



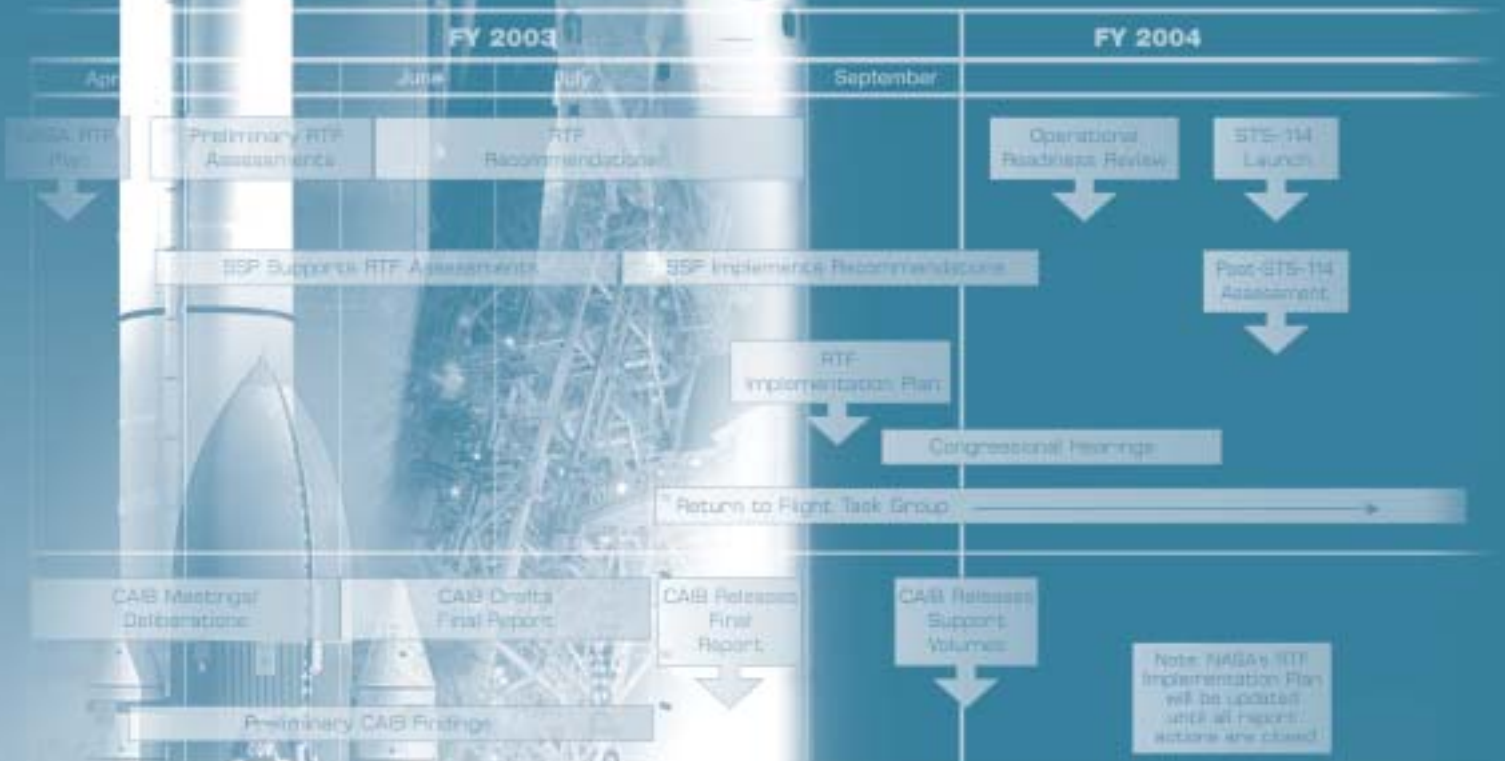
National Aeronautics and  
Space Administration

OFFICE OF INSPECTOR GENERAL

April 1—September 30, 2003

# SEMIANNUAL REPORT

## Return to Flight Milestones



**FRONT COVER:**

Shuttle collage with overlay of the NASA Return to Flight timeline.

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# FROM THE INSPECTOR GENERAL

This year is the 25th Anniversary of the Inspector General Act and the NASA Office of Inspector General (OIG). The operations of the OIG are dynamic, and we are constantly trying to improve the manner in which we are promoting the economy and efficiency of NASA operations and rooting out fraud, waste, and abuse.

During this reporting period, the NASA OIG continued to focus on matters relating to the Space Shuttle Columbia accident. My role as an observer to the Columbia Accident Investigation Board (CAIB) culminated in a letter to the Administrator, in which I stated that under Admiral Gehman's leadership, the Board conducted its investigation independently and without undue influence from NASA. Going forward, the OIG has developed an audit strategy to review NASA's response to the technical and organizational recommendations made by the CAIB. The OIG will dedicate a significant portion of its audit resources to this effort. We plan to bring transparency to the problems faced by NASA and to add value to NASA as it works to meet the challenges ahead.



Robert W. Cobb  
Inspector General

NASA faces fundamental challenges as it prepares to return to flight and develops plans for future space exploration. The CAIB reported that the Space Shuttle is not inherently unsafe. Possibly the vehicle is so complicated with so many technical challenges that NASA is unable to fully assess each of the risks before flight. It might be that managers, in facing myriad issues and a mission to fly, drive engineers to prove that a concern is one that merits resources and attention. The CAIB identified a culture in which "instead of having to prove it was safe to fly, [engineers] were asked to prove that it was unsafe to fly." Our audit strategy is intended to shed light on the risk posture of NASA's human space flight programs. Transparency will expose the issues, the difficulty of the work to be done, and the risks associated with space flight. In what I consider to be a very healthy and transparent approach, NASA is publishing its "Implementation Plan for Space Shuttle Return to Flight and Beyond" with regular updates. It is available electronically at: <http://www.nasa.gov/news>. This document provides general insight on the status of the many issues NASA is working on to improve Space Shuttle operations.

Beyond the risks of space flight, there are also business risks to the Agency. During the six-month reporting period, several significant investigative matters were brought to final resolution. Two cases detailed in this report resulted in historic recoveries of over \$18 million dollars to NASA and a total of over \$100 million returned to the Government. These cases involved thousands of hours of effort by NASA OIG Special Agents. The results reflect the Office of Investigations' (OI) dedication and commitment to combating fraud, waste, and abuse in Government and the positive impact that the OIG can have on NASA.

This semiannual report marks the first reporting period for the reorganized Office of Audits (OA). OA continues to position itself to effectively address the multitude of issues facing NASA including, but not limited to, CAIB recommendation follow-up, competition in contracting, financial management, and information technology (IT) issues. The retirement of several senior-level auditors pursuant to a buy-out provides the OIG an opportunity to accelerate its contemplated rebalancing of the OA's skill mix. For example, OA will hire a variety of occupational and professional specialists, such as aerospace technologists and procurement analysts. Additionally, the OIG has contracted with a consulting firm to provide engineering services on relevant technical audits and is making arrangements for two members of the CAIB support staff to join the OIG as detailees.

Aside from issues arising out of the Columbia accident, there are a number of ongoing audit and investigative activities of great significance to the Agency, including the Chief Financial Officer financial statement fiscal year (FY) 2003 audit, IT security audits, product substitution investigations, and investigations of contractor fraud and employee misconduct. As we commemorate the 25th Anniversary of the Inspector General Act, we will endeavor to fulfill our mission in these challenging times for the Agency.

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

A handwritten signature in black ink, appearing to read "Robert W. Cobb". The signature is written in a cursive, flowing style.

Robert W. Cobb  
Inspector General

# COMMEMORATING THE 25TH ANNIVERSARY OF THE INSPECTOR GENERAL ACT



On October 12, 1978, Congress enacted Public Law 95-452, the Inspector General Act, establishing several Offices of Inspector General. Throughout its history, the NASA OIG has worked diligently to fulfill the mandates of that Act.

Over the years, the NASA OIG's focus has constantly changed to address the many challenges facing an agency in an increasingly technological, scientific environment. Our mission, however, remains the same – to ensure efficient, cost-effective use of government resources and to support the initiatives of the Congress and the Administration. In furtherance of this mission, over the past 25 years the OIG has conducted many significant audits and investigations. In commemoration of the 25th Anniversary of the Inspector General Act, a few of those are briefly highlighted here.

## **Audit of Tracking and Data Relay Satellite System**

In May 1981, as the result of audit work conducted by the OIG into cost overruns on the Tracking and Data Relay Satellite System (TDRSS) contract, NASA earned one of former Senator Proxmire's Golden Fleece awards. At the time, appropriations were unavailable to support this system so NASA received congressional approval to borrow the money. The TDRSS sustained a cost growth upwards of \$1 billion beyond its initial cost estimate. The satellite became so heavy that it could not be lifted into orbit by NASA's available expendable launch vehicles. Senator Proxmire termed the TDRSS "overpriced, overweight, oversold, and overdue."

## **Rockwell International Mischarging Case**

The NASA OIG initiated this investigation when several whistleblowers at the Rockwell International (Rockwell) plant in Downey, California, alleged that costs associated with Air Force fixed price contracts were being allocated to the NASA Space Shuttle cost reimbursable contract. In 1982, the investigation resulted in a \$1.5 million settlement and injunctive relief against Rockwell for submitting mischarged costs to the Government. This case established the NASA OIG as a leader in investigating corporate accounting fraud, at a time when few organizations were equipped to investigate such allegations.

## **Security Operations Assessment**

In 1987, OIG audits of security operations at two NASA Centers found security personnel did not have authority to arrest persons found in violation of either NASA regulations or Federal law while on NASA property. Subsequently, the Space Act was amended at Section 799 (2) (f) to grant authority for security personnel to make arrests while guarding and protecting NASA property.

## **Relocation of Nozzle Operations to Yellow Creek**

In 1993, NASA planned to transition nozzle manufacturing and refurbishment operations for the Space Shuttle's reusable solid rocket motor from Utah to the Yellow Creek facility near Iuka, Mississippi. The Agency intended to build the Advanced Solid Rocket Motor (ASRM) at Yellow Creek and spent \$300 million on that facility, which included the termination costs incurred when the ASRM was canceled. As the result of our audit, which showed NASA would incur additional costs of \$500 million by fiscal year (FY) 2012, the Agency agreed transferring nozzle operations to Yellow Creek would not be cost effective.

### **Hubble Space Telescope**

On October 4, 1993, the eve of the expiration of the Statute of Limitations for filing suit, the Department of Justice (DOJ) announced a \$25 million settlement with the Perkin-Elmer (PE) Corporation and Hughes Aircraft, which had bought PE's optics division in December 1989. An OIG investigation found the company had provided false contractor certifications associated with the Hubble Space Telescope. The settlement agreement stated, "...[the manufacturers] knew or should have known of the defect," called spherical aberration, prior to the launch of the Hubble. Despite significant irregularities during the fabrication process, the contractor certified that the Hubble telescope met NASA's contract specifications.

### **NASA v. FLRA [Federal Labor Relations Authority]**

In June 1999, the Supreme Court of the United States decided the case of NASA v. FLRA. The Court held that a NASA OIG investigator is a "representative" of NASA when he or she interviews a NASA employee and, therefore, the employee may invoke the right to union representation during the interview. This so-called Weingarten right, which grew out of the collective bargaining relationship between the union and management, is available to federal bargaining unit employees through the Federal Service Labor-Management Relations Statute.

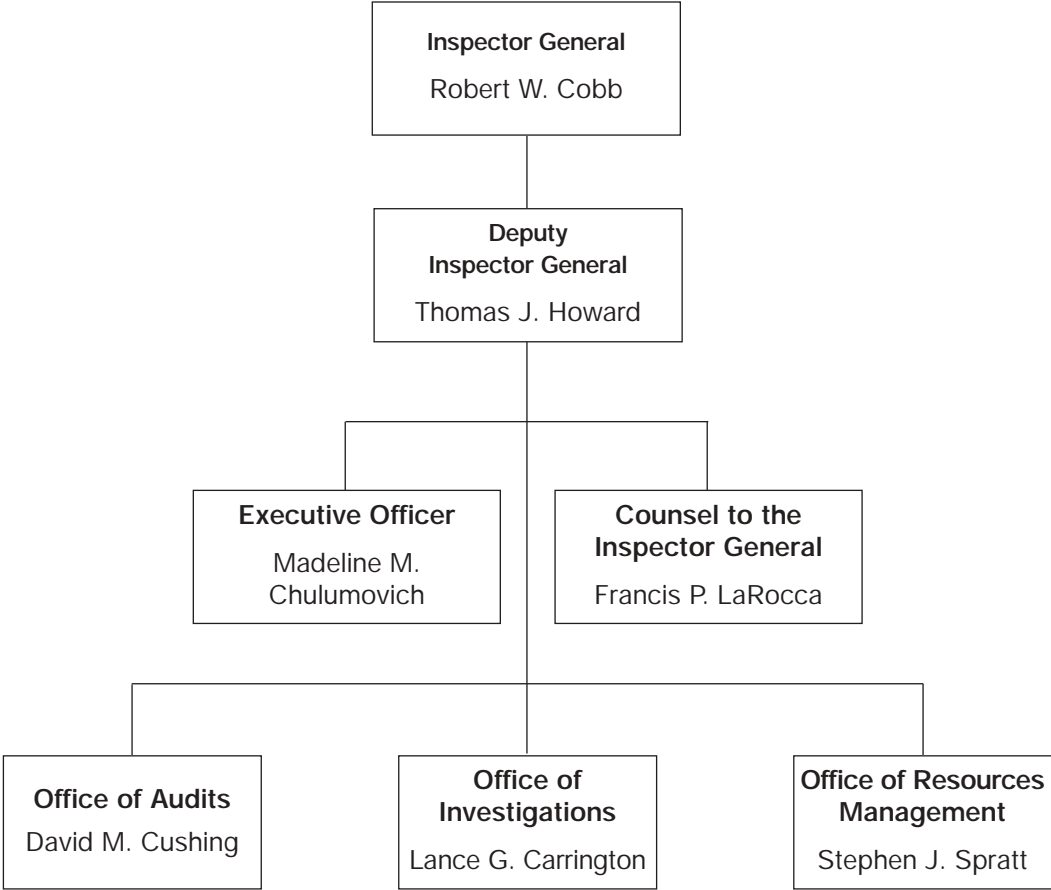


Jupiter's moons arranged by size from left: Ganymede, Callisto, Io, and Europa

# ORGANIZATION

## NASA OFFICE OF INSPECTOR GENERAL

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. During FY 2003 the OIG's \$25.6 million budget 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. The Deputy Inspector General serves as the alternate to the Inspector General (IG) and participates in the development and direction of the diverse audit and investigative functions of the OIG. The Counsel to the Inspector General advises and assists the IG on a variety of legal issues and matters. The Executive Officer manages special projects and is the OIG point of contact for congressional relations and outreach to external entities.

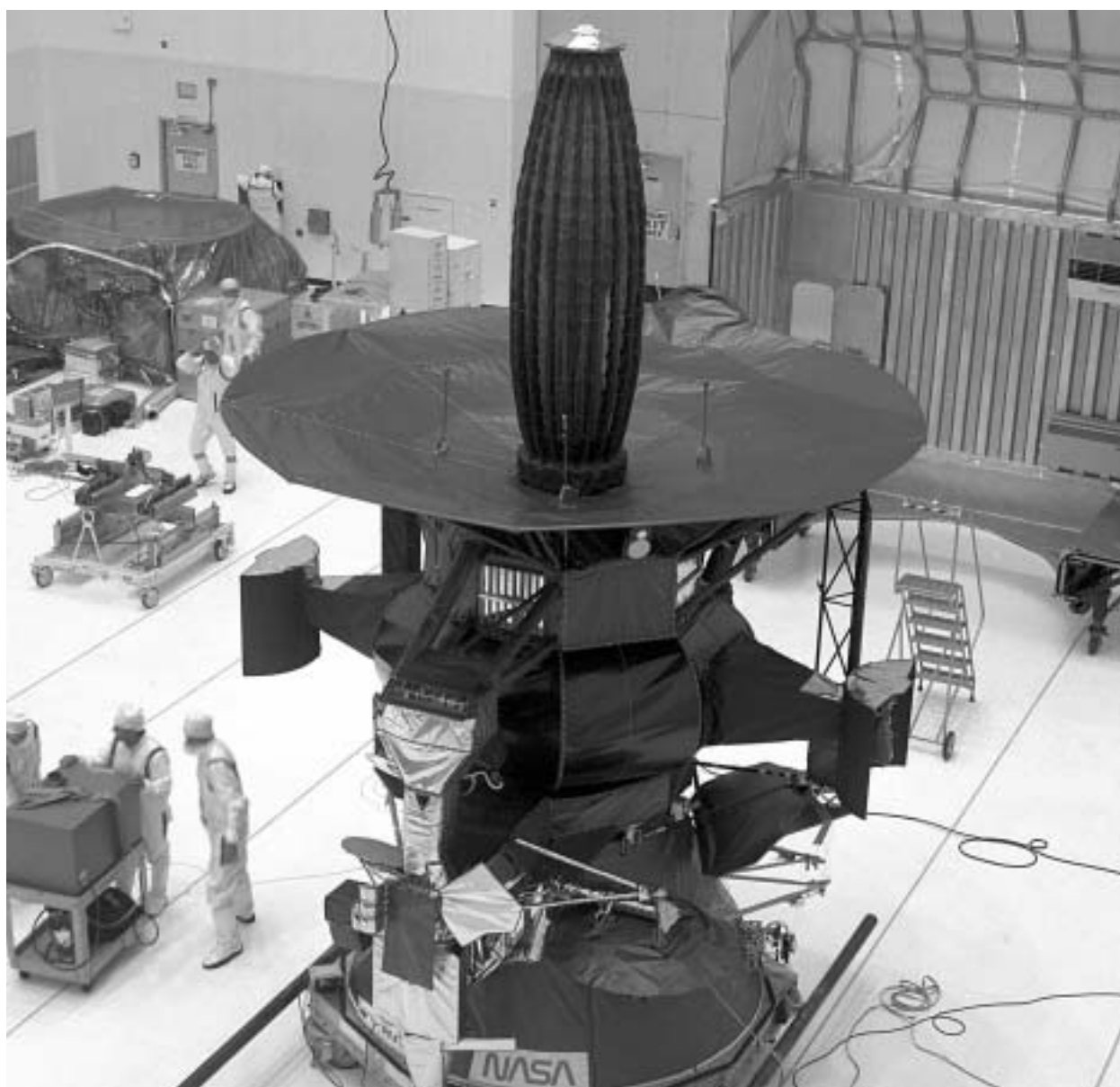
THE OFFICE OF AUDITS conducts independent, objective audits, reviews, and other examinations of NASA and NASA contractor programs and projects to improve NASA operations. The OA provides a broad range of professional audit and advisory services, performs focused reviews of specific management issues, comments on NASA policies, and is respon-



sible for oversight of NASA audits performed under contract or by other Federal agencies. The OA helps NASA accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the efficiency and effectiveness of NASA operations and by deterring fraud, crime, waste, and abuse.

THE OFFICE OF INVESTIGATIONS identifies, investigates, and refers for prosecution or to management for action cases of crime, waste, fraud, and abuse in NASA programs and operations. Through its investigations, the OI also seeks to prevent and deter crime by recommending to NASA effective measures to correct crime-conducive conditions at NASA. The OI's Computer Crimes Division (CCD) performs criminal cyber investigations in response to attacks against NASA's information technology systems and criminal misuse of NASA computers. The CCD also performs electronic forensic analysis and conducts research and development of computer media for national law enforcement purposes. The OI's Administrative Investigations Unit (AIU) investigates noncriminal matters involving NASA's civil servant and contractor employees.

THE OFFICE OF RESOURCES MANAGEMENT advises the IG and OIG managers and staff on administrative, budget, and personnel matters, and oversees OIG adherence to management policies.



Galileo spacecraft being prepared for mating to its Inertial Upper Stage.

# OIG PERSPECTIVE ON COLUMBIA ACCIDENT INVESTIGATION BOARD AND RETURN-TO-FLIGHT ACTIVITIES

## **IG Letter on the Independence of the CAIB**

As reported in our previous Semiannual Report, on February 2, 2003, the Administrator appointed the IG as an observer to the CAIB. Because of the critical importance of the CAIB's work to NASA, the IG sought to be an observer to the Board's activities and to make recommendations regarding CAIB organization on an ongoing basis.

During the first few weeks after the Columbia accident, members of Congress and the media expressed concerns that the Board would operate at the direction of the NASA Administrator and that NASA's influence would prevent the CAIB from conducting an independent and objective investigation. The role as an observer afforded the IG the opportunity to make observations on the independence of the CAIB. The IG primarily focused on the question of CAIB independence from NASA—the organization in the best position to interfere in the CAIB's pursuit of its objectives and with the most at stake in terms of the Board's report and recommendations.

On August 15, 2003, the IG sent a letter to the Administrator regarding his observations on the independence of the Board. In his letter, the IG stated,

Although NASA policy and the CAIB's original charter contained provisions that could have hindered an independent investigation, based on my observations, I believe the CAIB, under Admiral Harold Gehman's leadership, is and has been conducting its investigation independently and without undue influence from NASA.

Further, the IG's conclusion that the CAIB was acting independently and without undue influence was based on his view that the Board could address the challenging questions associated with the loss of the Space Shuttle Columbia in good faith and without material impediments from organizational or personal conflicts of interest. The complete letter can be found at: <http://www.hq.nasa.gov/office/oig/hq/columbia081503.pdf>

## **CAIB Identifies Physical, Organizational and Cultural Causes of the Columbia Accident**

The IG also stated that NASA and the public would be best served by the CAIB issuing an accurate, constructive, and credible report. On August 26, 2003, the CAIB released a comprehensive and objective report addressing the challenging questions associated with the loss of the Columbia. Although the CAIB's original charter was to determine the causes that led to the loss of the Columbia and seven astronauts, the Board, with the support of the White House, Congress, NASA, and the public, "broadened its mandate at the outset to include an investigation of a wide range of historical and organizational issues, including political and budgetary considerations, compromises, and changing priorities over the life of the Space Shuttle Program."

The CAIB identified the physical cause of the loss of Columbia and its crew to be a breach in the Thermal Protection System on the leading edge of the left wing. The breach was caused by a piece of insulating foam that separated from the left bipod ramp section of the External Tank at 81.7 seconds after launch, and struck the wing. However, the Board also believed that NASA's organizational culture and structure had as much to do with the accident as the External Tank foam. For example, according to the CAIB, the

organizational causes of the accident are rooted in the Space Shuttle Program's history and culture including original compromises that were required to gain approval for the Shuttle, subsequent years of resource constraints, fluctuating priorities, schedule pressures, mischaracterization of the Shuttle as operational rather than developmental, and lack of an agreed national vision for human space flight.

The Board made 29 recommendations to NASA and intends the recommendations to be a catalyst for changing NASA's culture. Fifteen recommendations are short-term/return-to-flight recommendations. These recommendations focus on

changes that must occur before the Shuttle can return to flight. The return to flight recommendations include the minimum that must be done to fix the problems identified and are primarily related to the physical causes of the accident. In contrast, the remaining 14 recommendations are considered "continuing to fly" recommendations. These recommendations focus on organizational cause factors and the changes necessary to operate the Shuttle and future spacecraft safely in the mid- to long-term. The full CAIB report can be found at: <http://www.nasa.gov/columbia/home/index.html>

### **IG's Audit Strategy Focuses on Return to Flight and CAIB-Related Activities**

The OIG is uniquely positioned to independently assess NASA's response to the CAIB report as the Agency plans a return to flight (RTF) and develops plans for future space exploration. Over the next 6 months, we plan to dedicate about 60 percent of our audit resources to audits focusing on how NASA is addressing CAIB recommendations. The OIG intends to bring transparency to the challenges faced by NASA in its efforts to comply with the CAIB report. We have discussed our strategy and audit plans with our stakeholders including Agency management, Congress, and former CAIB members. We will provide timely input on important issues as they develop, with the goal of contributing to effective decision-making during this critical time in NASA's history.

We are committed to adding value to NASA, the Congress, and the public by continuing to shed light on NASA's RTF plans, processes, culture and organization. To this end, we have already begun conducting two specific RTF/CAIB-related audits and are planning several more. We are currently reviewing the activities of the RTF Task Group including its independence and the scope of its activities. The Administrator chartered the RTF Task Group to "perform an independent assessment of NASA's actions to implement the recommendations of the CAIB, as they relate to the flight readiness of STS-114." We are also conducting an audit of CAIB financial and procurement management. The objectives of the audit are to determine whether the CAIB established controls to ensure that cost expenditures were reasonable, necessary, and accounted for, and whether the Board established contract agreements in accordance with the Federal Acquisition Regulation.

Further, our planned audits, at a minimum, include reviews of NASA's: (1) organizational issues, such as implementing an independent technical engineering authority and improving leadership/managerial training; (2) technical issues including plans to eliminate External Tank Thermal Protection System debris shedding and to redesign, certify, and test Shuttle flight hardware bolt catchers; and (3) contract oversight issues, such as Shuttle safety contractor quality assurance and incentive/award fee structure for Space Shuttle prime contractor. In addition, we plan to conduct a review of NASA's next-generation reusable launch vehicle system, the Orbital Space Plane.



The Space Shuttle Atlantis departs the Vehicle Assembly Building with its destination, Launch Pad 39A in preparation for STS-79 mission launch.

# SIGNIFICANT AUDITS AND INVESTIGATIONS

## SAFETY

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. The accident involving the Space Shuttle Columbia reflects the risks associated with human space flight. But, there are many other NASA programs that also require substantial attention to risk mitigation. The Agency has committed to an operational environment where safety is a top priority, and OIG audits and investigations are directed toward the goal of improving safety at NASA.

### **Safety of High Pressure Valves**

The following report is available on the Web at: <http://www.hq.nasa.gov/office/oig/hq/ig-03-018.pdf>

Our audit, *Weaknesses in Stennis Space Center's Procurement of High-Pressure Valves* (IG-03-018), found serious weaknesses with Stennis Space Center's (Stennis) management of a \$2.5 million contract for 26 high-pressure valves that was awarded to the Dresser Equipment Group (Dresser). The valves are critical components of pressure systems that control liquid and gaseous hydrogen, liquid oxygen, and gaseous nitrogen used in rocket engine testing. Stennis engineers allowed design changes to the valve specifications without authorization from the Contracting Officer. Also, Stennis did not perform technical, safety, or quality assurance reviews of Dresser or Dresser's subcontractors. Ineffective contract management resulted in late deliveries, increased costs, and defective valves that delayed engine testing more than two months for the Integrated Powerhead Demonstrator Project and one month for the 2nd Generation Reusable Launch Vehicle Program. By early 2003, Stennis had already incurred about \$229,000 in additional costs to rework 12 valves that it had accepted with known defects. As a result of this audit, we recommended that Stennis ensure: (1) existing and future pressure system contracts include specification reviews and that specifications be approved by appropriate quality, safety, and technical experts prior to contract award; (2) all changes to contract terms and conditions be coordinated with Contracting Officers; and (3) Dresser's performance on this contract be considered prior to awarding the company future contracts. Stennis concurred with all recommendations and has taken the corrective actions necessary to close them.

## PROCUREMENT

Over 85 percent of NASA's budget is expended through contracts and other procurement vehicles making effective and efficient procurement practices critical to NASA's success in achieving its overall mission. The NASA OIG seeks through its audits and investigations to prevent and detect procurement fraud and to identify areas in the Agency's procurement practices that need improvement.

### **Contractor Oversight of Noncompetitive Subcontracting Needs to Be Improved**

The following report is available on the Web at: <http://www.hq.nasa.gov/office/oig/hq/ig-03-024.pdf>

Our audit, *Improving NASA Oversight of Prime Contractors' Noncompetitive Subcontracting* (IG-03-024), found that Orbital Sciences Corporation (Orbital) and Computer Sciences Corporation (CSC) had awarded 10 (48 percent) of 21 non-competitive subcontracts without adequately justifying the lack of competition. As a result, NASA had reduced assurance that Orbital and CSC obtained fair and reasonable pricing for the 10 noncompetitive subcontracts valued at \$5.5 million. Further, based on our audits at 13 NASA prime contractors (including those in this audit), we found that 60 (54 percent) of 111 noncompetitive subcontracts reviewed, valued at \$11.6 million, were not justified in accordance with the contract and Federal procurement requirements. Management concurred with our recommendations and plans to complete all corrective actions. We consider management's planned actions responsive to the recommendations.

### **Investigations of NASA Contractor Fraud**

During this semiannual period, three investigations resulted in recoveries by NASA of over \$19 million. The recoveries in the TRW and Lockheed matters, which totaled over \$18 million, are among some of the largest recoveries to NASA in cases investigated by the OIG.

- Under the terms of a settlement agreement, Northrop Grumman Space and Mission Systems Corporation, the successor to TRW, Incorporated (TRW), paid the Government \$111.2 million to settle its civil liability for alleged violations of the False Claims Act. This agreement was reached following a joint investigation conducted by the OIG and numerous Federal agencies into cost mischarging schemes by TRW. The investigation found irregularities in TRW's cost accounting procedures resulting in excess cost to the Government that affected both NASA and Department of Defense contracts. As a result of the settlement, \$11,341,979 was returned to NASA.
- Another joint investigation conducted by the OIG and the Defense Criminal Investigative Service into contractor mischarging resulted in a settlement agreement between Lockheed Martin and the Government in which Lockheed agreed to pay the Government \$7.1 million. The \$7.1 million recovery to NASA includes the allegedly excessive lease costs Lockheed charged to NASA under a Government contract and the cost of the investigation.
- An OIG investigation based upon a Defense Contract Audit Agency (DCAA) audit determined Pioneer Contract Services, Incorporated (Pioneer), allegedly established a practice of including significant unallowable costs in its overhead claims in its contracts with NASA. As a result of the investigation, Pioneer renegotiated its general and administrative (G&A) costs with NASA resulting in a cost recovery to NASA of \$789,645.

## FINANCIAL MANAGEMENT

To fully comply with Office of Management and Budget Circular A-127, "Financial Management Systems," NASA established the Integrated Financial Management Program (IFMP). NASA has been faced with challenges in developing and implementing the IFMP, specifically in producing accurate and timely information to support operating, budget, and policy decisions. Improved financial performance and accountability continues to be a management challenge for NASA. The OIG will continue to review NASA's progress in this area and make recommendations to Agency management consistent with sound fiscal management.

### **NASA Working to Address the Challenge of Implementing the IFMP**

The following reports are available on the Web. IG-03-015 is at: <http://www.hq.nasa.gov/office/oig/hq/ig-03-015.pdf> and IG-03-028 is at: <http://www.hq.nasa.gov/office/oig/hq/ig-03-028.pdf>

In our audit, *Integrated Financial Management Program Core Financial Module Conversion to Full Cost Accounting*, (IG-03-015), we found NASA needs to resolve how it will allocate service and G&A costs, civil service costs, and unassigned costs before implementation of full cost accounting. NASA will also need to reconfigure the IFMP software to reflect the changes. We recommended that the NASA Deputy Chief Financial Officer revise the IFMP plans to include: (1) timeframes and milestones for completing steps implementing full cost accounting (including addressing and resolving cost issues identified in the report), (2) identification of the personnel and other resources necessary to perform the steps within the established timeframes, and (3) senior management approval and support of these additional procedures. Management concurred with the recommendations and formed the Full Cost Policy and Operations Team to address those issues. In addition, NASA appointed a full-time Director of Full Cost to manage the full-cost implementation process. The Agency has completed reconfiguration and testing of the software for implementation of full cost accounting. The OIG will monitor the progress of this implementation to evaluate whether the IFMP will adequately support full cost accounting.

In our audit, *Summary Report on the Audit of the Integrated Financial Management Program Core Financial Module*, (IG-03-028), we made several recommendations to the NASA IFMP Program Executive to improve full implementation of the IFMP Core Financial Module (CFM). We recommended that the Program Executive: (1) identify and test all deferred "non-closing" transactions prior to Wave 2 and 3 implementation and test all remaining deferred transactions prior to full implementation, (2) perform appropriate tests to ensure all CFM-generated reports can be traced to and verified by the standard general ledger accounts, (3) apply additional resources to prioritize all open data conversion testing discrepancies and close them in a timely manner, and (4) ensure all IFMP personnel use the Knowledge Sharing System to its fullest extent and fully document lessons learned in that system. Management concurred with and had adequately acted upon our recommendations.



## INFORMATION TECHNOLOGY SECURITY

NASA management has implemented several information technology security (ITS) improvements and more initiatives are planned that may significantly enhance NASA's ITS posture. However, OIG ITS reviews continue to find that the Agency needs to improve controls over its information systems and compliance with its ITS requirements. On June 24, 2003, the NASA IG testified before the House Government Reform Subcommittee on Technology, Information Policy, Intergovernmental Relations and the Census on the status of NASA's ITS and Federal Information Security Management Act efforts. As part of his testimony, the IG emphasized that ITS remains a serious management and performance challenge for NASA. Consequently, the OIG will continue to focus on NASA's effectiveness in implementing policies, procedures, and practices as well as its progress in protecting its critical physical and cyber-based infrastructure.

### Review of NASA's Wireless Security Infrastructure

Due to the sensitivity of reporting ITS vulnerabilities, this report is not available on the Web.

Our *Assessment of Wireless Security at [a NASA Installation]* (G-03-001) identified a wireless infrastructure with weak security controls, a variety of vulnerabilities, and no Center policy regarding the management and control of wireless networks. Hackers can use weaknesses within a wireless network to gain unauthorized access to computer systems potentially compromising a system. Not having an Agencywide wireless network policy guidance led to uncertainty and caused Center IT management to discount the importance of wireless network security. As a result of our assessment, Center management promptly addressed the security concerns raised, and NASA is currently in the process of issuing an Agencywide wireless security policy.

### Computer Crimes Investigations

Computer crimes threaten the security of our nation's information technology infrastructure. The OIG continues to investigate perpetrators who misuse computer services for unauthorized or illegal purposes. Some of this work is conducted jointly with other law enforcement organizations.

- As reported in the previous semiannual period, a former senior NASA employee pled guilty to one count each of sexual exploitation of a child, transportation of child pornography by computer, and receipt of child pornography by computer. As a result of the plea, the former senior NASA employee was sentenced to 120 months in prison to be followed by 3 years supervised release. The former employee used a NASA-assigned computer and NASA networking facilities to engage in the exchange of pictures depicting child pornography.
- We previously reported the indictment of an Alabama man on 40 counts of accessing Government computers without authorization, causing damage to Government Web sites, and possessing access devices (credit card numbers) with intent to defraud. The individual has pled guilty to 1 count of possession of access devices and 17 counts of obstructing communications. He was sentenced to 2 years probation and ordered to pay \$7,276 restitution to NASA and a \$1,800 special assessment to the Government. The court also ordered that he be restricted from using the Internet during his probation.

## MANAGEMENT AND POLICY

Key factors in helping NASA achieve its goals and minimize operational problems are effective management and the establishment of appropriate policies. These factors are used to reasonably ensure that programs achieve their intended results; resources are used consistent with Agency mission; programs and resources are protected from fraud, waste, and mismanagement; laws and regulations are followed; and reliable and timely information is obtained, maintained, reported, and used for decisionmaking. As programs change and NASA strives to improve operational processes and implement new technological developments, management must continually assess, evaluate, and update its policies. The OIG will continue to review NASA's management and policies and make recommendations to Agency management where improvements can be made.

### **Improving Management of the Astronaut Corps**

The following report is available on the Web at: <http://www.hq.nasa.gov/office/oig/hq/inspections/g-01-035.pdf>

Our assessment, *Improving Management of the Astronaut Corps* (G-01-035), evaluated the size and utilization of NASA's astronaut corps. The OIG considered whether the astronaut corps was effectively used, supportive of the Agency's current and future mission, and managed in accordance with governing policies and procedures. We found optimistic predictions of future rates of flight, minimal regulation of astronaut candidate selection, and the need to staff engineering positions at Johnson Space Center to be factors in the Agency's astronaut hiring process. As a result, costs for the astronaut program were higher than necessary and individuals trained to be astronauts were not all being used in a manner commensurate with their costly training. To assist the Agency in assuring that the size of the corps is more closely aligned with mission and program needs, we recommended that the Agency establish formal guidelines for certain aspects of the astronaut candidate selection process, conduct more realistic analyses of astronaut corps size needs, document reasons for deviating from those analyses, and establish formal criteria for astronaut technical assignments. NASA management concurred with our recommendations.

### **Enterprise Standards Needed for Wind Tunnel Utilization Data**

The following report is available on the Web at: <http://www.hq.nasa.gov/office/oig/hq/ig-03-027.pdf>

Our audit, *Audit of Wind Tunnel Utilization* (IG-03-027), identified the historical use of NASA wind tunnels, gathered information about planning and projections for wind tunnel utilization, compared historical use to planning and projections, and identified the number of wind tunnels mothballed or abandoned within the last 10 years. We found NASA needs to maintain better, more consistent records for wind tunnel utilization. Specifically, we found that the Ames Research Center, Glenn Research Center, and Langley Research Center could only provide comparable facilities utilization data for some of the Agency's major wind tunnel facilities. Also, the method of calculating utilization rates varied significantly from Center to Center. Improved, consistent record keeping will allow the Agency to achieve more effective oversight and management of its wind tunnel operations. Without current comparable utilization data, Aerospace Technology Enterprise management is challenged to make well-informed strategic and operational decisions regarding use of the Agency's wind tunnels. Further, management decisions regarding wind tunnel utilization may not always serve the best interests of the Agency or the nation. NASA management concurred with our recommendation that the Aerospace Technology Enterprise establish Enterprise-wide standards for recording, summarizing, and reporting wind tunnel facilities utilization data. We used the results of our work to augment the RAND Corporation's congressionally mandated *Study of NASA's Aeronautical Test and Evaluation Facilities*.

# LEGAL MATTERS AND REGULATORY REVIEW

## LEGAL MATTERS

In anticipation of finalization of the draft regulation on research misconduct, the OIG legal unit briefed OI AIU investigators on its requirements. The regulation was published in the *Federal Register* on July 25, 2003, as a proposed ruling. OIG attorneys also provided mandatory training to OIG law enforcement officers on the legal requirements associated with the use of force and briefed OIG managers on the No FEAR Act (Notification and Federal Anti-Discrimination and Retaliation Act of 2002). The primary purpose of the Act, which became effective October 1, 2003, is to improve agency accountability for antidiscrimination and whistleblower laws.

## REGULATORY REVIEW

During this period, we processed 30 NASA and Headquarters directives. Three of the directives we reviewed were later withdrawn from processing: NASA Policy Directives (NPD) 8610.12E, *Office of Space Flight Space Shuttle Services for NASA and NASA-Sponsored Payloads*; NPD 8900.3G, *Astronaut Medical and Dental Care and Observation Program*; and NPD 9710.1R, *Delegation of Authority to Authorize or Approve Temporary Duty Travel on Official Business and Related Matters*. We nonconcurred with NPD 2810.1A, *NASA Information Security*, which addresses, among other things, responsibility for investigating computer crimes and misconduct.



Hubble mosaic of the majestic Sombrero Galaxy.



# SIGNIFICANT OUTREACH ACTIVITIES

## RECOVERED MOON ROCK RETURNED TO HONDURAN AMBASSADOR

An OIG sting operation resulted in the recovery of a moon rock originally given to the Republic of Honduras in 1973 by President Richard M. Nixon as a goodwill gift. The moon rock had been imported illegally into the United States and offered for sale on the Internet. In a ceremony held at NASA Headquarters, NASA Administrator Sean O'Keefe and Inspector General Robert W. Cobb returned the recovered moon rock to Mario M. Canahuati, the Honduran Ambassador to the United States.



Pictured from left to right, Administrator Sean O'Keefe, Ambassador Marion M. Canahuati, and Inspector General Robert W. Cobb



Plaque containing lunar sample returned to the Honduran government

## OTHER ACTIVITIES

The OIG participates in numerous cooperative activities with the Agency and other Government organizations. For instance:

The President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency (PCIE/ECIE) represent all of the Federal Offices of Inspector General. The OIG continues to participate in a variety of activities of the PCIE/ECIE and other intra-governmental groups, including the PCIE's Information Technology Roundtable, chaired by the NASA IG; the Inspection and Evaluation Roundtable; and the Federal Audit Executives Council financial statements group.

As part of our commitment to recruit a high-quality Government workforce, the OIG participates in numerous experiential opportunities and educational programs for students, including the Presidential Management Intern Program; the Cyber Corps, which recruits college students for Government IT work; the Hispanic Association of Colleges and Universities, which promotes Hispanics in higher education; and the Access program for handicapped college students.

The OIG staff continues to assist the Inspector General Criminal Investigator Academy in curriculum development and instruction provided to all agency OIGs. The OIG OI CCD staff participates in several working groups within the Federal IT community, such as the Scientific Working Group for Digital Evidence and the Law Enforcement Cyber Attack Technology Gap Analysis Working Group. CCD also presented the IG community a technical briefing on the NORS (NASA Office of Inspector General Reporting System) and how to implement a similar system like it at their respective offices.

# AWARDS AND SPECIAL THANKS

## AWARDS

### OIG Employees Recognized for Outstanding Contributions

During this period, the PCIE recognized two NASA OIG teams for their accomplishments. At a ceremony held on October 16, 2003, each team received a PCIE Award for Excellence.



From left to right, Stephen J. Nesbitt, NASA OIG; Gaston Gianni, Vice Chair, PCIE

The OIG OI Space Shuttle Columbia Disaster Recovery Team was recognized for its exemplary commitment to recovering Columbia shuttle debris and the integral role it played in the initial efforts to plan, coordinate, and participate in the securing of shuttle debris. Stephen J. Nesbitt is shown accepting the award on behalf of the Team.

The OIG's Information Technology Round Table Team was recognized for its outstanding achievement in fulfilling multiple PCIE/ECIE program initiatives in the field of information technology. The Team's leadership and contributions continue to improve the OIG community's capabilities in the field of IT oversight. G. Brent Melson is shown accepting the award on behalf of the Team.

From left to right, Gaston Gianni, Vice Chair, PCIE; G. Brent Melson, NASA OIG; and Barry Snyder, Vice Chair, ECIE



## SPECIAL THANKS

Michael T. Shelby, United States Attorney for the Southern District of Texas, played a major role in the successful negotiations between the Department of Justice and Lockheed Martin that resulted in the contractor agreeing to pay \$7.1 million to the Government. Details of this settlement are reported on page 11 of this report.



Matthew D. Orwig

We commend Mr. Shelby for his professionalism, dedication, and commitment to federal law enforcement. We look forward to continuing the excellent working relationship between Mr. Shelby's office and the NASA OIG at Johnson Space Center

Matthew D. Orwig, U.S. Attorney for the Eastern District of Texas, has been instrumental in the success of several prosecutions involving theft of Space Shuttle Columbia debris. The OIG appreciates U.S. Attorney Matt Orwig's commitment to NASA's mission and the professionalism his office has shown in handling prosecutions of individuals involved in stealing Columbia debris.



Michael T. Shelby



The Space Infrared Telescope Facility, the fourth and final element of NASA's family of orbiting "Great Observatories," was launched from Cape Canaveral on August 25, 2003.

# APPENDICES

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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 . . . . .	14, 26
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies . . . . .	2, 8-13
Section 5(a)(2)	Recommendations for Corrective Actions . . . . .	2, 8-13
Section 5(a)(3)	Prior Significant Audit Recommendations Yet To Be Implemented . . . . .	23
Section 5(a)(4)	Matters Referred to Prosecutive Authorities . . . . .	26
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 Dollar Values of Questioned Costs, Unsupported Costs, and Recommendations That Funds Be Put to Better Use . . . . .	20
Section 5(a)(7)	Summary of Significant Audit Reports . . . . .	8-13
Section 5(a)(8)	Total Number of Audit Reports and Total Dollar Value Questioned Costs . . . . .	22
Section 5(a)(9)	Total Number of Audit Reports and Total Dollar Value Funds Be Put To Better Use . . . . .	22
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

# APPENDIX B

## STATISTICAL REPORTS

Table 1—Audit Reports and Impact		
Report Number/ Date Issued	Report Title	Impact
<b>Safety</b>		
<b>IG-03-018</b> 06/27/03	Weaknesses in Stennis Space Center's Procurement of High-Pressure Valves	Actions are needed to ensure pressure vessels and pressurized systems contracts are effectively managed to minimize potential safety hazards
<b>IG-03-019</b> 06/27/03	Railroad Operations Involving Hazardous Commodities at the John F. Kennedy Space Center	Improvements needed in safety and security of railroad transport of hazardous commodities on NASA property
<b>Procurement</b>		
<b>IG-03-014</b> 05/19/03	Audit of Contract Administration for Glenn's Management Operations Contract	Better support needed for fee determinations for administrative and clerical support
<b>Letter</b> 07/31/03	Intergovernmental Personnel Act Agreements	Grants received by employees under the Intergovernmental Personnel Act were peer reviewed and awarded based on merit
<b>IG-03-024</b> 08/15/03	Improving NASA Oversight of Prime Contractors' Noncompetitive Subcontracting	Actions needed to justify noncompetitive sub-contract awards and improve NASA oversight
<b>IG-03-025</b> 08/25/03	NASA's Purchase Card Program Was Effective; Additional Controls Will Further Reduce Risk	Program is effective but additional actions are recommended to reduce risk
<b>IG-03-021</b> 09/16/03	Contract Data Reports	Promote increased use of electronic commerce
<b>Financial Management</b>		
<b>IG-03-015</b> 05/30/03	Integrated Financial Management Program Core Financial Module Conversion to Full Cost Accounting	NASA must resolve extraordinarily complex accounting and costing issues associated with full cost accounting and establish a plan for configuring the CFM software to support full cost accounting
<b>IG-03-028</b> 09/29/03	Summary Report on Audit of Integrated Financial Management Program Core Financial Module	Actions have been taken on prior recommendations affecting the implementation of the new system
<b>Information Technology</b>		
<b>IG-03-012</b> 04/10/03	Review of NASA's Information Technology Security Plans of Action and Milestones	NASA needs to include IT weaknesses in its report to Office of Management and Budget

Table 1—Audit Reports and Impact (continued)

Report Number/ Date Issued	Report Title	Impact
<b>IG-03-017</b> 06/09/03	NASA's Information Technology Incident Response Capability Needs Improvement	NASA needs to improve its response to IT incidents
<b>G-03-001</b> 07/18/03	Assessment of Wireless Network Security	Develop and disseminate Agencywide policy on wireless network security
<b>IG-03-022</b> 08/04/03	Follow-up of Report IG-00-036, "Summary Report on Disaster Recovery Planning Audits"	Improvements in IT contingency plan testing and use of alternate processing facilities
<b>IG-03-026</b> 09/22/03	Federal Information Security Management Act-2003 Report from the Office of Inspector General	IT security program continues to be a material weakness for the Agency
<b>Management and Policy</b>		
<b>IG-03-013</b> 05/30/03	NASA Noncompliance With Waste Reduction Requirements	Actions needed to meet Federal environmental goals
<b>G-01-035</b> 06/27/03	Improving Management of the Astronaut Corps	Actions needed to ensure the size of the astronaut corps is more closely aligned with mission and program needs
<b>IG-03-020</b> 07/18/03	Opportunities for Cost Savings in Purchasing Peripheral and Accessory Equipment and Supplies for Desktop Computing Services	\$ 9,015 in questioned costs
<b>IG-03-027</b> 09/26/03	Audit of Wind Tunnel Utilization	Actions needed to improve utilization data recording, summarizing, and reporting
<b>IG-03-023</b> 09/29/03	Failures in Cost Estimating and Risk Management Weaknesses in Prior Space Launch Initiative	Improved cost estimating and risk management needed for new space transportation programs
<b>Quality Control Reviews</b>		
<b>IG-03-016</b> 05/28/03	Quality Control Review of Johns, Bubbers & Johns, P.A., Audits of Kennedy Space Center Exchange Financial Statements for Fiscal Years Ended September 30, 2000, and 2001	Certified Public Accountant audit work complied with standards but NASA management needed to take additional actions on management representations and responding to audit findings
<b>Total Reports Issued</b>	<b>19</b>	
<b>Total Letters Issued</b>	<b>1</b>	
<b>Total Audit Dollar</b>	<b>\$ 9,015 Questioned Costs</b>	

Table 2—Audits with Questioned Costs

	Number of Audit Reports	Total Costs Questioned
No management decision made by beginning of period	1	\$1,800,000
Issued during period	1	9,015
Needing management decision during period	2	1,809,015
Management decision made during period:	2	1,809,015
Amounts agreed to by management	1	9,015
Amounts not agreed to by management	1	1,800,000
No management decision at end of period:	0	0
Less than 6 months old	0	0
More than 6 months old	0	0

Table 3—Audits with Recommendations That Funds Be Put To Better Use

	Number of Audit Reports	Total Costs Questioned
No management decision made by beginning of period	1	\$115,000,000
Issued during period	0	0
Needing management decision during period	1	115,000,000
Management decision made during period:	1	115,000,000
Amounts which management agreed to be put to better use:	1	115,000,000
Based upon proposed management action	1	115,000,000
Based upon proposed legislative action	0	0
Amounts which management disagreed be put to better use		0
No management decision at end of period:	0	0
Less than 6 months old	0	0
More than 6 months old	0	0



Table 4—Prior Significant Audit Recommendations Yet To Be Implemented

Report Number/ Date Issued	Report Title	Date Resolved	Total Monetary Findings	Number of Recommendations Open	Closed	Latest Target/ Closure Date
<b>NEW SINCE LAST REPORTING PERIOD</b>						
<b>INFORMATION TECHNOLOGY</b>						
<b>G-02-024</b> 12/18/02	Assessment of [a NASA Installation's] Firewall and Other Information Technology Security Measures	12/18/02	*	1	0	06/30/04
<b>IG-03-009</b> 03/27/03	Performance Management Related to Agencywide Fiscal Year 2002 Information Technology Security Program Goals	03/27/03	*	5	7	08/26/04
<b>IG-03-011</b> 03/28/03	Independent Verification and Validation of Software	03/28/03	*	2	0	09/30/03 <sup>1</sup>
<b>PROCUREMENT</b>						
<b>G-02-006</b> 02/03/03	Review of NASA's Procurement Management System On-line Query Tool	02/03/03	*	2	3	12/31/03
<b>REPORTED IN PREVIOUS SEMIANNUAL REPORTS</b>						
<b>SAFETY AND MISSION ASSURANCE</b>						
<b>IG-99-047</b> 09/22/99	Safety Considerations at Goddard Space Flight Center	09/22/99	*	1	4	10/30/03
<b>INFORMATION TECHNOLOGY</b>						
<b>IG-00-055</b> 09/28/00	System Information Technology Security Planning	12/29/00	*	2	8	05/31/03 <sup>1</sup>
<b>IG-00-057</b> 09/28/00	NASA's Planning and Implementation for Presidential Decision Directive 63—Phase I	09/28/00	*	2	1	06/30/03 <sup>1</sup>
<b>IG-01-022</b> 03/30/01	Information Technology Security Planning	03/30/01	*	3	1	07/01/03 <sup>1</sup>
<b>IG-01-038</b> 09/27/01	NASA Planning and Implementation of PDD 63—Phase III	09/27/01	*	2	0	06/30/03 <sup>1</sup>
<b>IG-02-001</b> 10/25/01	Evaluation of NASA Incident Response Capability	10/25/01	*	1	0	08/30/03 <sup>1</sup>
<b>IG-02-029</b> 09/30/02	NASA's Implementation Activities for Critical Cyber-Based Infrastructure Assets —Phase II	09/30/02	*	1	2	06/30/31 <sup>1</sup>
						(continued)

Table 4—Prior Significant Audit Recommendations Yet To Be Implemented

Report Number/ Date Issued	Report Title	Date Resolved	Total Monetary Findings	Number of Recommendations		Latest Target/ Closure Date
				Open	Closed	
<b>SECURITY</b> <b>IG-02-004</b> 11/19/01	Approval for Accessing IT Systems at [Two NASA Centers]	11/19/01	*	1	5	04/30/03 <sup>1</sup>
<b>INTERNATIONAL SPACE STATION</b>						
<b>IG-02-011</b> 03/22/02	International Space Station Spare Parts Costs	03/22/02	*	2	3	09/30/03 <sup>1</sup>
<b>PROCUREMENT</b>						
<b>IG-02-017</b> 06/04/02	Management of Research Grants and Cooperative Agreements	06/04/02	*	4	2	10/30/03
<b>LAUNCH VEHICLES</b>						
<b>IG-01-003</b> 12/21/00	Space Shuttle Payloads	10/10/02	*	4	1	08/15/03 <sup>1</sup>
<b>IG-01-021</b> 03/30/01	X-37 Technology Demonstrator Project Management	07/23/02	*	1	12	06/30/03 <sup>1</sup>
<b>IG-02-028</b> 09/30/02	Space Launch Initiative: Primary Requirements for a 2nd Generation Reusable Launch Vehicle	09/30/02	*	1	1	09/30/03 <sup>1,2</sup>

\*Non-monetary finding

<sup>1</sup>The management-estimated completion date has expired, and management has not provided the OIG with a revised date.

<sup>2</sup>Revised from previous semiannual report.

Table 5—Status of A-133<sup>1</sup> Findings and Questioned Costs Related to NASA Awards<sup>2</sup>

Total Audits Reviewed	65
Audits with Recommendations	2
Total Disallowed/Questioned Costs	\$14,047
Total Disallowed/Questioned Costs Recovered/Sustained	\$0
Recommendations:	
Beginning Balance	36
New Recommendations	2
Recommendations Dispositioned	0
Ending Balance	38
Average Age of Recommendations Not Completed	8.3 months

<sup>1</sup>OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*, requires Federal agencies to audit non-Federal entities expending Federal awards.

<sup>2</sup>Data prepared by NASA Office of Procurement for the financial reporting period ending September 30, 2003, in accordance with OMB Circular A-50, *Audit Followup*.

Table 6—Administrative Investigations Activities

Cases Opened	54
Cases Closed	38
Cases Pending <sup>1</sup>	98
Referred to Management	7
Closed	8
Pending	7
Referred to Criminal Investigations	1

<sup>1</sup>Correction to previous reporting.

Table 7—Criminal Investigations Activities

Cases Opened	117
Cases Closed	170
Cases Pending	278
Hotline Complaints Received	108
Referred to Audits	1
Referred to Investigations	76
Referred to NASA Management	3
Referred to Other Agencies	1
No Action Required	27

Table 8—Criminal Investigations Impact

Indictments/Informations	36
Convictions/Plea Bargains/Pre-trial Diversions	37
Cases Referred for Prosecution	43
Cases Declined	29
Cases Referred to NASA Management for Action	12
Cases Referred to Other Agencies for Action	14
Suspensions/Debarments from Government Contracting	11
Individuals	8
Firms	3
Administrative/Disciplinary Actions <sup>1</sup>	
Against NASA Employees	6
Against Contractor Firm(s)	1
Reported Actions Taken by Contractor Against Contractor Employees <sup>2</sup>	13
Total Recoveries	\$128,580,316
NASA <sup>3</sup>	\$ 19,105,328
NASA Property <sup>4</sup>	\$ 7,000,733
Other <sup>5</sup>	\$101,996,570

<sup>1</sup>Includes terminations, suspensions, demotions, reassignments, reprimands, and resignations or voluntary retirements.

<sup>2</sup>13 actions taken against 10 individuals.

<sup>3</sup>Includes administrative recoveries and contract credits.

<sup>4</sup>Includes \$6,959,000 stipulated and certified value of recovered lunar and meteorite samples.

<sup>5</sup>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.

Table 9—Legal Activities and Reviews

Freedom of Information Act Matters	18
Inspector General Subpoenas Issued	31
Regulations Reviewed	30

# APPENDIX C

## DCAA AUDITS OF NASA CONTRACTORS

The DCAA provides various audit services to NASA on a reimbursable basis. The following summarizes information provided during this period by DCAA 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 655 audit reports (excluding pre-award contractor proposal evaluations) on contractors who do business with NASA. DCAA also issued 182 reports on audits of NASA contractor proposals totaling \$4,912,128,000, which identified cost exceptions totaling about \$120,771,000. 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's 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 95 reports with \$24,455,000 of questioned costs, and 42 reports with \$92,557,000 of funds put to better use. NASA management sustained 64.5 percent of DCAA's questioned costs and 69.2 percent of the funds put to better use.



Similar in size and grand design to our own Milky Way, spiral galaxy NGC 3370 lies about 100 million light-years away toward the constellation Leo. Recorded here in exquisite detail by the Hubble Space Telescope's Advanced Camera for Surveys.

Table 10—DCAA Audits with Questioned Costs<sup>1, 2</sup>

	Number of Audit Reports	Total Costs Questioned (in thousands)
No management decision made by beginning of period <sup>3</sup>	283	\$176,959
Issued during period	121	69,528
Needing management decision during period	404	246,487
Management decision made during period:	95	24,455
Dollar value of contract recoveries		15,777
Dollar value of costs not recovered		8,678
No management decision made by end of period	309	222,032

<sup>1</sup>Includes 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 is subject to change based on subsequent DCAA authentication.

<sup>2</sup>Reflects revised DCAA reporting criteria to include all audits with a NASA share ratio, not just those with 100 percent.

<sup>3</sup>Represents beginning April 1, 2003, amounts adjusted for (a) contracts not awarded, and (b) revised audit findings and recommendations.

Table 11—DCAA Audits with Recommendations That Funds Be Put to Better Use<sup>1, 2</sup>

	Number of Audit Reports	Total Costs Questioned (in thousands)
No management decision made by beginning of period <sup>3</sup>	67	\$166,658
Issued during period	48	126,339
Needing management decision during period	115	292,997
Management decision made during period:	42	92,557
Amounts agreed to by management		64,022
Amounts not agreed to by management		28,535
No management decision made by end of period	73	200,440

<sup>1</sup>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.

<sup>2</sup>Reflects revised DCAA reporting criteria to include all audits with a NASA share ratio, not just those with 100 percent.

<sup>3</sup>Represents beginning April 1, 2003 amounts adjusted for (a) contracts not awarded, and (b) revised audit findings and recommendations.

# APPENDIX D

## GLOSSARY AND ACRONYMS

### GLOSSARY

#### **ADMINISTRATIVE INVESTIGATION**

Inquiry involving noncriminal allegations of administrative wrongdoing.

#### **FINAL ACTION**

(The IG Act of 1978 definition) The completion of all actions management has concluded, in its decision, that are necessary with respect to the findings and recommendations included in an audit report; and 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 restitution; and (3) out-of-court settlements, including administrative actions resulting in non-court settlements.

#### **INVESTIGATIVE REFERRALS**

Cases that require additional investigative work, civil or criminal prosecution, or disciplinary action. These 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 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 concluded to be necessary.

#### **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**

(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 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 Follow-up Official determines whether the recommended corrective action should be taken.

**RECOMMENDATIONS 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 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 not in preaward reviews of contract or grant agreements; or (6) any other savings which 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 accomplishment of program objectives.)

**UNSUPPORTED COST**

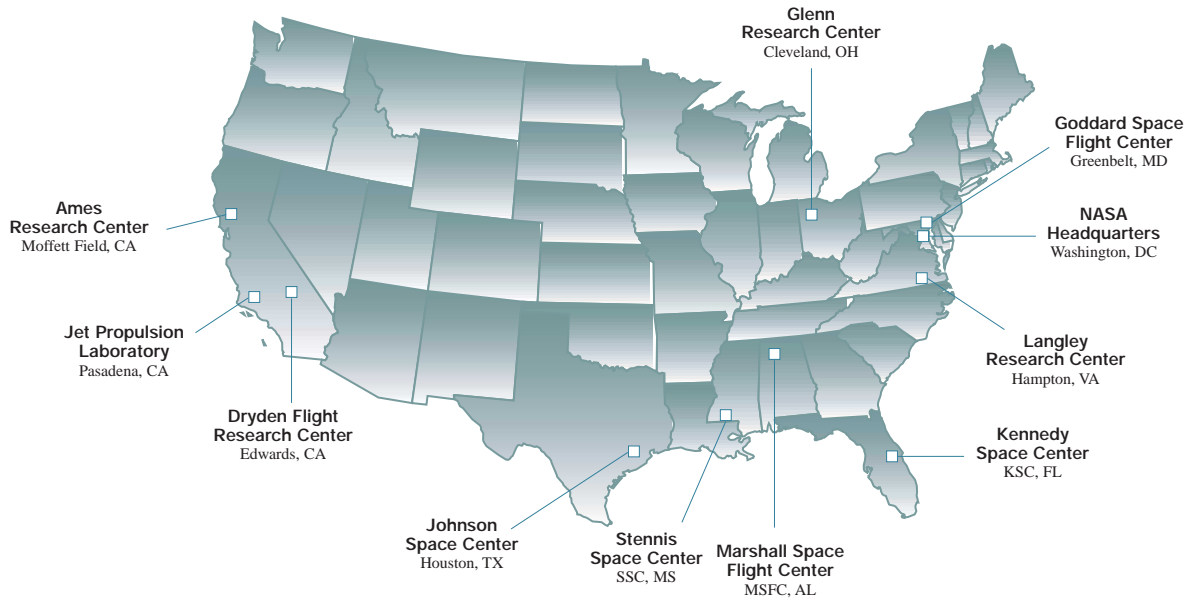
(The IG Act of 1978 definition) A cost that is questioned by OIG because OIG found that, at the time of the audit, such cost is not supported by adequate documentation.



## ACRONYMS

<b>AIU</b>	Administrative Investigations Unit
<b>ASRM</b>	Advanced Solid Rocket Motor
<b>CAIB</b>	Columbia Accident Investigation Board
<b>CCD</b>	Computer Crimes Division
<b>CFM</b>	Core Financial Module
<b>CSC</b>	Computer Science Corporation
<b>DCAA</b>	Defense Contract Audit Agency
<b>DOJ</b>	Department of Justice
<b>ECIE</b>	Executive Council on Integrity and Efficiency
<b>FISMA</b>	Federal Information Security Management Act
<b>FLRA</b>	Federal Labor Relations Authority
<b>FY</b>	Fiscal Year
<b>G&amp;A</b>	General and Administrative
<b>IFMP</b>	Integrated Financial Management Program
<b>IG</b>	Inspector General
<b>ITS</b>	Information Technology Security
<b>JSC</b>	Johnson Space Center
<b>NPD</b>	NASA Policy Directive
<b>OA</b>	Office of Audits
<b>OI</b>	Office of Investigations
<b>OIG</b>	Office of Inspector General
<b>PCIE</b>	President's Council on Integrity and Efficiency
<b>PE</b>	Perkin-Elmer
<b>RTF</b>	Return to Flight
<b>TDRSS</b>	Tracking and Data Relay Satellite System
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