better Use and Agreed To^{1, 2}

¹ This data is provided to the NASA OIG by the DCAA and includes forward pricing proposals and operations audits. Because of limited time between availability of management information system data and legislative reporting requirements, there is minimal opportunity for the DCAA to verify the accuracy of reported data. Accordingly, submitted data is subject to change based on subsequent DCAA authentication.

2 None of the data presented includes statistics on audits that resulted in contracts not awarded or in which the contractor was not successful. The data in "No decision made by end of period" may include some audit reports that will ultimately meet this same circumstance but are not yet recorded as such.

3 The number of reports includes only those with funds put to better use and, therefore, differs from the total number of reports noted in the paragraph "DCAA Audit Reports Issued" found on the previous page.

4 Beginning April 1, 2007, adjusted for (a) contracts not awarded and (b) audit reports issued prior to April 1, 2007, that did not meet the reporting criteria as of the date of this report.

APPENDIX C

GLOSSARY AND ACRONYMS

Glossary

Final Action (the IG Act of 1978 definition). The completion of all actions that management has concluded, in its decision, are necessary with respect to the findings and recommendations included in an audit report. In the event that management concludes no action is necessary, final action occurs when a management decision has been made.

Investigative Recoveries. Investigative recoveries are the total dollar value of (1) recoveries during the course of an investigation (before any criminal or civil prosecution); (2) court (criminal or civil) ordered fines, penalties, and restitutions; and (3) out-of-court settlements, including administrative actions resulting in non-court settlements.

Investigative Referrals. Investigative referrals are cases that require additional investigative work, civil or criminal prosecution, or disciplinary action. Those cases are referred by the OIG to investigative and prosecutive agencies at the Federal, state, or local level, or to agencies for management or administrative action. An individual case may be referred for disposition to one or more of these categories.

Latest Target/Closure Date. Management's current estimate of the date it will complete the agreed-upon corrective action(s) necessary to close the audit recommendation(s).

Management Decision (the IG Act of 1978 definition). The evaluation by management of the findings and recommendations included in an audit report and the issuance of a final decision by management concerning its response to such findings and recommendations, including actions that management concludes are necessary.

Material Weakness. Reportable conditions that the agency head determines to be significant enough to report outside the agency. A reportable condition is a control deficiency, or combination of control deficiencies, that in management's judgment should be communicated because it represents significant weaknesses in the design or operation of internal controls that could adversely affect the organization's ability to meet its internal control objectives.

Prosecutive Activities. Investigative cases referred for prosecution that are no longer under the jurisdiction of the OIG, except for cases on which further administrative investigation may be necessary. This category comprises cases investigated by the OIG and cases jointly investigated by the OIG and other law enforcement agencies. Prosecuting agencies will make decisions to decline prosecution; to refer for civil action; or to seek out-of-court settlements, indictments, or convictions. Indictments and convictions represent the number of individuals or organizations indicted or convicted (including pleas and civil judgments).

Questioned Cost (the IG Act of 1978 definition). A cost that is questioned by the OIG because of (1) alleged violation of a provision of a law, regulation, contract, grant, cooperative agreement, or other agreement or document governing the expenditure of funds; (2) a finding that, at the time of the audit, such cost is not supported by adequate documentation; or (3) a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable.

Questioned Costs for Which a Management Decision Has Not Been Made. Costs questioned by the OIG about which management has not made a determination of eligibility for reimbursement or about which there remains disagreement between the OIG and management. All agencies have formally established procedures for determining the ineligibility of questioned costs. This process takes time; therefore, this category may include costs that were questioned in both this and prior reporting periods.

Recommendation Resolved. A recommendation is considered resolved when (1) management agrees to take the recommended corrective action, (2) the corrective action to be taken is resolved through agreement between management and the OIG, or (3) the Audit Follow-up Official determines whether the recommended corrective action should be taken.

Recommendation That Funds Be Put to Better Use (the IG Act of 1978 definition). A recommendation by OIG that funds could be more efficiently used if management took actions to imA recommendation by the OIG that funds could be more efficiently used if management took actions to implement and complete the recommendation, including (1) reductions in outlays; (2) deobligation of funds from programs or operations; (3) withdrawal of interest subsidy costs on loans or loan guarantees, insurance, or bonds; (4) costs not incurred by implementing recommended improvements related to the operations of the establishment, a contractor, or grantee; (5) avoidance of unnecessary expenditures noted in preaward reviews of contract or grant agreements; or (6) any other savings that are specifically identified. (Note: Dollar amounts identified in this category may not always allow for direct budgetary actions but generally allow the Agency to use the amounts more effectively in the accomplishment of program objectives.)

Unsupported Cost (the IG Act of 1978 definition). An unsupported cost is a cost that is questioned by the OIG because the OIG found that, at the time of the audit, the cost was not supported by adequate documentation.

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Acronyms

AIP	Acquisition Integrity Program
ASAP	Aerospace Safety Advisory Panel
C&A	Certification and Accreditation
CAOC	Chief Acquisition Officers Council
CCL	Cryogenic Components Laboratory
CFO	Chief Financial Officer
CIO	Chief Information Officer
СО	Contracting Officer
COTR	Contracting Officer's Technical Representative
DCAA	Defense Contract Audit Agency
DOJ	Department of Justice
ECIE	Executive Council on Integrity and Efficiency
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FFMIA	Federal Financial Management Improvement Act
FISMA	Federal Information Security Management Act
FOIA	Freedom of Information Act
FY	Fiscal Year
GAO	Government Accountability Office
HRC	PCIE Human Resources Committee
HRMD	Human Resources Management Division
IAOP	Inter-Center Aircraft Operations Panel
IEMP	Integrated Enterprise Management Program
IG	Inspector General
IPA	Intergovernmental Personnel Act
IT	Information Technology
MCAD	Mechanical Computer-Aided Design
ММА	Mission Management Aircraft
NASA	National Aeronautics and Space Administration
NIST	National Institute of Standards and Technology
NMIS	NASA Management Information System
NPR	NASA Procedural Requirements
0A	Office of Audits
OI OIG	Office of Investigations
	Office of Inspector General
OMB	Office of Management and Budget
OMP	Office of Management and Planning
PCIE	President's Council on Integrity and Efficiency
PDM	Product Data Management
PIA	Privacy Impact Assessment
PSA	Program Support Aircraft
SAP	Systems, Applications, and Products
SHED	Safety, Health, and Environmental Division
SOP	Standard Operating Procedure
SSP	Space Shuttle Program
SVU	SAP Version Update
WBS	Work Breakdown Structure

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Investigations NASA Office of Inspector General Office of Investigations Mail Stop 205 Langley Research Center Hampton, VA 23681-2199 Tel: 757-864-3263

John F. Kennedy Space Center

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