

National Aeronautics and Space Administration

Office of Inspector General SEMIANNUAL REPORT

April 1-September 30, 2004

FRONT COVER: This image of Saturn and its rings was taken by Voyager 1.

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FROM THE INSPECTOR GENERAL

Since April 2002, when I became the NASA Inspector General, the Office of Inspector General (OIG) has undergone significant changes in its organizational structure and workforce. These changes are intended to improve our ability to root out crime, fraud, waste and abuse, and to promote economy and efficiency at NASA.

Specifically, during this semiannual period the OIG has enhanced the management of the Office of Investigations by establishing a Deputy Assistant Inspector General for

Investigations position at Headquarters and adding Resident Agents-In-Charge to our offices at NASA's larger Centers. In the Office of Audits we continued to implement the reorganization strategy created in April 2003 to improve and diversify the skill mix of the audit staff by hiring technical experts and management analysts. We also established an Office of Management and Planning to consolidate the management of our information technology services, strategic planning and development, budget, human resources, and administrative services.

Throughout the transition, we have conducted meaningful work in both the Office of Audits and the Office of Investigations. This semiannual report reflects on some of our activities that resulted in published audit works, such as *

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our assessment of the quality assurance process for the redesigned Solid Rocket Booster bolt catchers, and on results from our investigative work including indictments, prosecutions, and convictions for crimes relating to NASA.

The semiannual report does not reflect some other work we are doing or have done to improve the Agency. For example, some of our Office of Audits activities this period have included monitoring various financial management, contract, and Return To Flight matters that do not necessarily fall within the parameters of announced audits and will not result in published reports. Also, investigative work often is not published due to privacy concerns and a desire to maintain confidentiality of sources and investigative techniques. We also frequently answer congressional inquiries or provide information to congressional oversight committees on matters of interest to the legislative branch, and these activities often do not involve the generation of public reports.

Although our work may not always result in a published report, we do not hesitate to present our independent views to the Agency on a broad range of topics. The use of alternative communication strategies, such as formal and informal briefings, allows the OIG to inform the Agency of critical matters in real time so management can take action before issues become problematic.

Allegations of Reprisal and Whistleblowing

In this semiannual period, the OIG dedicated a significant amount of time and resources investigating allegations of reprisal against NASA and contractor employees for raising safety and other concerns. In fulfilling the office's overall mandate, the OIG can and does look at whatever matters it thinks most important to protect the taxpayers' investment in NASA, which may include examining whether management fairly addresses concerns raised by employees on myriad topics.

In the wake of the Space Shuttle Columbia accident, a perception arose that NASA culture at times has muted the free flow of information. The OIG is trying to assist the Agency in ensuring that the NASA workplace encourages the free flow of information, especially pertaining to safety, and that those who conscientiously raise issues are protected from reprisal. While the OIG does not have the authority to undo personnel actions taken as reprisal, the OIG can be an advocate to the NASA Administrator to seek redress where appropriate and report to Congress on Agency activity. (The independent agency vested with the responsibility to protect civil service whistleblowers is the Office of Special Counsel [*http://www.osc.gov*].)

Whistleblower matters are often difficult to untangle because they involve professional disagreements and personality conflicts. The OIG often relies on sources, including confidential and anonymous sources, to conduct its business. Sources may surface fraud, waste and abuse, violations of law, safety issues, and ways of improving the Agency. However, sometimes after conducting an investigation or audit, our office is unable to validate a source's statements. Notwithstanding the challenges associated with these matters, the OIG believes it plays an important check and balance to Agency action. To reflect our views, we published a white paper, *Handling Disagreement with Superiors' Decisions and Whistleblowing*, which can be found on our Web site at http://www.hq.nasa.gov/office/ oig/hq/whistleblower.pdf.

Peer Review

During this semiannual report, under the purview of the President's Council on Integrity and Efficiency (PCIE), our Office of Audits completed a time-consuming and expensive review of the Department of Treasury OIG's Office of Audits, and the Department of Justice OIG finished its peer review of the NASA OIG Audit program. The peer reviews conducted were compliance audits that determined whether audit policies comply with government auditing standards and if audits are conducted in accordance with those policies, but did not determine whether the audits were meaningful or timely. The peerreview compliance audits, while useful for their intended purpose, are not designed to determine whether the taxpayers' money is being used economically or even appropriately. My office has made recommendations to the PCIE Audit Committee and its workgroup on peer-review standards that they revise the standards to include steps to assess the economy, efficiency, and timeliness of OIG audits. We will continue to advocate overall improvements in the OIG audit peer-review process.

This report fairly summarizes the activities of the NASA Office of Inspector General during the reporting period.

Robert Cot

Robert W. Cobb Inspector General

ORGANIZATION



The NASA Office of Inspector General (OIG) conducts audits, reviews, and investigations 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) 2004 budget of \$27.3 million supported the work of approximately 200 auditors, investigators, analysts, and support staff.

Inspector General 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.

The Office of Counsel to the Inspector General legal staff provides advice and assistance on a variety of legal issues and matters relating to the OIG review of NASA's programs and operations. The legal staff coordinates reviews of legislation, regulations, Freedom of Information Act requests, and congressional matters requiring OIG attention. Additionally, the legal 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 in litigation in which the OIG either participates as part of the prosecution or civil team, or in which the OIG is a witness or defendant.

The Office of Audits (OA) conducts independent, objective audits and reviews of NASA's programs, projects, operations, and contractor activities. The OA is committed to assisting NASA in improving the management and conduct of the Agency's mission programs and mission support activities. Accordingly, the audits that the OA performs focus on information technology (IT), procurement, safety and security, financial and institutional management, and mission activities. Through its audit services, the OA recommends actions that NASA management may follow to accomplish its goals and objectives related to those programs.

The Office of Investigations (OI) investigates allegations of crime, cyber-crime, fraud, waste, abuse, and misconduct having impact on NASA programs, operations, and resources. The OI refers its findings to either the Department of Justice for prosecution, or to NASA management for action. Through its investigations, the OI identifies crime indicators and recommends effective measures to NASA management intended to reduce NASA's vulnerability to criminal activity.

The Office of Management and Planning (OMP) was recently established to consolidate OIG IT services, strategic planning and development, budget, human resources (HR), and administrative services under one functional office. The OMP ensures state-of-theart IT systems capabilities for the OIG, advises the Inspector General and OIG senior management on budget issues and HR staffing matters, directs OIG internal management and support operations, and oversees OIG development of and adherence to management policies and procedures.

SIGNIFICANT AUDITS AND INVESTIGATIONS

Safety

Following the loss of the Space Shuttle Columbia and its seven-member crew, the Columbia Accident Investigation Board (CAIB) conducted an extensive examination of the accident. NASA still has substantial work to perform in addressing issues raised by the CAIB. Correcting weaknesses identified by the CAIB is an imperative for the Agency. NASA will need to exercise due diligence to ensure that engineering and safety decisions are not adversely affected by the cost and schedule pressures associated with the Space Shuttle Program (SSP).

The CAIB report contains numerous and significant findings, recommendations, and observations on the SSP. The report, among other things, reflects serious cultural, organizational, and technical deficiencies impacting the safety and effectiveness of Shuttle operations. Return To Flight (RTF) represents a critical and massive undertaking requiring careful coordination by many Agency organizations. NASA established an RTF Planning Team to help the SSP plan and implement the CAIB recommendations. Also, the Administrator established an RTF Task Group to report on the progress on NASA's response to the CAIB and to make other observations on safety and operational readiness. NASA is in the process of revising the draft plan that addresses the organizational causes of the Columbia accident. In addition, the SSP must resolve several technical challenges, such as thermal protection system inspection and repair, in order to safely and successfully return the Shuttle fleet to flight.

As part of our ongoing review of RTF activities, we identified management challenges related to the safety and quality assurance of space flight hardware and technical challenges related to debris shedding from the External Tank. Also, NASA faces additional challenges with the reinforced carbon-carbon panel impact tests and the impact testing for ice debris. NASA performs some of the most technologically complex tasks of any organization in the world. Programs such as the International Space Station and the Space Shuttle present enormous engineering challenges with inherent dangers and significant safety risks. As NASA plans the RTF, identifying and mitigating the risks associated with human space flight are critical. The Agency is committed to an environment where safety is a top priority in all operational and functional areas, and many OIG audits and investigations are directed toward the goal of improving safety at NASA.

NASA Working To Reduce External Tank Debris Shedding

The following memorandum report is available on the Web at: *http://www.hq.nasa.gov/office/oig/hq/ig-04-020.pdf*

During this period, we issued *Status of NASA OIG Review of External Tank Thermal Protection System Debris Shedding* (IG-04-020), a review of NASA's progress in responding to the CAIB's recommendations concerning the thermal protection system (TPS) for the Space Shuttle's External Tank. The CAIB concluded that a breach in the TPS (the reinforced carbon-carbon panels) on the leading edge of the left wing was the physical cause of the loss of the Columbia and its crew. The breach occurred when a piece of insulating foam shed by the External Tank during launch struck the wing. The CAIB recommended that NASA initiate an aggressive program to eliminate all debris shedding from the External Tank at the source with particular emphasis on the region where the bipod struts attach the orbiter to the External Tank. The CAIB further recommended that NASA require at least two people attend all final closeouts and observe all handspraying of the insulating foam on to the intertank section of the External Tank.

Although implementation of corrective actions is incomplete as of the effective date of the audit, June 08, 2004, we found that NASA is taking appropriate steps to fully address the two CAIB recommendations concerning the External Tank. While the CAIB Chairman subsequently recognized that eliminating all debris shedding from the External Tank would not be feasible, the Agency is pursuing methods designed to significantly reduce debris shedding to an acceptable safe level prior to RTF. NASA has employed a variety of analytical tools to define that acceptable safe level. Those tools include viable risk-management processes for identifying, assessing, and mitigating risks from the sources of External Tank debris and analytical tools such as: (1) failure mode and effects analysis, (2) fault trees, (3) root cause analysis, (4) critical defect analysis, (5) thermal analysis, and (6) transport analysis.

While future Shuttle flights might still be exposed to some debris shedding from the External Tank, prior to returning to flight NASA intends to eliminate debris that could seriously damage critical areas of the Shuttle (this debris is referred to as critical debris).

NASA Plans Improvements to Space Shuttle Imaging

The following memorandum report is available on the Web at: *http://hq.nasa.gov/ office/oig/hq/a-04-007-00.pdf*

The CAIB concluded that deficiencies in NASA's imaging capabilities impeded the Agency's ability to adequately identify foam losses on the External Tank and to assess damage to the Space Shuttle Columbia during the STS-107 mission. We conducted a

review, *Status of NASA Office of Inspector General Review of Space Shuttle Imaging* (A-04-007-00), of NASA's progress in implementing the four CAIB recommendations regarding Space Shuttle imaging. The CAIB recommendations were aimed at providing: (1) three useful views of the Space Shuttle from liftoff to at least SRB separation, along any expected azimuth; (2) a capability to obtain and downlink high-resolution images of the External Tank after it separates; (3) a capability to obtain and downlink high-resolution images of the orbiter's TPS; and (4) imaging of each Space Shuttle flight while on orbit.

In general, NASA's plans to address the CAIB's recommendations appear to satisfy the intent of those recommendations. While the plans have not been fully implemented, we concluded that NASA is effectively working to improve Shuttle imagery in accordance with the CAIB recommendations. The OIG will continue to monitor NASA's progress in implementing imagery plans as well as the transition of NASA's Shuttle imaging services to a new contractor.

Company President Sentenced for Providing Nonconforming Aircraft Parts

An OIG investigation disclosed that a company allegedly submitted false claims, false documents, and provided nonconforming aircraft parts and hardware to NASA and the Department of Defense. The company's president was charged with one count of making a false statement and three counts of fraud involving aircraft and space parts. Following his guilty plea, the company president was sentenced to 30 months in prison, to be followed by 36 months of supervised release, and ordered to pay \$56,932 in restitution.

Company President Fined \$25,000

A company's president was convicted on one count of fraud involving aircraft parts and fined \$25,000. A joint investigation conducted by the OIG, the Defense Criminal Investigative Service, and the Department of Transportation OIG found that the company allegedly sold unapproved hoses and connectors to NASA, other Federal agencies, and the commercial airline industry for use on aircraft. The parts were not approved by the Federal Aviation Administration in accordance with National Transportation Safety Board standards. Sentencing of the company president is pending.

Procurement

Approximately 90 percent of NASA's budget is expended through contracts and other procurement tools. Through its audits and investigations the NASA OIG seeks to identify areas in the Agency's procurement practices that need improvement and to further prevent and detect procurement fraud.

During this reporting period, Senate Report 108-143 directed that the NASA Inspector General report to Congress on NASA's contracting procedures and conventions and determine whether ways of reforming the process and reducing the costs of NASA programs and activities exist. We found that overall NASA's contract procedures and conventions are generally effective. However, as reported to Congress, we have identified opportunities for NASA to improve decisionmaking and better control cost growth resulting from delays.

Our audit activities address a wide variety of NASA contracting issues, including minimizing the cost impact of program delays, restructuring of contracts in response to the CAIB findings and recommendations, and competition in contracting. Some of our active projects include: (1) Review of NASA's Plans and Actions to Improve Kennedy Space Center Quality Assurance, (2) Audit of Sole Source and Limited Competition Contract Actions Citing "Only One Responsible Source," and (3) Management of the NASA Procurement Workforce.

The OIG will continue to routinely monitor NASA's procurement function and contracting procedures with the goal of improving the economy and efficiency of Agency operations.

Cost Recovery Realized

An OIG investigation and follow-on audit disclosed that a university inappropriately charged various costs totaling \$214,212 to a NASA grant at the Stennis Space Center. NASA realized full recovery of the costs based on supporting audit work completed by the Department of Health and Human Services OIG.

Two Former Contractor Employees Sentenced

An OIG investigation previously reported in our semiannual report for the period ending March 31, 2004, disclosed that two former contractor employees failed to report taxable income they received based on fraudulent invoice payments. During this period, one of the former employees was sentenced to 13 months in prison, 24 months of supervised release, and ordered to pay a \$100 special assessment. Sentencing of the second former employee is pending.

Financial Management

Federal Financial Management Improvement Act (FFMIA) Remediation Plan

In the FY 2003 Performance and Accountability Report, NASA management and the Agency's independent auditor state that NASA's financial management system does not comply substantially with FFMIA. As a result of this noncompliance, FFMIA requires that the Agency establish a remediation plan that specifies resources and milestone dates for bringing the financial system into compliance. NASA currently does not have an

FFMIA remediation plan. The NASA Office of the Chief Financial Officer (CFO) has stated that a remediation plan will be included as part of the overall NASA Financial Management Improvement Plan. According to the CFO, this plan is currently being revised and will be issued in FY 2005. The OIG is monitoring NASA's corrective actions for improving the financial management system and keeping the Administrator and Congress informed of the status of NASA's financial management system pending the conclusion of the FY 2004 financial audit.

In FY 2003, PricewaterhouseCoopers, the independent audit firm that conducted NASA's FY 2003 financial statement audit, issued a disclaimer of opinion. However, NASA continues to be challenged by major deficiencies in management controls that were identified in the audit. For example, NASA lacks a significant audit trail that supports amounts reported in its interim financial statements, controls over fund balance with Treasury are weak, and the process for preparing financial statements requires improvement. In FY 2004, NASA has been unable to generate useful financial statements from data in the Core Financial Module. The system-generated statements contained fundamental errors and data that management could not rely upon. The fundamental errors included a balance sheet that did not balance, line items within the statement of budgetary resources that did not equal, and different amounts for the same line item on two separate financial statements. Interim financial statements required to be submitted to the Office of Management and Budget (OMB) have been entirely developed using estimates.

During FY 2004, NASA initiated a plan to replace existing financial management policies with new financial management regulations based on correcting weaknesses identified in the FY 2003 financial statement audit. However, the new regulations were not issued timely enough for NASA to benefit from having a consistent operating environment throughout the fiscal year. For example, on September 30, 2004, NASA issued the first of two sets of requirement documents designed to address near-term execution requirements, such as accounting, budget execution, and reporting. However, the second set is under development and will address longer-term requirements, such as budget formulation, strategic planning, and information systems. Also, we believe NASA must address an existing staff shortage within the Office of the CFO. Without sufficient and adequately trained staff, the Office of the CFO will not be able to perform their oversight responsibilities of accounting at NASA Centers and monitor the quality of data generated by the financial system.

Improved financial performance and accountability continues to be a significant management challenge for NASA. During this semiannual period, the OIG continued to review NASA's progress in that area and make recommendations to Agency management consistent with sound fiscal management. NASA's Integrated Financial Management Program (IFMP) Travel Module Was Not in Compliance with Federal Requirements

The following report is available on the Web at: http://www.hq.nasa.gov/office/oig/hq/ ig-04-027.pdf

We conducted an audit, *NASA's Travel Module Lacks Management Control Structure and Compliance with Federal Requirements* (IG-04-024), of NASA's IFMP travel module to determine whether the module complied with requirements established by the Joint Financial Management Improvement Program (JFMIP) and contained appropriate management controls for monitoring NASA's expenditures of approximately \$59 million of annual travel funds. We found that the travel module was not in compliance with JFMIP requirements in two key areas: (1) required reporting capabilities and (2) interface with the core financial system. The lack of compliance with JFMIP requirements in those two areas created a management control weakness in which NASA management was unable to monitor and document Agency travel expenditures and transactions from initiation through final posting to Agency accounting records. We made eight recommendations to NASA to guide the Agency in ensuring that the travel module meets all JFMIP requirements for reporting capabilities and interfaces effectively with the core financial system. Management concurred with each of the report's recommendations and has either initiated or planned responsive corrective actions.

Information Technology Security

In FY 2004, we provided our assessment of NASA's compliance with the Federal Information Security Management Act. We continue to consider NASA's IT security to be a material weakness that is reportable in accordance with the Federal Managers' Financial Integrity Act. We found recurring significant internal control weaknesses related to system administrator roles and responsibilities, host and network security, IT contingency plan testing and alternate processing facilities, IT risk assessments, certification of IT systems, and vulnerability scanning.

We also found that NASA's IT organizational structure, which controls management of IT resources and IT security, was different at each NASA Center and at the Agency level. The Agency-level Chief Information Officer and IT security officials had very limited oversight and influence over IT and IT security decisions at the Centers. The dissimilar organizational structures, the inconsistent roles and responsibilities, and the lack of central oversight over Agency IT and IT security created an environment that we believe

is detrimental to effective IT and IT security management and operations. We believe, however, that positive changes NASA management is implementing should improve NASA's overall IT security posture.

The OIG continues to focus on NASA's effectiveness in enforcing IT policies and implementing procedures, as well as its progress in protecting its critical physical and cyberbased infrastructure. During this reporting period, Senate Report 108-143 directed that the NASA Inspector General report to Congress on an assessment of commercially available IT vulnerability management technologies and also report on the status of computer security within NASA. We found that overall NASA appears to have an effective process for assessing IT vulnerability management technologies and that NASA's IT vulnerability management program has attracted favorable attention in the Federal IT security community. However, in terms of NASA's overall IT security, our assessment supports our concern that IT security is still a serious weakness.

Although IT reports are not publicly available because of the sensitivity surrounding IT security vulnerabilities, two of those reports are highlighted here.

Center Wireless Network Security Measures

We conducted our audit, *Assessment of Wireless Network Security at [a NASA Center]* (IG-04-019), to evaluate whether wireless networks at a NASA Center were secure and whether they were implemented in accordance with industry best practices and Center-specific guidance. We made five recommendations to strengthen and enforce appropriate policies and to plan for a future wireless network strategy at the Center. Center management has taken or planned corrective actions in response to the recommendations.

Information Assurance Controls Need Improvement

During our audit, *Information Assurance Controls for [a NASA Center's] IT System Need Improvement* (IG-04-018), we identified control weaknesses that, if corrected, should reduce both the risk of unauthorized access and compromise of a NASA Center's information technology resources. We made seven recommendations for improvements to the Center's information assurance controls. The Center was responsive to our findings and corrected many of the weaknesses we identified.

LEGAL MATTERS

Whistleblower Protection

The OIG legal staff hosted a Whistleblower Protection Panel at the Inspector General's Annual All-Hands Conference. Also, the OIG legal staff is developing a whistleblower protection course curriculum for our OI staff, focusing on the Whistleblower Protection Act and the whistleblower protection provisions of the Federal Acquisition Streamlining Act. The course will include instruction on the elements of a whistleblower reprisal case, effective questioning, marshalling of evidence, and report writing.

Regulatory Review

During this reporting period, we reviewed and commented on 27 NASA and Headquarters directives. Of those reviewed, three directives were of significance to the OIG: (1) an update to NASA Policy Directive 9800.1, NASA Office of Inspector General Programs, was issued April 7, 2004; (2) The Revised Privacy Act System of Records Notice for the Inspector General Investigations Case Files was published in the Federal Register on May 7, 2004; and (3) NASA Policy Directive 1382.17G, NASA Privacy Policy.

SIGNIFICANT OUTREACH ACTIVITIES

We recognize that visibility and communication within the larger community promote the OIG as an advocate for NASA personnel, Congress, and the taxpayer. Furthermore, the OIG seeks to maximize the benefits of its activities by conveying through outreach the knowledge, experience, and lessons learned from those activities. During this reporting period, the Inspector General engaged in a number of significant outreach efforts.

- At the NASA Office of General Counsel's annual conference, held in April 2004, the Inspector General updated attorneys on OIG activities.
- In May 2004, the Inspector General testified before the House Subcommittee on Government Efficiency and Financial Management, Committee on Government Reform, on the status of NASA's financial management efforts.

- During the last 6 months, the Inspector General participated in several panel discussions before various organizations, including the following:
 - "Inspector General Perspectives" on conflicts and ethics in research at the Federal Demonstration Partnership annual meeting,
 - "Federal Audit Coordination and Outcomes" at the Association of Government Accountants Professional Development Conference, and
 - "Conflict of Interest and Conflict of Commitment" at the National Council of University Research Administrators Summer Conference.
- During this period, we supported several training efforts. Those efforts included:
 - Conducting a training session on standards of conduct including emphasis on the requirements and prohibitions of the Hatch Act;
 - Providing instructors for the procurement courses and the undercover operations training at the Federal Law Enforcement Training Center, Inspector General Criminal Investigator Academy;
 - Conducting a fraud awareness briefing to Government employees attending the Contracting Officer's Technical Representative training at the Goddard Space Flight Center; and
 - Hosting a crime scene training exercise for the Brook Park, Ohio, Police Department and the Cuyahoga County Coroner's Office.
- The OIG participated in an interagency working group to reassess, update, and revise the *Guide for Conducting External Peer Reviews of the Audit Operations of Offices of Inspector General.*
- The OIG OI continued to participate in the meetings of the Heads of Federal Law Enforcement Agencies and the regional Inspectors General Investigation Councils.

AWARDS

OIG Employee Contributions Recognized

In April 2004, Michael Shelby, United States (U.S.) Attorney for the Southern District of Texas, recognized the outstanding investigative work of several NASA OIG employees. The employees were commended for their work on an investigation into fraudulent lease charges that resulted in a \$7.1 million recovery to NASA in June 2003.



Pictured from left to right: Assistant U.S. Attorney Cedric Joubert; Special Agent Lonnie Taylor, Defense Criminal Investigative Service; Inspector Robert Cregger, U.S. Postal Inspection Service; Investigative Auditor Ronald Marta, NASA OIG; Investigative Auditor Melody Coston, NASA OIG; Special Agent Sheila Brock, NASA OIG; and U.S. Attorney Michael Shelby.

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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	16 and 26
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies .	
Section 5(a)(2)	Recommendations for Corrective Actions	
Section 5(a)(3)	Prior Significant Audit Recommendations Yet To Be Implemented	
Section 5(a)(4)	Matters Referred to Prosecutive Authorities	
Section 5(a)(5) and 6(b)(2)	Summary of Refusals To Provide Information	None
Section 5(a)(6)	OIG Audit Reports Issued—Includes Total Dolla of Questioned Costs, Unsupported Costs, and Recommendations That Funds Be Put to Better	
Section 5(a)(7)	Summary of Significant Audit Reports	
Section 5(a)(8)	Total Number of Reports and Total Dollar Value with Questioned Costs	
Section 5(a)(9)	Total Number of Reports and Total Dollar Value for Audits with Recommendations That Funds Be Put to Better Use	
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 the 1996 Remediation Plan	t

APPENDIX B

Statistical Reports

During the period April 1 through September 30, 2004, the OIG issued 9 audit reports and 6 audit letters.

TABLE 1: AUDIT REPORTS AND IMPACT

Report No./		
Date Issued	Report Title	IMPACT
	Audit Area Safety and Security	
IG-04-020 06/08/04	Status of OIG Review of External Tank Thermal Protection System Debris Shedding	NASA is taking appropriate actions to address CAIB recommendations concerning the thermal protection system for the External Tank.
IG-04-025 09/07/04	NASA's Implementation of the Mission-Critical Space System Personnel Reliability Program	Recommended improvements will help NASA ensure that the Personnel Reliability Program is effectively implemented at space flight centers.
	Audit Area Information Technology	
IG-04-018 04/15/04	Audit of Information Assurance Controls [at a NASA Center]	Improving IT controls should reduce the risk of compromise to NASA's IT systems and data.
IG-04-019 05/21/04	Assessment of Wireless Network Security [at a NASA Center]	Recommendations were made that will help to strengthen and enforce appropriate policies and to plan for a future wireless network strategy.
Letter 06/18/04	Presidential Council on Integrity and Efficiency/Executive Council on Integrity and Efficiency (PCIE/ECIE) Report on Review of Federal Agency Implementation Activities for Critical, Cyber-Based Infrastructures	The OIG community identified specific areas where the Government can significantly improve its implementation activities for critical, cyber-based infrastructures.
	Audit Area Return To Flight	
IG-04-021 07/21/04	Final Report on Audit of the Return-To-Flight Task Group's Business Processes	The Task Group has established and imple- mented effective internal controls over financial and procurement processes.

Report No./ Date Issued	Report Title	Імраст
Letter 04/16/04	Status of NASA Office of Inspector General Review of Space Shuttle Imaging	NASA is working effectively to improve Shuttle imagery, which will allow NASA to identify potential damage to the reinforced carbon-carbon panels and Shuttle tiles.
	Audit Area Human Capital Management	
IG-04-022 09/07/04	Audit of NASA's Actions To Improve Leadership and Managerial Training	NASA is effectively working to improve leadership and managerial development in response to the CAIB observation.
Letter 06/23/04	Review of NASA's Compliance with Senior Executive Service Promotion Criteria	We found that the Senior Executive Service candidate approval process was generally effective and compliant with criteria.
	Audit Area Financial Management	
IG-04-027 09/24/04	NASA's Travel Module Lacks Management Control Structure and Compliance With Federal Requirements	Identified internal control weaknesses in NASA's IFMP travel module, allowing management to initiate corrective action.
	Audit Area Quality Control Reviews	
IG-04-023 08/12/04	Peacock, Condron, Anderson & Co. Audit of Universities Space Research Association for the Fiscal Year Ended June 30, 2003	Certified Public Accountant audit work complied with standards.
IG-04-026 09/09/04	KPMG LLP Audit of the Association of Universities for Research in Astronomy, Inc., for the Fiscal Year Ended September 30, 2002	Certified Public Accountant audit work complied with standards.
Letter 09/07/04	Initial Review of Arnet & Foster Audit Report on Clay Center for Arts and Sciences	Audit report was accepted as meeting OMB Circular A-133 requirements.
Letter 09/07/04	Initial Review of Deloitte & Touche Audit Report on Donald Danforth Plant Science Center	Audit report was accepted as generally meeting OMB Circular A-133 requirements.
Letter 08/02/04	Peer Review of the U.S. Department of Treasury	The Department of Treasury received an unqualified opinion report, however, numer- ous areas and opportunities for improvement were identified.

TABLE 1: AUDIT REPORTS AND IMPACT (continuation)

TABLE 2: PRIOR SIGNIFICANT AUDIT RECOMMENDATIONS YET TO BE IMPLEMENTED¹

		NUMBER OF			
Report No./		Date	Recomme	NDATIONS	Latest Target/
Date Issued	Report Title	Resolved	Open	Closed	Closure Date
	Audit Area Human Capital Management				
IG-04-017 03/30/04	Integrated Financial Management Program Budget Formulation Module	03/30/04	2	1	09/30/04 ²
	Audit Area Safety				
IG-04-011 02/04/04	Stennis Space Center's Pressure Vessel and Pressurized System Program Needs Significant Improvements	02/04/04	2	2	11/07/04

New Since Last Reporting Period

Reported in Previous Semiannual Reports

		Number of			
Report No./		Date Recommendations		Latest Target/	
Date Issued	R eport Title	Resolved	Open	Closed	Closure Date
	Audit Area Information Technology				
IG-00-055 09/28/00	System Information Technology Security Planning	12/29/00	2	8	01/30/05
IG-00-057 09/28/00	NASA's Planning and Implementation for Presidential Decision Directive 63— Phase I	09/28/00	1	2	N/A ³
IG-01-038 09/27/01	NASA Planning and Implementation of PDD63—Phase III	09/27/04	1	1	N/A ³
IG-03-009 03/27/03	Performance Management Related to Agency-Wide Fiscal Year 2002 Information Technology Program Goals	03/27/03	1	11	01/30/05
	Audit Area Information Technology				
IG-02-004 11/19/01	Approval for Accessing IT Systems at [Two NASA Centers]	11/19/01	1	5	N/A ³

¹ All findings were nonmonetary.

² The management-estimated completion date has expired. Management has not provided the OIG with a revised date.

³ Closure of the recommendation depends on NASA's issuance of NASA Procedural Requirements 1600.1.

⁴ Closure of the recommendation depends on NASA's issuance of NASA Procedural Requirements 7120.5.

TABLE 2: PRIOR SIGNIFICANT AUDIT RECOMMENDATIONS YET TO BE IMPLEMENTED¹ (continuation)

		Number of			
Report No./	Report No./		Recommen	NDATIONS	Latest Target/
Date Issued	Report Title	Resolved	Open	Closed	Closure Date
	Audit Area International Space Station				
IG-02-011 03/22/02	International Space Station Space Parts Costs	03/22/02	1	4	N/A ⁴
	Audit Area Procurement				
IG-02-017 06/04/02	Management of Research Grants and Cooperative Agreements	06/04/02	1	5	09/15/04 ²
	Audit Area Launch Vehicles				
IG-01-021 03/30/01	X-37 Technology Demonstrator Project Management	07/12/04	1	12	N/A ⁴
IG-02-028 09/30/02	Space Launch Initiative: Primary Requirements for a 2nd Generation Reusable Launch Vehicle	09/30/04	1	1	N/A ⁴

¹ All findings were nonmonetary.

² The management-estimated completion date has expired. Management has not provided the OIG with a revised date.
 ³ Closure of the recommendation depends on NASA's issuance of NASA Procedural Requirements 1600.1.

⁴ Closure of the recommendation depends on NASA's issuance of NASA Procedural Requirements 7120.5.

TABLE 3: STATUS OF A-1331FINDINGS AND QUESTIONEDCOSTS RELATED TO NASA AWARDS2

Total Audits Reviewed	*
Audits with Recommendations	*
Total Disallowed/Questioned Costs	*
Total Disallowed/Questioned Costs Recovered/Sustained	*
Recommendations:	
Beginning Balance	*
New Recommendations	*
Recommendations Dispositioned	*
Ending Balance	*
Average Age of Recommendations Not Completed	*

¹ OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, requires Federal award recipients to obtain audits of its Federal awards.

² Data prepared by NASA Office of Procurement for the financial reporting period ending September 30, 2004, in accordance with OMB Circular A-50, *Audit Followup*.

*NOTE:

The OIG and NASA management are reevaluating OMB Circular A-133 reporting requirements. We will report the status of OMB Circular A-133 findings and questioned cost related to NASA awards next semiannual period.

TABLE 4: LEGAL ACTIVITIES AND REVIEWS

Freedom of Information Act Matters	24
Inspector General Subpoenas Issued	9
Regulations Reviewed	27

TABLE 5: ADMINISTRATIVE INVESTIGATIONS ACTIVITIES

Cases Opened	17
Cases Closed	24
Cases Pending	60
Referred to Management	9
Closed	6
Pending	3
Referred to Criminal Investigations	9

TABLE 6: CRIMINAL INVESTIGATIONS ACTIVITIES

44
59
201
89
5
57
5
0
22

TABLE 7: CRIMINAL INVESTIGATIONS IMPACT

Indictments/Informations	11
Convictions/Plea Bargains/Pretrial Diversions	15
Cases Referred for Prosecution	28
Cases Referred to NASA Management for Action	3
Cases Referred to Other Agencies for Action	1
Suspensions/Debarments from Government Contracting	6
Individuals	5
Firms	1
Administrative/Disciplinary Actions ¹	11
Against NASA Employees	4
Against Contractor Firm(s)	0
Reported Actions Taken by Contractor Against Contractor Employees ²	7
Total Recoveries (In Dollars)	3,004,370
NASA ³	746,239
NASA Property	7,029
Other ⁴	2,233,102

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

² Seven actions taken against seven individuals.

³ Includes administrative recoveries and contract credits.

⁴ 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.

DCAA AUDITS OF NASA CONTRACTORS

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

DCAA Audit Reports Issued

During the period, DCAA issued 378 audit reports (excluding preaward contractor proposal evaluations) on contractors who do business with NASA. DCAA also issued 137 reports on audits of NASA contractor proposals totaling \$3,414,943,000, which identify cost exceptions totaling about \$64,493,000. However, some of DCAA's reported cost exceptions are attributable to unsuccessful contractor proposals that NASA never accepted or relied upon for contract negotiation. Therefore, the actual amount of potential savings to NASA from DCAA-cited costs exceptions in its audit reports is less than the reported total cost exceptions amount.

NASA Actions

Corrective actions taken on DCAA audit report recommendations usually result from negotiations between the contractor and the Government contracting officer. The following tables show the number of all DCAA audit reports and amounts of questioned costs and funds put to better use for the reporting period. During this period, NASA management resolved 106 reports with \$19,551,000 of questioned costs, and 34 reports with \$130,166,000 of funds put to better use. NASA management sustained 64 percent of DCAA's questioned costs and 83.9 percent of the funds put to better use.

TABLE 8: DCAA AUDITS WITH QUESTIONED COSTS^{1, 2}

		Total Costs
	Number of	Questioned
	AUDIT REPORTS ³	(In Thousands)
No management decision made by beginning of period ⁴	265	\$150,158
Issued during period	94	112,539
Needing management decision during period	359	262,697
Management decision made during period:	106	19,551
Dollar value of contract recoveries		12,512
Dollar value of costs not recovered		7,039
No management decision made by end of period	253	243,146

¹ Data are provided to the NASA OIG by the DCAA and include forward pricing proposals and operations audits. Because of limited time between availability of management information system data and legislative reporting requirements, minimal opportunity exists for the DCAA to verify the accuracy of reported data. Accordingly, submitted data are 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 the contractor was not successful. The data in the "No management decision made by end of period" line above may include some audit reports that will ultimately meet this same circumstance, but are not yet recorded as such.

³ 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 Represents beginning April 1, 2004, amounts adjusted for (a) contracts not awarded and (b) revised audit findings and recommendations.

TABLE 9: DCAA AUDITS WITH RECOMMENDATIONS THAT FUNDS BE PUT TO BETTER USE^{1, 2}

		Total Costs
	Number of	Questioned
	AUDIT REPORTS ³	(In Thousands)
No management decision made by beginning of period ⁴	51	\$159,786
Issued during period	33	82,046
Needing management decision during period	84	241,832
Management decision made during period:	34	130,166
Amounts agreed to by management		109,270
Amounts not agreed to by management		20,896
No management decision made by end of period	50	111,666

¹ Data are provided to the NASA OIG by the DCAA and include incurred cost, Cost Accounting Standards, and defective pricing. 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 are 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 the contractor was not successful. The data in the "No management decision made by end of period" line above may include some audit reports that will ultimately meet this same circumstance, but are not yet recorded as such.

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

⁴ Represents beginning April 1, 2004, amounts adjusted for (a) contracts not awarded, and (b) revised audit findings and recommendations.

APPENDIX C

Glossary

Administrative Investigation. An administrative investigation is an inquiry into allegations of misconduct, wrongdoing, or administrative matters, the results of which could lead to disciplinary action.

Final Action. The completion of all actions 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 (the IG Act of 1978 definition).

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-ordered (criminal or civil) fines, penalties, and restitution; and (3) out-of-court settlements, including administrative actions resulting in noncourt 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 in 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 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 concluded to be necessary (the IG Act of 1978 definition).

Prosecutive Activities. Investigative cases referred for prosecutions that are no longer under the jurisdiction of the OIG, except for cases on which further administrative investigation may be necessary. This category represents 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. 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 (the IG Act of 1978 definition).

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 costs questioned. 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 Followup Official determines whether the recommended corrective action should be taken.

Recommendations That Funds Be Put to Better Use. A 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 which are specifically identified (the IG Act of 1978 definition). (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 accomplishment of program objectives.)

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

Acronyms

CAIB	Columbia Accident Investigation Board
CFO	Chief Financial Officer
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
ECIE	Executive Council on Integrity and Efficiency
FFMIA	Federal Financial Management Improvement Act
FY	Fiscal Year
HR	Human Resources
IFMP	Integrated Financial Management Program
IG	Inspector General
IT	Information Technology
JFMIP	Joint Financial Management Improvement Program
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
OA	Office of Audits
OI	Office of Investigations
OIG	Office of Inspector General
OMB	Office of Management and Budget
OMP	Office of Management and Planning
PCIE	President's Council on Integrity and Efficiency
PDD	Presidential Decision Directive
RTF	Return To Flight
SRB	Solid Rocket Booster
SSP	Space Shuttle Program
TPS	Thermal Protection System

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