

### **NASA OFFICE OF INSPECTOR GENERAL**



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**Cover image:** 

A SpaceX Falcon 9 rocket carrying the company's Dragon spacecraft launches NASA's SpaceX Crew-8 mission to the International Space Station.



# FROM THE ACTING INSPECTOR GENERAL

The NASA Office of Inspector General (OIG) remains committed to providing independent, objective, and comprehensive oversight of NASA programs, projects, and personnel while supporting the Agency's mission and improving its outcomes. Our work and insights are particularly relevant as NASA faces a constrained budget environment while confronting the challenges of executing large and complex projects on time and within budget. It is a privilege to lead such a highly professional staff dedicated to NASA's mission, and I am proud of the OIG staff for their timely and impactful achievements. Also, I would like to recognize and thank Paul K. Martin, our former Inspector General, for his exceptional leadership of our office over the past 14 years.

Our audit work has continued to focus on the top management challenges facing NASA including a range of issues from the Artemis campaign, cybersecurity, and science missions. For example, during this reporting period our Office of Audits identified \$2 million in questioned costs and found that:

- Despite NASA's affordability initiatives, the price of the Space Launch System (SLS) Block 1B rockets will not be significantly reduced through a planned sole-source contract, and the production cost alone will remain over \$2 billion.
- NASA and its prime contractors continue to experience challenges obtaining key components and
  necessary supplies to meet Artemis goals, resulting in cost increases and schedule delays. Supply
  chain delays and disruptions over the past several years have resulted from a variety of factors
  outside the Agency's control, from the COVID-19 pandemic to inflation of wages and material costs
  to the Russia-Ukraine conflict.
- Although NASA has established a comprehensive privacy program, the Agency needs to take additional steps to better protect individuals' personal information.
- Despite a history of innovation in high-end computing (HEC), NASA needs a renewed commitment and sustained leadership attention to reinvigorate its HEC efforts. Without key changes, the Agency's HEC is likely to constrain future mission priorities and goals.

In the coming months we will be issuing audit reports on topics such as sustaining International Space Station operations, NASA's Commercial Lunar Payload Services initiative, management of Artemis IV and future missions, the Nancy Grace Roman Space Telescope, and the Mobile Launcher 2.

Our Office of Investigations continues to identify and investigate fraud, waste, abuse, misconduct, and mismanagement involving NASA personnel and contractors, resulting in over \$4 million in recoveries during this reporting period. Examples of our investigative results include:

• A Small Business Innovative Research contractor agreed to a civil settlement of \$1.35 million to resolve claims that it violated export control laws and misrepresented its eligibility to receive contracts under the program.

- The CEO of a Florida company pleaded guilty to wire fraud for submitting nearly two hundred fraudulent quality control documents for parts destined for NASA's SLS. In addition, the company sold nonconforming products, which resulted in a \$680,000 loss to NASA.
- A former California Institute of Technology employee working at NASA's Jet Propulsion Laboratory was sentenced to 2 years of probation and ordered to pay \$167,000 in restitution and a \$10,000 fine for committing wire fraud in order to fraudulently secure an Economic Injury Disaster Loan from the U.S. Small Business Administration.
- A senior NASA employee received a 5-day suspension for misusing her position to secure an internship for her child at NASA Headquarters.

This Semiannual Report summarizes the OIG's activities and accomplishments between October 1, 2023, and March 31, 2024. We appreciate Congress's continued support of our oversight efforts and hope that you find this report informative.

George A. Scott

Acting Inspector General April 30, 2024

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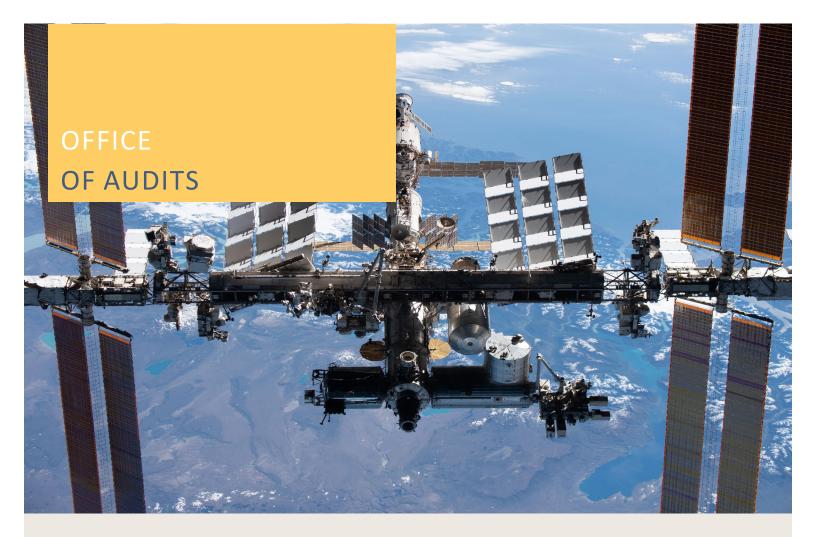


NASA's James Webb Space Telescope shows the Orion Nebula, which is 1,400 light-years from Earth. As required by the Reports Consolidation Act of 2000, the OIG annually provides its independent assessment of the top management and performance challenges facing NASA. In our November 2023 report, we organized the challenges facing NASA under the following topics:

- Returning Humans to the Moon
- Improving Management of Major Programs and Projects
- Sustaining a Human Presence in Low Earth Orbit
- Maturing Information Technology Management and Security
- Improving Oversight and Management of Contracts, Grants, and Cooperative Agreements
- Attracting and Retaining a Diverse and Highly Skilled Workforce
- Managing NASA's Outdated Infrastructure and Facilities

Most of these issues are long-standing, difficult challenges central to NASA's core missions and will likely remain top challenges for years to come.

In our Top Management and Performance Challenges report and all related work, the OIG is committed to providing independent, objective, and comprehensive oversight of NASA programs, projects, and personnel to improve Agency outcomes. To that end, we plan to conduct audits and investigations in the coming year that focus on NASA's continuing efforts to address these and other challenges.



The International Space Station is pictured from the SpaceX Crew Dragon Endeavour during a fly around of the orbiting lab that took place following its undocking from the Harmony module's space-facing port.

#### **HUMAN EXPLORATION**

Human exploration activities remain among NASA's most highly visible missions, with the Agency currently operating the International Space Station, managing the commercial crew and cargo programs that support the Station, and planning for future exploration beyond low Earth orbit, including ambitious goals for the Artemis campaign. Through Artemis, NASA seeks to establish a sustainable lunar presence while preparing the way for crewed missions to Mars. Our oversight of these issues generally involves operations within the Agency's Exploration Systems Development Mission Directorate, Space Operations Mission Directorate, and Space Technology Mission Directorate, as well as select portions of the Science Mission Directorate.

### NASA'S MANAGEMENT OF THE ARTEMIS PROGRAM'S SUPPLY CHAIN

IG-24-003, OCTOBER 19, 2023

Consisting of multiple programs and projects; more than a dozen prime contractors; and thousands of subcontractors, vendors, and suppliers, NASA's Artemis campaign is an ambitious and costly effort that seeks to return humans to the Moon and eventually to Mars. However, recent supply-chain issues and threats—exacerbated by the COVID-19 pandemic—have negatively impacted mission goals. We found



The Artemis II crew is shown inside the Neil Armstrong Operations and Checkout Building at NASA's Kennedy Space Center in Florida in front of their Orion crew module.

that supply chain issues have contributed to cost increases and schedule delays for the Artemis campaign. Though some supply chain challenges are beyond Agency control, such as the COVID-19 pandemic and Russia-Ukraine conflict, we identified several factors within NASA's purview. Specifically, the Agency lacks visibility into its critical suppliers, does not communicate identified challenges across the Artemis campaign, and does not adequately utilize NASA's Logistics Management Division to help proactively mitigate supply chain issues. While NASA is making efforts to understand and proactively manage supply chain issues, these initiatives are still in early stages. Of our seven recommendations, the Agency concurred with six and partially concurred with one.

### NASA'S TRANSITION OF THE SPACE LAUNCH SYSTEM TO A COMMERCIAL SERVICES CONTRACT

IG-24-001, OCTOBER 12, 2023

NASA's total Artemis campaign costs are projected to reach \$93 billion from fiscal year (FY) 2012 through 2025, with SLS Program costs representing 26 percent (\$23.8 billion) of that total. With the goal of making Artemis missions



NASA's SLS rocket, with the Orion spacecraft aboard, is seen atop the mobile launcher at NASA's Kennedy Space Center in Florida.

more affordable, NASA is preparing to award a sole-source services contract, known as the Exploration Production and Operations Contract (EPOC), to Deep Space Transport, LLC (DST)—a new joint venture of The Boeing Company and Northrop Grumman Services Corporation. Our projections estimate that a single SLS rocket produced under EPOC will cost \$2.5 billion, a figure NASA hopes to reduce by 50 percent. We found that despite NASA's plan to use a pre-EPOC contract to provide the Agency more time to evaluate DST's ability to assume all SLS-related production and launch responsibilities and the Agency's current affordability initiatives, the

\$2.5 billion production cost of the SLS Block 1B rocket will not be significantly reduced through EPOC. This is due to unrealistic assumptions associated with NASA's ongoing affordability initiatives, the Agency's limited ability to negotiate lower launch costs with current SLS contractors, and the uncertainty of DST expanding the SLS user base. Failure to achieve NASA's projected 50-percent cost savings in producing SLS vehicles under EPOC threatens the long-term sustainability of the SLS rocket as the mainstay of the Artemis campaign, especially as less costly commercial heavy-lift alternatives become available. Of our seven recommendations, the Agency concurred with five and partially concurred with two.

#### **ONGOING AUDIT WORK**

### Audit of NASA's Readiness for its Artemis II Crewed Mission to Lunar Orbit

With NASA's completion of the uncrewed Artemis I test flight in December 2022, the Agency is now preparing for the crewed Artemis II mission. NASA estimates it can launch Artemis II by the end of 2025; however, prior OIG work found that this time frame may be unrealistic. With each of the early Artemis missions dependent on the success of the previous mission, technical or safety issues encountered during Artemis I will have a cascading effect on the Artemis II mission. This audit will examine NASA's progress toward achieving its Artemis II goals.



The astronauts selected for NASA's Artemis II mission. Artemis II will be NASA's first crewed flight test of the SLS rocket and Orion spacecraft.

### NASA's Management of Artemis IV and Future Missions—NASA's Management of the Space Launch System Block 1B Development

Artemis IV marks the first flight of NASA's more powerful heavy-lift rocket—SLS Block 1B. This spaceflight development project and the subsequent spaceflight operations will become significantly more expensive and complex due to the need to integrate disparate systems. Key to achieving this is successfully completing the development of the new upper stage—the Exploration Upper Stage—along with other modifications and integration activities. However, Block 1B system development has already experienced numerous challenges that have resulted in cost increases and schedule delays. This audit will examine NASA's management of the development of the SLS Block 1B.



NASA's Space Launch System carrying the Orion spacecraft lifts off the pad at Launch Complex 39B.

### NASA's Management of Risks to Sustaining International Space Station Operations Through 2030

At a cost of approximately \$4.3 billion per year, or 16 percent of NASA's last annual budget, NASA expects the International Space Station (ISS) to continue operations through 2030. While the Station's structure is projected to remain viable through 2030, NASA must manage a series of evolving risks to the ISS as it ages and faces changes to its operational environment. Further, NASA is planning to transition its crewed low Earth orbit operations to one or more commercial low Earth orbit destinations to ultimately replace the ISS. As part of this transition in low Earth orbit, NASA is planning to decommission and deorbit the ISS. NASA is procuring a commercial U.S. deorbit vehicle, with an estimate of nearly \$1 billion, to safely execute a controlled deorbit in 2031. However, until then, managing the risks facing the ISS is imperative for sustaining a human presence in space and preparing for the Agency's deep-space goals. This audit will examine NASA's management of risks to sustaining ISS operations through 2030.

### NASA's Management of the Mobile Launcher 2 Project

The Agency is developing Mobile Launcher 2 (ML-2) for future, larger variants of the SLS to support Artemis missions beginning with Artemis IV, currently planned for 2028. The prime contractor, Bechtel National, Inc., is responsible for all activities related to the design and construction of the launcher. In a previous report issued June 2022, we identified risks to the project including a delay of at least 3 years and that as of September 2023, the ML-2 contract's value had risen to over \$1 billion, nearly triple the original value of \$383 million. Given the importance of ML-2 for future Artemis missions and its cost growth to date, it is vital that NASA effectively manages the project to control future cost increases and schedule delays. This audit will examine the current management of the ML-2 project.



#### **SCIENCE AND AERONAUTICS**

Science missions like the Mars 2020 Perseverance Rover, Parker Solar Probe, and James Webb Space Telescope further our understanding of the universe. Meanwhile, NASA's Earth-observing missions shed light on climate change, severe weather and other natural hazards, wildfires, and global food production. And, as it has since its earliest days, the Agency continues to conduct research in pursuit of improvements and efficiencies in aviation technology. Our oversight of these areas generally corresponds to efforts undertaken by the Agency's Science Mission Directorate and Aeronautics Research Mission Directorate.

### AUDIT OF THE MARS SAMPLE RETURN MISSION IG-24-008, FEBRUARY 28, 2024

The Mars Sample Return (MSR) Program is an international partnership between NASA and the European Space Agency (ESA) designed to bring Martian geological samples to Earth for scientific study in the early 2030s. The MSR Program is one of the most technically complex, operationally demanding robotic space missions ever undertaken. We found the MSR Program which consists of two major flight projects, the Earth Return Orbiter (ERO) and Sample Retrieval Lander (SRL)—is facing significant obstacles completing its Formulation Phase in a timely and effective manner. Those obstacles include schedule and design issues with the ERO's Capture, Containment, and Return System that have delayed the MSR Program by at least 7 months in completing its Formulation Phase. Additionally, the Program acknowledged it will likely not meet its launch schedule of 2027 for the ERO and 2028 for the SRL nor its \$6.2 billion lifecycle cost estimate, which has since grown to an unofficial estimate of \$7.4 billion as of June 2023. Operational differences between NASA and ESA have also impacted Program execution. Of our four recommendations, the Agency concurred with three and partially concurred with one. Since

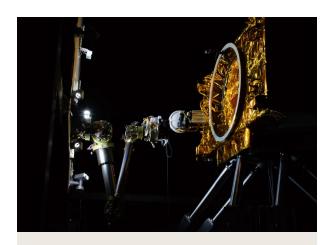


The Perseverance Mars rover, collecting MSR Program samples, is part of NASA's Mars Exploration Program.

we issued this report, the Agency announced a new approach to retrieving the samples and intends to solicit architecture proposals from industry in an effort to lower cost, risk, and complexity.

### NASA'S EFFORTS TO DEMONSTRATE ROBOTIC SERVICING OF ON-ORBIT SATELLITES IG-24-002, OCTOBER 4, 2023

NASA's On-Orbit Servicing, Assembly, and Manufacturing 1 (OSAM-1) mission intends to



Grapple testing of OSAM-1's Robotic Servicing Arm at Goddard Space Flight Center. The robotic arm (left) is interacting with a model of a satellite (right) in a simulated zero-gravity environment.

demonstrate first-of-its-kind technology by grappling a U.S. government-owned satellite, Landsat 7, and refueling it, thereby demonstrating the capability of extending the operational life of satellites on orbit. We found OSAM-1 cost growth and schedule delays are exacerbated by poor contractor performance and continued technical challenges. After rebaselining its cost and schedule in April 2022, the OSAM-1 project continues to experience cost growth, and it now appears the Agency will exceed its current \$2.05-billion price tag and the December 2026 launch date commitment to Congress. Much of the project's cost growth and schedule delays can be traced to Maxar's poor performance on the spacecraft bus and SPIDER contracts with each deliverable approximately 2 years behind schedule. We found the structure of these firm-fixed-price contracts does not provide NASA adequate flexibility to incentivize Maxar to improve its performance. Consequently, NASA is providing personnel and services to supplement Maxar's efforts to mitigate contractor performance issues and reduce further impacts to the project's cost and schedule. In addition, the Agency project managers have not modified the spacecraft bus contract to decrease its value to account for the supplemental labor provided by NASA. The OIG made three recommendations,

which the Agency concurred or partially concurred with and described corrective actions to address them. Since we issued this report, the Agency made the decision to cancel this project. However, Congress provided funding for OSAM in FY 2024 and directed NASA to stick with the 2026 launch date. As of April 2024, NASA was evaluating its path forward.

#### **ONGOING AUDIT WORK**

#### Audit of NASA's Commercial Lunar Payload Services Initiative

In 2018, NASA created the Lunar Discovery and Exploration Program to support innovative approaches to achieve human and science exploration goals by funding contracts for commercial transportation services and the development of small rovers and instruments. Under the Program, NASA selected 14 companies to facilitate the rapid acquisition of science and technology systems delivery services to the Moon through a new initiative known as Commercial Lunar Payload Services (CLPS). This audit will assess the effectiveness of NASA's

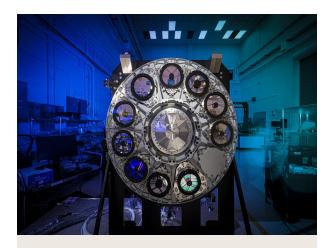


NASA's Volatiles Investigating Polar Exploration Rover (VIPER) in a clean room at NASA's Johnson Space Center. VIPER is scheduled to fly on a CLPS delivery in late 2024.

implementation and management of the CLPS initiative and determine whether the Agency's organizational, programmatic, and acquisition approaches are effective in achieving its goals and objectives.

### Audit of the Nancy Grace Roman Space Telescope Project

Since 1968, NASA has launched several significant space telescopes, including Hubble, Spitzer, and the James Webb Space Telescope. The latest space telescope mission is the Nancy Grace Roman Space Telescope, which began development in February 2016 and seeks to settle essential questions in the areas of dark energy, exoplanets, and infrared astrophysics. This audit will assess whether the project is meeting cost, schedule, and technological goals while managing risks.



The element assembly wheel of the Nancy Grace Roman Space Telescope.



Next-generation pad abort demonstrator technology is tested by Boeing Rocketdyne at a test stand at NASA's Marshall Space Flight Center in Huntsville, Alabama.

### NASA's Management of its Rocket Propulsion Test Program

For over 5 decades, NASA's Stennis Space Center has served as the Agency's primary rocket propulsion test site and is home to NASA's Rocket Propulsion Test Program. The Program, which provides chemical rocket propulsion test services and allows for a single-entry point of coordination for any user of NASA rocket test stands, manages all the Agency's propulsion test facilities located at several NASA Centers. This audit will assess NASA's management of its portfolio of rocket propulsion testing capabilities.



#### MISSION SUPPORT AND INFORMATION TECHNOLOGY

Institutional services such as human capital management, procurement, infrastructure, and security are organized under NASA's Mission Support Directorate. Our oversight of these functions covers a wide array of topics, including the Agency's procurement of goods and services, operations and maintenance of facilities and infrastructure, workforce management, and physical security. We also monitor and evaluate NASA's management of its information technology (IT) assets, which is led by the Agency's Chief Information Officer, and we continue to pay close attention to the Agency's efforts to improve its IT cybersecurity practices.

### AUDIT OF NASA'S HIGH-END COMPUTING CAPABILITIES

IG-24-009, MARCH 14, 2024

NASA's High-End Computing (HEC) capabilities provide computing systems and services to support the Agency's aeronautics, exploration, science, and space technology missions. HEC enables scientists and engineers to model and analyze large amounts of data and perform calculations at high speeds and view results at a higher fidelity. NASA needs a renewed commitment and sustained leadership attention to reinvigorate HEC efforts. NASA's HEC is not managed as a program or centralized service, and this disjointed organization and management exacerbates several HEC issues. NASA's HEC resources are oversubscribed and overburdened. and this scarcity drives schedule delays and often leads NASA teams to purchase their own HEC resources. The Agency also lacks a comprehensive strategy on commercial cloud versus on-premises HEC use. NASA's decentralized HEC management also raises cybersecurity concerns, with mandated cybersecurity controls ignored or bypassed. Without an integrated HEC strategy and a more focused approach, the Agency's trailblazing

science and technology research will continue to be unnecessarily limited by NASA's disjointed HEC efforts. The OIG made nine recommendations, which the Agency concurred or partially concurred with.



Image from a HEC simulation of launch ignition for NASA's next-generation SLS. Colors indicate temperature, where white is hot and brown is cooler. The plume is contoured based on the airmass fraction (that is, the fraction by mass of air vs. gas plume species). Small green person is shown for scale.

### NASA'S COMPLIANCE WITH FEDERAL EXPORT CONTROL LAWS

**IG-24-007, FEBRUARY 1, 2024** 

The OIG is required to annually assess the Agency's compliance with federal export control laws and reporting requirements regarding cooperative agreements between NASA and China or any Chinese company. Since we last reported on these issues, NASA has not established any new bilateral agreements with China.

In a February 2024 letter to Congress, we summarized our work relating to NASA's compliance with federal export control laws. During the past year we completed one audit related to NASA's partnerships with international space agencies for the Artemis campaign and three audits that examined NASA's controls over sensitive information and IT assets and security systems, many of which contain data subject to export control laws. We also initiated two new audits related to IT security. In addition, our Office of Investigations closed nine investigations related to inappropriate associations with China and the unauthorized access to export-controlled information.

### AUDIT OF NASA'S PRIVACY PROGRAM IG-24-006, DECEMBER 19, 2023

NASA and other federal agencies collect, process, maintain, disseminate, and disclose personally identifiable information (PII) on employees, contractors, the public, and partners in the course of their activities. The OIG found that although NASA has established a comprehensive privacy program, the Agency needs to take additional steps to better protect individuals' personal information. In particular, NASA does not consistently document key decisions on the necessity of privacy impact assessments, is not fully utilizing its data loss prevention capabilities to detect potential breaches across its network,

and does not have a clear process for deciding when to convene a Breach Response Team. Additionally, not all individuals with key privacy roles receive the appropriate level of privacy training. Improvements in these areas would ensure NASA complies with federal laws when collecting PII, enhance detection and mitigation of incidents where PII is potentially compromised, and ensure NASA users are equipped with the requisite knowledge to better protect PII. The OIG made six recommendations, which the Agency concurred with and described corrective actions to address them. However, we consider the proposed actions of one recommendation unresponsive, and it remains unresolved pending further discussions with the Agency.

#### **ONGOING AUDIT WORK**

### Audit of NASA's Science, Technology, Engineering, and Math (STEM) Engagement

The success of NASA's missions, programs, and projects relies on the Agency attracting and retaining a highly skilled and diverse STEM workforce with varied technical and managerial skills. At the end of 2023, approximately 63 percent of the over 18,000 civil service employees at NASA facilities nationwide worked in the science and engineering fields. The Agency's Office of STEM Engagement



Students design a roller coaster during a design challenge at Glenn's 2016 National Lab Day.

seeks to build the next generation of workers and broaden student participation to increase diversity, equity, and inclusion in STEM fields. This audit will evaluate whether NASA is effectively implementing STEM engagement activities and outreach efforts to meet its strategic goals and objectives.

## Evaluation of NASA's Information Security Program under the Federal Information Security Modernization Act for Fiscal Year 2024

The Federal Information Security Modernization Act of 2014 requires that the OIG conduct an annual evaluation of NASA's information security program and practices and report the results to the Office of Management and Budget (OMB). This evaluation will determine the effectiveness of NASA's information security program and practices for FY 2024.

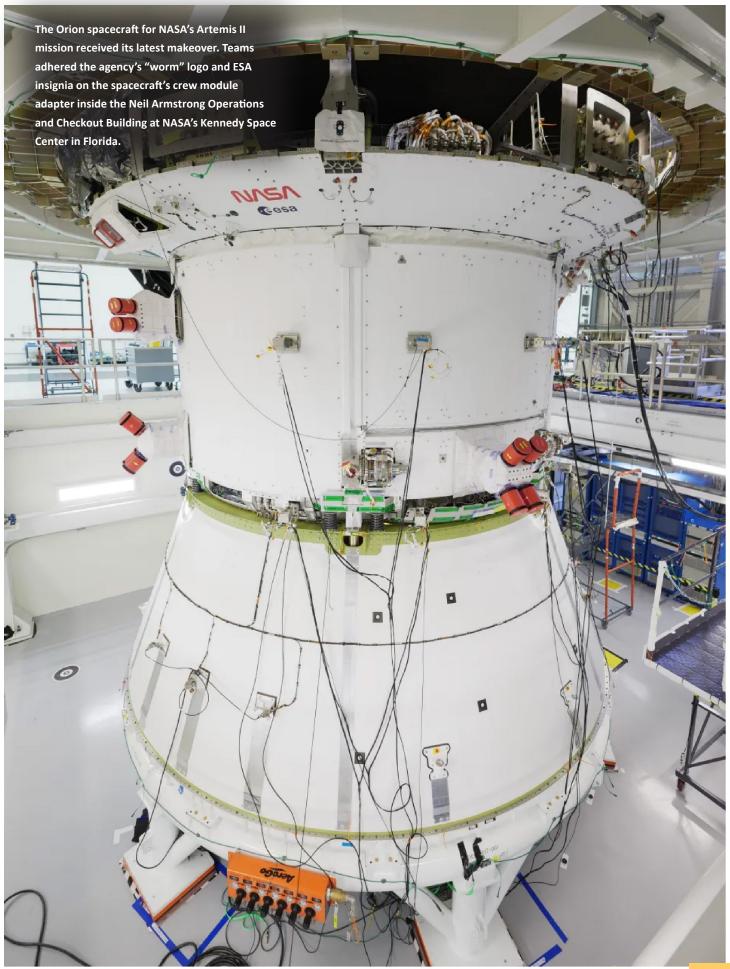
### Audit of NASA's Awards to Small Disadvantaged Businesses

Federal agencies, including NASA, have been directed to make contracting and procurement opportunities more readily available to all eligible vendors and to remove barriers faced by underserved individuals and communities. To that end, the administration set a goal of increasing the share of contracts awarded to small

disadvantaged businesses (SDBs)—a category under federal law for which Black-owned, Latino-owned, and other minority-owned businesses are presumed to qualify—to 15 percent by FY 2025. NASA is continuing its efforts to include SDB participation in its contracts, however, in FY 2022, the Agency fell short of its negotiated SDB prime contracting goal and will be further challenged as the goals increase to meet the administration's requirements. This audit will assess NASA's processes and key management practices for encouraging SDB participation in contracting and determine whether NASA has controls in place to ensure awards were made to eligible businesses.

### NASA's Compliance with the Geospatial Data Act for Fiscal Year 2024

The Geospatial Data Act of 2018 seeks to foster efficient, government-wide management of geospatial data—information identifying the geographic location and characteristics of natural or constructed features and boundaries on Earth. The Act requires Inspectors General to audit the collection, production, acquisition, maintenance, distribution, use, and preservation of geospatial data by covered agencies, including NASA, at least once every 2 years. This audit will determine the extent to which NASA is managing its geospatial data in accordance with the Act.



#### FINANCIAL MANAGEMENT

The OIG and its independent external auditor continue to assess NASA's efforts to improve its financial management practices by conducting and overseeing a series of audits—including the annual financial statement audit—to help the Chief Financial Officer and the Agency identify and address weaknesses. We also assess single audits of NASA grantees performed by external independent public accounting firms. The single audits provide NASA and stakeholders with assurance that these award recipients comply with federal reporting directives and assist the Agency in performing pre-award risk assessments and post-award monitoring efforts.

### FISCAL YEAR 2023 REPORT ON STATUS OF CHARGE CARD AUDIT RECOMMENDATIONS

#### ML-24-002, JANUARY 09, 2024

The Government Charge Card Abuse Prevention Act of 2012, Public Law 112-194, as implemented by OMB Memorandum M-13-21, requires each Inspector General to report to OMB within 120 days of the end of each FY on its agency's progress in implementing charge card related audit recommendations. We did not issue any reports on NASA's charge card programs in FY 2023 and therefore had no recommendations to report; as of the issuance of our memorandum, NASA had no open recommendations related to its charge card programs.

### AUDIT OF NASA'S FISCAL YEAR 2023 FINANCIAL STATEMENTS

#### **IG-24-004, NOVEMBER 15, 2023**

We contracted with the independent public accounting firm Ernst & Young LLP to audit NASA's FY 2023 financial statements in accordance with the Government Accountability Office's Government Auditing Standards and OMB Bulletin No. 24-01, Audit Requirements for Federal Financial Statements. The audit resulted in the 13th consecutive "clean" or unmodified opinion on NASA's financial statements. An unmodified opinion means the financial statements present fairly, in all material respects, the financial position and results of NASA's operations in conformity with U.S. generally accepted accounting principles. Ernst & Young LLP found no material weaknesses

or significant deficiencies in internal controls or any instances of significant noncompliance with applicable laws and regulations.

#### **ONGOING AUDIT WORK**

### NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2023

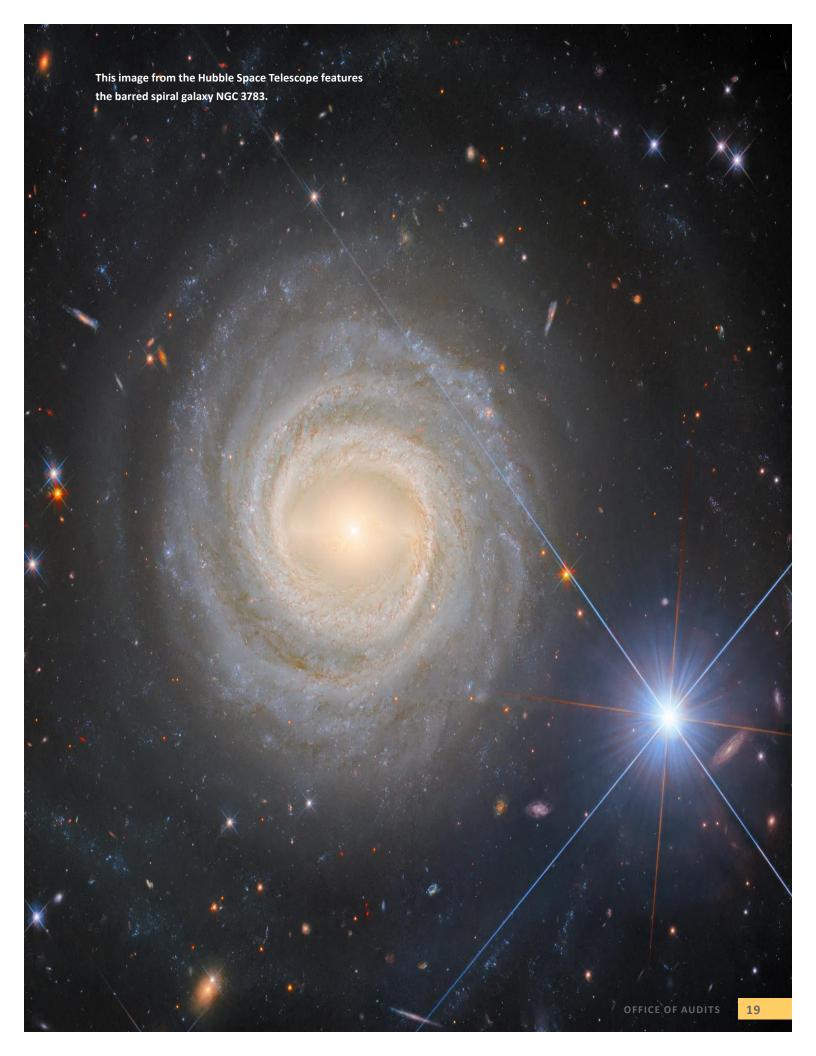
Improper payments are payments the federal government should not have made or made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements. This audit will examine whether NASA complied with the requirements of the Payment Integrity Information Act in FY 2023.

#### **Audit of NASA's Fiscal Year 2024 Financial Statements**

The Chief Financial Officers Act of 1990, as amended by the Government Management Reform Act of 1994, requires an annual audit of NASA's consolidated financial statements. We are overseeing the FY 2024 audit conducted by the independent public accounting firm Ernst & Young LLP.

#### **Desk Reviews of Select NASA Grantee Single Audits**

We are reviewing single audits of NASA grantees performed by independent public accounting firms. The purpose of these reviews is to determine whether the firm's single audit report and data collection form met generally accepted government auditing standards and requirements in the Code of Federal Regulations.



#### STATISTICAL DATA

TABLE 1: AUDIT PRODUCTS ISSUED AND NOT DISCLOSED TO THE PUBLIC, CURRENT SEMIANNUAL REPORT

Report No. and Date Issued	Report Title	Objective
ML-24-004, 1/30/2024	Desk Review of the American Geophysical Union's Fiscal Year 2022 Single Audit Reporting Package	Determined whether the audit report and supporting workpapers met generally accepted government auditing standards and the Uniform Guidance audit requirements.
ML-24-003, 1/12/2024	Desk Review of the Earth Science Information Partners' Fiscal Year 2022 Single Audit Reporting Package	Determined whether the audit report and supporting workpapers met generally accepted government auditing standards and the Uniform Guidance audit requirements.
IG-24-005, 12/12/2023	FY23 Financial Statement Audit Management Letter	Identified improvement in the effectiveness of the controls over financial reporting and the IT control environment.
ML-24-001, 11/20/2023	Desk Review of Blue Marble Space's Fiscal Year 2022 Single Audit Reporting Package	Determined whether the audit report and supporting workpapers met generally accepted government auditing standards and the Uniform Guidance audit requirements.

#### TABLE 2: AUDIT RECOMMENDATIONS YET TO BE IMPLEMENTED, CURRENT SEMIANNUAL REPORT

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	Human Exploration		<u> </u>
IG-24-003, 10/19/2023	NASA's Management of the Artemis Program's Supply Chain		
	2. Complete the Supply Chain Visibility Data Requirement Description effort to gain supplier data from contractors.	2/29/2024	\$0
	3. Provide training to contracting officers on FAR Subpart 44.2 - Consent to Subcontracts, so that the contracting officers will utilize available supplier data to determine whether the contractor should enter a contract with a particular subcontractor.	9/30/2024	\$0
	5. Ensure data is regularly entered into a supplier database (e.g., Insight Central) to track supplier data and ongoing challenges.	9/30/2024	\$0
	6. Incorporate a representative from the Logistics Management Division into each Artemis-related program and project at appropriate milestones, including at the onset of a contract and each life-cycle milestone.	8/31/2024	\$0
	7. Ensure an Artemis-specific study of the Agency's industrial base and supply chain is completed on a recurring basis.	9/30/2023	\$0
IG-24-001, 10/12/2023	NASA's Transition of the Space Launch System to a Commercial Services Contr	act	
	1. Establish achievable cost saving metrics beginning with Artemis IV SLS elements and production contracts.	12/31/2027	\$0
	2. Transition the core stage and Exploration Upper Stage contracts to fixed-price contracts with a per mission price to codify the actual costs.	12/31/2027	\$0
	3. If keeping contracts as cost-plus-award-fee, increase the percentage of cost as a factor when conducting contractor evaluations for award fee purposes.	12/31/2027	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	4. Conduct a detailed review of all contractor-submitted documents to ensure the government's rights to data and processes are not unnecessarily transferred to the contractor.	12/31/2027	\$0
	5. Include contract flexibility on future SLS acquisitions that will allow NASA to pivot to other commercial alternatives.	12/31/2027	\$0
	6. For each Artemis SLS rocket under EPOC, add compensation to the DST contract such as incentive fees for when the contractor achieves specific cost saving goals.	12/31/2027	\$0
	7. Ensure Government Mandatory Inspection Points and government oversight teams remain throughout the EPOC transition period.	6/28/2024	\$0
	Science and Aeronautics		
IG-24-008, 2/28/2024	Audit of the Mars Sample Return Mission		
	1. Ensure the MSR Program establishes a stable CCRS design prior to establishing the life-cycle cost and schedule estimate at KDP-C, incorporating recommendations from the 2023 IRB as appropriate.	2/28/2024	\$0
	2. Ensure the life-cycle cost and schedule estimates properly incorporate MSR Program complexity and performance as factors and do not only focus on external cost growth impacts and ongoing design issues.	3/29/2024	\$0
	3. Ensure the Agency Program Management Council is provided with a set of potential launch scenarios by KDP-C, including life-cycle cost and schedule estimates and an associated Joint Cost and Schedule Confidence Level for each.	3/29/2024	\$0
IG-24-002, 10/4/2023	NASA's On-Orbit Servicing, Assembly, and Manufacturing 1 Mission		
	1. Recoup the costs of the labor and services (supplemental work) provided by NASA to Maxar to complete the work on the spacecraft bus contract.	12/30/2024	\$2,000,000
	2. Ensure all work is contractually agreed upon and integrated into the contract SOW, and all changes are appropriately reflected in the SOW with adjustments to the contract value.	9/30/2024	\$0
	3. Issue guidance that contracting officials, as part of acquisition strategy planning, consider incorporating award or incentive fees into future fixed price development contracts.	9/30/2024	\$0
	Mission Support and Information Technology		
IG-24-009, 3/14/2024	Audit of NASA's High-End Computing Program		
	1. Appoint executive leadership to determine appropriate definition/ scope, ownership, organizational placement, and structure (e.g., portfolio, program, enterprise service) of HEC within NASA.	3/29/2024	\$0
	2. Develop enterprise-wide HEC stakeholder requirements to validate commitment agreements as required in NPR 8600.1.	12/31/2024	\$0
	3. Identify technology gaps, such as GPU transition and code modernization, essential for meeting current and future needs and strategic technological and scientific requirements.	12/31/2024	\$0
	4. Develop a strategy to improve HEC asset allocations and prioritization for usage, including the appropriate use of on-premises versus cloud resources.	12/31/2024	\$0
	5. Evaluate cyber risks associated with HEC assets to determine oversight and monitoring requirements, establish risk appetite, and address control deficiencies. Consider using NASA's Splunk enterprise platform as a shared resource.	12/31/2024	\$0
	6. Implement an HEC classification/category designation within RISCS for identifying HEC assets.	12/31/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	7. Develop an inventory of enterprise-wide HEC assets and formalize procedures for hardware and software life-cycle management.	12/31/2024	\$0
	8. Document data risk impact levels, classification, and export control categorization for all HEC jobs.	12/31/2024	\$0
	9. Identify and mitigate gaps in the foreign national accreditation access process.	12/31/2024	\$0
IG-24-006, 12/19/2023	Audit of NASA's Privacy Program		
	1. Document the decision-making process between collection owners and Agency Privacy Managers to include key determinations of instances where privacy impact assessments are not required by law despite indications that one is required within RISCS.	9/30/2024	\$0
	2. Establish data loss prevention roles and responsibilities related to the oversight of and response to potential personally identifiable information incidents.	3/31/2024	\$0
	3. Clearly identify roles and responsibilities for tracking and documenting incident response from detection to final resolution for incidents that involve or potentially involve personally identifiable information.	9/30/2024	\$0
	4. Update NASA's breach response plan to clearly identify who is involved during breach responses of varying levels of severity, when a Breach Response Team should be activated, and when an incident should be categorized as a breach.	9/30/2024	\$0
	5. Ensure that designated members of a Breach Response Team participate in a tabletop exercise, at least annually.	9/20/2025	\$0
	6. Require those with specific security and privacy roles to take privacy role-based training.	Unresolved <sup>a</sup>	\$0
	Financial Management		
IG-24-005, 12/12/2023	Fiscal Year 2023 Management Letter <sup>b</sup>		

<sup>&</sup>lt;sup>a</sup> There is no estimated completion date and the OIG and NASA are working on corrective actions to address the recommendation.

#### TABLE 3: AUDIT RECOMMENDATIONS YET TO BE IMPLEMENTED, PREVIOUS SEMIANNUAL REPORT

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	Human Exploration		
IG-23-015, 5/25/2023	NASA's Management of the Space Launch System Booster and Engine Contract	s	
	2. Coordinate with the Marshall procurement office to identify procurement needs and resources available under MAP to address staff capacity shortages at the senior procurement level to ensure sufficient oversight roles are staffed and separated from the contract actions.	7/31/2023	\$0
	3. Ensure Marshall procurement, legal, project planning and control, and SLS and booster program officials comply with best practices for establishing and maintaining internal controls, specifically on the appropriate process and procedures on REAs, fiscal law, and appropriate internal and external engagement.	9/30/2023	\$24,500,000

<sup>&</sup>lt;sup>b</sup> This table omits 11 recommendations from IG-24-005 that NASA determined to be sensitive or classified and therefore unsuitable for release.

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	4. Ensure Elements and procurement management comply with appropriate separation of roles and responsibilities for program and procurement actions and the FAR with respect to use of letter contracts, proper definitization, overpayments, and duplicative payments of award fees for modified scope and contracts.	10/1/2023	\$0
	5. Update RS-25 production per engine cost estimate to include investment costs in restart facilities, equipment, new production overhead costs, and government-funded property.	12/31/2023	\$0
	6. Conduct a thorough review of BPOC's scope of work and technical requirements needed to complete the respective periods of performance and update the contract as appropriate.	11/30/2023	\$0
	7. Conduct a thorough review of BPOC's definitization to ensure proper liquidation of funds paid under the letter contract as progress payments are returned to the Agency and are appropriately paid when the performance of the work, per the contract, is completed.	7/31/2023	\$5,600,000
	8. Develop a separate non-fee bearing contract line item for completion of the 11 unfinished heritage RS-25 adaptation engines.	6/30/2023	\$19,767,103
IG-23-004, 1/17/2023	NASA's Partnerships with International Space Agencies for the Artemis Campa	nign	
	1. Establish a coordination strategy with NASA's international partners that includes recurring forums specifically for Artemis Accords signatories that are (or are interested in) participating in the Artemis campaign.	8/31/2023	\$0
	2. Establish NASA-led Artemis campaign boards and working groups for partners with agreed-upon commitments with NASA and provide opportunities for liaison representation from international partner agencies.	3/31/2024	\$0
	4. Perform a detailed gap analysis and cost estimate for Artemis missions beyond Artemis IV that will help inform a cost-sharing strategy with international partners.	Unresolved <sup>a</sup>	\$0
	5. Establish a full-time export control team dedicated to the various Artemis programs in support of space flight developments.	12/31/2023	\$0
	6. Review export control requirements and consider additional roles for partner astronauts to increase their utilization in NASA space flight operations, to include amending existing agreements if necessary.	6/30/2024	\$0
	7. Establish a full-time export control team dedicated to the Artemis programs in support of space flight operations.	12/31/2023	\$0
	8. Coordinate with other federal agencies to gain a unique EAR classification for the Gateway as appropriate.	3/31/2023	\$0
	9. In conjunction with NASA's Mission Directorates and the State Department, execute appropriate Artemis agreements with key international space agency partners to ensure partner roles and responsibilities are clearly understood and allow for efficient and timely partnerships in support of Artemis.	3/31/2024	\$0
	10. Develop an automated routing method for the processing of international agreements within NASA.	6/30/2023	\$0
IG-23-005, 12/19/2022	Review of NASA's Space Technology Mission Directorate Portfolio		
	1. Reexamine its SPAR data system to ensure it provides as accurate and complete a picture of project costs as is practicable.	12/31/2023	\$0
	2. Update its STARPort data system with complete information on project alignment to STAR desired outcomes for all projects active in FY 2021 and beyond.	3/31/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	3. Complete efforts to develop additional outcome-based performance measures based on the transition, advancement, and infusion of technologies.	12/30/2024	\$0
IG-22-012, 6/9/2022	NASA's Management of the Mobile Launcher 2 Contract		
	1. Evaluate Bechtel's support for the updated estimate of cost and schedule at project completion and finalize negotiations for Bechtel's currently proposed cost increases and NASA's government-driven changes.	7/31/2023	\$0
	2. Before completing and finalizing the ML-2 project-level ABC, update the JCL analysis to reflect realistic life-cycle cost and schedule estimates to ensure effective budgeting and management of the project.	6/30/2023	\$0
	3a. To the extent that some or all of the Bechtel contract is converted to a fixed-price contract, ensure that an Independent Government Cost Estimate (IGCE) is established before entering into any new contractual agreements.	9/30/2023	\$0
	3b. To the extent that some or all of the Bechtel contract is converted to a fixed-price contract, ensure that the Critical Design Review has been completed in accordance with NASA's life-cycle policies prior to conversion.	9/30/2023	\$0
IG-22-007, 1/11/2022	NASA's Management of its Astronaut Corps		
	3. At least 18 months prior to the planned Artemis II launch, coordinate with Artemis program offices to complete the development and chartering of the framework of Artemis boards and panels to ensure alignment with future mission training needs for new vehicles and missions, including Orion, next-generation spacesuits, HLS, and Gateway.	8/21/2023	\$0
IG-22-005, 11/30/2021	NASA's Management of the International Space Station and Efforts to Commer	cialize Low Earth 0	rbit
	1. In order to mitigate risks to the Station's structural integrity, ensure the risks associated with cracks and leaks in the Service Module Transfer Tunnel are identified and mitigated prior to agreeing to an ISS life extension.	1/31/2025	\$0
IG-22-003, 11/15/2021	NASA's Management of the Artemis Missions		
	1. Develop a realistic, risk-informed schedule that includes sufficient margin to better align Agency expectations with the development schedule.	9/30/2023	\$0
	3. Develop an Artemis-wide cost estimate, in accordance with best practices, that is updated on an annual basis.	2/28/2024	\$0
	4. Maintain an accounting of permission costs to increase transparency and establish a benchmark against which NASA can assess the outcome of initiatives to increase the affordability of ESD systems.	2/28/2023	\$0
IG-21-027, 9/8/2021	NASA's Construction of Facilities		
	1. Develop and institute an agency-wide process to prioritize and fund institutional and programmatic CoF projects that align with Agency-level missions and goals and require business case analyses to be completed and considered as part of the process prior to the project's approval.	12/30/2024	\$0
	3. In coordination with the Mission Directorates, institute a process to ensure facility requirements are identified and funding sources are specified during a program's development and implementation phases.	7/31/2024	\$0
IG-21-004, 11/10/2020	NASA's Management of the Gateway Program for Artemis Missions		
	2. Ensure PPE and HALO delivery and launch dates are realistic by including sufficient schedule margin in the development schedule.	7/31/2023	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	3. Develop a HEOMD policy that establishes a reasonable amount of recommended schedule margin by phase of the program or project.	3/31/2024	\$0
IG-21-002, 10/27/2020	NASA's Management of its Acquisition Workforce		
	1. To help ensure the success of the MAP transformation, we recommend NASA's Assistant Administrator for Procurement finalize and fully implement the Performance Metrics Dashboard to measure acquisition performance.	6/1/2024	\$0
	2. To help ensure the success of the MAP transformation, we recommend NASA's Assistant Administrator for Procurement document contract assignments to COs, CORs, and program/project managers in a centralized system for inclusion in the Performance Metrics Dashboard.	6/1/2024	\$0
IG-20-018, 7/16/2020	NASA's Management of the Orion Multi-Purpose Crew Vehicle Program		'
	2. To the extent practicable, adjust the production schedules for Artemis IV and V to better align with the successful demonstration of Artemis II to reduce schedule delays associated with potential rework.	12/31/2023	\$0
IG-20-013, 3/17/2020	Audit of NASA's Development of Its Mobile Launchers		
	3. Ensure life cycle and milestone reviews incorporate programmatic and technical risks and are conducted with the Associate Administrator for Human Exploration and Operations Directorate and other senior Agency officials.	9/1/2023	\$0
	4. Require the ML-2 project to develop an ABC separate from the EGS Program.	9/1/2023	\$0
IG-20-012, 3/10/2020	NASA's Management of Space Launch System Program Costs and Contracts		
	2. Review HEOMD and NASA program management policies, procedures, and ABC reporting processes to provide greater visibility into current, future, and overall cost and schedule estimates for the SLS Program and other human space flight programs.	12/31/2023	\$0
	2b. Establishing methodologies and processes to track and set cost commitments for Artemis II.	4/29/2022	\$0
	2c. Determining reporting and tracking procedures for setting cost and schedule commitments, and monitoring progress throughout the entire life cycle of the SLS Program (through at least 2030).	12/31/2023	\$0
IG-20-011, 3/3/2020	NASA's Management of Distributed Active Archive Centers		
	1. In conjunction with ESDIS, once SWOT and NISAR are operational and providing sufficient data, complete an independent analysis to determine the long-term financial sustainability of supporting the cloud migration and operation while also maintaining the current DAAC footprint.	3/31/2025	\$0
IG-20-005, 11/14/2019	NASA's Management of Crew Transportation to the International Space Station	ı	
	2. Correct identified safety-critical technical issues before the crewed test flights, including parachute and propulsion systems testing, to ensure sufficient safety margins exist.	9/30/2024	\$0
	Science and Aeronautics		
IG-23-018, 9/5/2023	NASA's Earth System Science Pathfinder Program		
	2. Reexamine its selection process to ensure PIs or their teams have sufficient experience, including project management, and the ability to dedicate necessary resources to effectively manage ESSP projects.	9/30/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	3. Reissue and require SMD stakeholders to follow the tenets of the 2017 decision memorandum on Class D missions.	7/22/2024	\$0
	4. In collaboration with NASA's Launch Services Program, develop a process to engage early and evaluate alternative launch options in the event that ESSP projects encounter access to space issues.	7/22/2024	\$0
	5. Conduct a lessons learned review of the GeoCarb mission to identify what NASA, PI, and contractor practices and activities should be revised and applied to the management of future Earth Venture Class projects.	9/30/2024	\$0
	6. Develop a plan to provide PIs and their teams with contract and project management training post-selection approval to better equip them to manage subcontractors.	4/30/2024	\$0
	7. Develop formal and clear guidance on the roles, responsibilities, and expectations for the inclusion of applications within Earth Venture Class projects.	9/30/2024	\$0
	8. Develop a methodology for funding applications in Earth Venture Class projects.	4/30/2024	\$0
IG-23-014, 5/17/2023	NASA's Electrified Aircraft Propulsion Research and Development Efforts		
	1. Coordinate with Agency JCL experts in addressing estimation challenges relative to X-plane development and lower TRL efforts and adjust risk analyses accordingly to derive higher probability/confidence cost and schedule estimates.	5/31/2024	\$0
	2. Re-evaluate ARMD's planning and support of the U.S. 2021 Aviation Climate Action Plan priorities and commit project resources and funding accordingly to minimize funding instabilities for these efforts.	3/29/2024	\$0
IG-23-010, 3/20/2023	NASA's Management of Its Radioisotope Power Systems Program		
	1. Create an RPS resource allocation and technology development strategic plan that includes an evaluation and mitigation of risks for each project through its completion and provide a communication plan to stakeholders and mission managers.	12/1/2024	\$0
	2. Conduct high quality, frequent, and routine self-assessment TRAs by project management beginning after the initial implementation of a technology development project as a basis for TRL assessment and risk management discussions.	12/31/2024	\$0
	3. Per Title 51 and NPR 7120.5F, recalculate the life-cycle costs for Next-Gen RTG and DRPS projects to include funding NASA provides to DOE.	3/31/2026	\$0
	4. Institute an EVM process for Next-Gen RTG and DRPS projects that conforms with NASA policy, FAR requirements, and industry best practices.	3/31/2026	\$0
	5. For Next-Gen RTG and DRPS development efforts that transition to a space flight project, execute a JCL analysis at the proper phases in accordance with NPR 7120.5F.	3/31/2026	\$0
	6. In coordination with DOE, develop a means for the RPS Program to obtain high-fidelity Pu-238 and fueled clad current and future inventory information.	5/30/2024	\$0
	7. Develop a means to quantify risk of future Pu-238 and fueled clad availability that can be communicated to NASA mission managers and incorporated into mission development proposals and plans.	5/29/2024	\$0
	8. Leverage the RPS Program's existing business processes with its element structure to monitor fission technology development for SMD feasibility and educate stakeholders on the possibilities and differences.	9/30/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	9. Reevaluate the need and if appropriate reauthorize the organizational position of the Nuclear Power and Propulsion System Capability Leadership Team through the appropriate Mission Directorate and provide the Team responsibility for monitoring and advocating strategic nuclear power coordination across NASA.	9/30/2023	\$0
IG-22-013, 06/14/2022	NASA's Management of the Earth Science Disasters Program		
	1. Establish and document Program management requirements in a strategic plan and/or NPR 7120.8 project plan format for consistent messaging on ESDP priorities, objectives, and quantifiable performance metrics.	5/31/2024	\$0
	2. Perform a funding analysis of ESDP to determine if current resources are adequate to manage, oversee, and administer Program goals and objectives in accordance with its strategic plan and/or project plan.	9/30/2024	\$0
IG-22-011, 4/7/2022	NASA's Cost Estimating and Reporting Practices for Multi-Mission Programs		
	4. Develop a formal process by which a risk-based probabilistic analysis is conducted to cover the global and interdependency risks of major programs and projects when those individual projects are required for the successful implementation of a mission; regardless of how those programs/projects are categorized (i.e., tightly coupled and single-project program).	6/30/2023	\$0
	7. Establish procedural requirements for a risk posture analysis to ensure that major programs supporting multiple missions identify and estimate the cost and schedule impact of global and major interdependency risk.	12/31/2023	\$0
IG-22-010, 4/6/2022	NASA's Volatiles Investigating Polar Exploration Rover (VIPER) Mission		
	1. Coordinate with the Chief Knowledge Officer to submit and at appropriate intervals document and publish lessons learned associated with using a CLPS provider, particularly on major acquisitions.	7/22/2024	\$0
	2. Develop a VIPER mission cost estimate that includes all critical mission components and risks, specifically associated with the Astrobotic task order, and update the MPAR accordingly.	6/15/2024	\$0
IG-21-011, 1/27/2021	NASA's Efforts to Mitigate the Risks Posed by Orbital Debris		
	1. Lead national and international collaborative efforts to mitigate orbital debris including activities to encourage active debris removal and the timely end-of-mission disposal of spacecraft.	6/30/2022	\$0
	2. Collaborate with Congress, other federal agencies, and partners from the private and public sectors to adopt national and international guidelines on active debris removal and strategies for increasing global compliance rates for timely removal of spacecraft at the end of a mission.	6/30/2022	\$0
	3. Invest in methods and technologies for removing defunct spacecraft. As part of this effort, conduct a study evaluating the technical merit and cost to investing in active debris removal systems and technologies.	12/31/2025	\$0
IG-20-023, 9/16/2020	NASA's Planetary Science Portfolio		
. ,	2. In coordination with the Office of Chief Financial Officer, engage relevant Centers and technical capability leaders to implement budgetary and accounting system options to support critical discipline capabilities.	1/31/2025	\$0
IG-19-019, 5/29/2019	Management of NASA's Europa Mission		
	9. Reassess the process of isolating key project personnel from instrument selection to balance their additional insight in integration and cost estimation while maintaining fairness in the announcement and mitigating conflict of interest risks.	4/26/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	Mission Support and Information Technology		
IG-23-017, 8/17/2023	NASA's Federal Information Security Modernization Act of 2014 Evaluation Re	port for Fiscal Year	r 2023
, ,	1. Implement necessary oversight to monitor RISCS for accuracy and completeness, so RISCS provides sufficient support for decision-making and determining compliance with federal requirements.	2/29/2024	\$0
	2. Ensure the information system owner of the systems selected for testing perform a system inventory of software assets and licenses used within the system boundaries and updates RISCS as necessary.	2/29/2024	\$0
	3. Implement necessary oversight to monitor RISCS for accuracy and completeness of software and license information.	2/29/2024	\$0
	4. Continue its efforts in developing policies, procedures, and processes for risk framing, risk response, and risk monitoring.	2/29/2024	\$0
	5. Continue its efforts to develop and implement the necessary entity-wide oversight policy and procedures to monitor risk through a risk register and a risk profile that provide enterprise-wide metrics to inform top management of its IT risks.	2/29/2024	\$0
	6. Implement the necessary oversight of RISCS to ensure that ISOs take action to review, update, and approve POA&Ms and RBDs, as necessary, before they become delinquent, taking into consideration the length of time required to obtain necessary approvals, and update RISCS.	2/29/2024	\$0
	7. Ensure the system owners of the systems selected for testing address past due POA&Ms and RBDs	2/29/2024	\$0
	8. Revise its policies and procedures to document and implement a lessons learned process based on risk events within the ISCM and Risk Management areas. System security personnel should be instructed to record, analyze, and revise control activities to improve NASA's security posture.	2/28/2025	\$0
	9. Incorporate supplier risk evaluations into its continuous monitoring practices.	2/29/2024	\$0
	10. Continue developing and implementing plans to integrate its C-SCRM controls and processes across the three Agency levels.	7/31/2024	\$0
	11. Continue to implement the necessary entity-wide oversight to improve enforcement mechanisms and controls to ensure all standard baselines and vulnerabilities are monitored and remediated in accordance with Federal and Agency requirements.	7/31/2024	\$0
	12. Continue the ongoing effort to enforce mandatory multifactor authentication using a NASA identity-based account and token from Agency ICAM service offerings (i.e., NASA PIV, Agency Smart Badge) for all information systems in NASA's environment.	2/29/2024	\$0
	13. Ensure each information system owner of the systems selected for testing implements multifactor authentication for its non-privileged users.	2/29/2024	\$0
	14. Develop and implement an ISCM Strategy in accordance with OMB Circular No. A-130, Managing Information as a Strategic Resource, and NIST SP 800-137A, Assessing Information Security Continuous Monitoring (ISCM) Programs: Developing an ISCM Program Assessment, including defining metrics, status monitoring frequencies, and control assessment frequencies.	2/29/2024	\$0
	15. Ensure that the security controls in control families PM, PT, and SR are updated and defined within the Agency's ISCM strategy.	2/28/2025	\$0
	16. Document the NMI process in NASA's ISCM Strategy to ensure its hardware inventory monitoring process is accurate, complete, and fully aligns with NASA's other continuous monitoring guidance and integrates processes, associated outputs, and incorporates results to provide situational awareness.	2/28/2025	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	17. Implement the necessary oversight to monitor RISCS for delinquent or invalid ATOs and SARs so that RISCS provides sufficient information to determine NASA's risk exposure.	2/29/2024	\$0
	18. Ensure ATOs and SARs are properly completed for the systems selected for testing.	2/29/2024	\$0
	19. Ensure each information system owner of the systems selected for testing (1) updates the SSP to specify the specific application associated with the implementation statement for each NIST SP 800-53 Revision 5 control, and (2) has the system controls assessed by an independent assessor.	2/29/2024	\$0
	20. Continue its efforts to prioritize projects that address the complexities required across EL tiers to meet the intermediate (EL2) maturity level in accordance with OMB M-21-31.	7/31/2024	\$0
	21. Design and implement the necessary entity-wide oversight, enforcement mechanisms, and controls to ensure all system-level BIAs are accurate and reviewed annually.	2/29/2024	\$0
	22. Review all information systems to determine if a BIA has been performed in accordance with NASA policy.	2/29/2024	\$0
	23. Ensure each information system owner of the systems selected for testing performs and completes a system-level BIA.	2/29/2024	\$0
	24. Implement the necessary oversight to monitor RISCS for delinquent testing of contingency plans.	7/31/2024	\$0
	25. Ensure each information system owner of the systems selected for testing conducts a test of its contingency plan annually.	7/31/2024	\$0
	26. Ensure each information system owner of the systems selected for testing confirms the adequacy of its recovery procedures and the plan's overall effectiveness.	7/31/2024	\$0
	27. Ensure that each information system owner of external systems has a current ISA that defines how each entity will manage, operate, use, and secure the interconnection.	7/31/2024	\$0
IG-23-016, 7/12/2023	Audit of NASA's Deep Space Network		
	1. Explore more efficient options for DSN scheduling, such as maintaining a list of DSN users by priority that is updated in real-time and accessible to all users.	9/30/2025	\$0
	2. Ensure completion of the DAEP's remaining antennas and transmitters and finalize requirements for the LEGS project.	10/31/2029	\$0
	3. Finalize international agreements, obtain appropriate clearances for installing the remaining 80 kW transmitters, and establish mechanisms to allow for greater oversight of DAEP project sites.	10/31/2029	\$0
	4. Explore options for utilizing commercial and international partners networks to offload excess demand from the DSN and to serve as backups in the event of network overages or outages.	12/31/2023	\$0
IG-23-012, 5/3/2023	NASA's Management of Its Artificial Intelligence Capabilities		
	1. Establish a standardized definition for Artificial Intelligence (AI) within the Agency, to include harmonizing the definitions in the NASA Framework for the Ethical Use of AI, NASA's Responsible AI Plan, and NASA AIML SharePoint.	4/30/2024	\$0
	2. Ensure the standardized AI definition is used to identify, update, and maintain the Agency's AI use case inventory.	7/31/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	4. Develop a method to track budgets and expenditures for AI use case inventory.	4/30/2024	\$0
IG-23-011, 4/20/2023	NASA's Efforts to Increase Diversity in Its Workforce		
	Ensure hiring and promotion managers across NASA receive appropriate training to increase DEIA awareness on topics such as implicit bias and inclusive leadership.	12/31/2024	\$0
	2. Ensure leadership-related professional development courses and detail assignments are widely available to prepare a more diverse cohort of employees for promotional opportunities.	12/31/2024	\$0
	4. Conduct a barrier analysis to identify obstacles restricting women and minorities from senior management positions and develop a plan to address and eliminate these obstacles.	9/30/2024	\$0
	6. Conduct an analysis of all applicant data, including veterans, to better understand hiring trends and outcomes.	12/31/2024	\$0
	7. Designate an official or organization to oversee coordination between the stakeholders to develop a sustainable operation and funding structure for the EDP.	9/30/2024	\$0
IG-23-008, 1/12/2023	NASA's Software Asset Management		
	Establish enterprise-wide (institutional and mission) Software Asset     Management policy and procedures.	9/30/2024	\$0
	2. Implement a single Software Asset Management tool across the Agency.	10/1/2027	\$39,000,000
	6. Implement a centralized repository for NASA's internally developed software applications.	10/31/2024	\$0
	7. Develop an Agency-wide process for limiting privileged access to computer resources in accordance with the concept of least privilege.	3/29/2024	\$0
	9. Centralize software spending insights to include purchase cards.	11/29/2024	\$0
IG-22-015, 8/4/2022	Ames Research Center's Lease Management Practices		
	1. Conduct cyclical reviews (no less than once every 5 years) of the Ames lease process to ensure compliance with federal and NASA requirements.	6/30/2024	\$0
	2. Update applicable real estate policies and NASA-wide guidance to enhance requirements and procedures to comply with EUL authority and to require maintaining appropriate documentation, documenting decisions, and fostering transparent coordination and communication with internal and external stakeholders in a timely manner.	6/30/2024	\$0
	3. Update applicable real estate policies and NASA-wide guidance to enhance requirements and standardize applicable financial practices (such as the benefit and cost analysis, life-cycle cost analysis, and audits of tenants' books and records when required) associated with leases.	6/30/2024	\$0
	4. Update applicable real estate policies and NASA-wide guidance to incorporate applicable security requirements and agreement clauses in leases.	6/30/2024	\$0
	5. Implement written procedures in the lease process to ensure compliance with federal and NASA requirements applicable, but not limited to, timely involvement of the RPAO, competition, life-cycle cost analysis, fair market value assessments, certifications, and termination clauses as appropriate.	9/30/2024	\$0
	9. Within the next 3 years, conduct a Center-wide security vulnerability risk assessment, including the districts outside Ames Campus, to ensure compliance with federal and NASA requirements.	6/30/2025	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	10. Identify and implement mitigation strategies and resource requirements to address the security vulnerability assessment risks.	6/30/2025	\$0
IG-22-009, 3/14/2022	NASA's Insider Threat Program		
	2. Improve cross-discipline communication by establishing a Working Group that includes OPS, OCIO, Procurement, human resource officials, and any other relevant Agency offices to collaborate on wide-ranging insider threat related issues for both classified and unclassified systems.	12/1/2024	\$0
IG-21-001, 10/2/2020	Audit of NASA's Compliance with the Geospatial Data Act (GDA)		
	2. Develop a unified Strategy Implementation Plan or "Roadmap" that defines detailed action items, milestones, and responsibilities for geospatial data management in support of missions across NASA.	10/30/2024	\$0
IG-20-001, 10/21/2019	NASA's Security Management Practices		
	5. Coordinate with the Office of General Counsel to standardize the carrying of firearms by NASA civil servants in an Agency-wide policy while also addressing the appropriate situations when NASA contractors may carry their government-issued weapons off NASA property.	2/28/2025	\$0
IG-19-002, 10/22/2018	Audit of NASA's Historic Property		
	2. Develop comprehensive procedures for identifying and managing heritage assets, including defining roles and responsibilities for the different NASA entities responsible for evaluating what historic items would most effectively be maintained by the Agency and considered as heritage assets.	7/24/2024	\$0
	3. Evaluate and justify the existing list of NASA and contractor held heritage assets to determine whether NASA is the most effective owner and what property the Agency will retain because of its historical value.	12/1/2023	\$0
	5. Ensure NASA policy for using the proceeds from facilities leased under NHPA authority appropriately aligns with Agency goals to minimize excess facilities.	6/30/2024	\$0
IG-12-017, 8/7/2012	Review of NASA's Computer Security Incident Detection and Handling Capabil	ity <sup>b</sup>	
	Financial Management		
IG-23-019, 9/25/2023	NASA's Vulnerability Assessment and Penetration Testing Report for the Fisca Financial Statement Audit <sup>c</sup>	l Year 2023	
IG-23-013, 5/16/2023	Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2022		
	1. Enhance the NASA PIIA: Risk Assessment Methodology document by including detailed information and job aids, such as a checklist, and outlining the review procedures to ensure that a thorough review of the risk assessment ratings is performed before approving the risk assessment. The review procedures should include steps to verify that risk factor question ratings are accurate and that risk condition-level ratings correspond to their underlying risk factor ratings.	5/31/2024	\$0
IG-23-001, 10/5/2022	NASA's Compliance with the Geospatial Data Act for Fiscal Year 2022		
	1. The role of the SAOGI is strategically positioned within the Agency to have responsibility, accountability, and authority needed to meet GDA-assigned agency responsibilities.	6/28/2024	\$0
	2. Roles and responsibilities of the SAOGI and other key stakeholders are defined in both the Geospatial Data Strategy and its implementation plan.	6/28/2024	\$0

Report No. and Date Issued	Report Title and Recommendations	Estimated Completion Date	Potential Cost Savings
	3. The implementation plan for the Geospatial Data Strategy contains detailed action items and milestones, including those for developing a complete and accurate inventory of the Agency's geospatial data.	9/30/2024	\$0
	4. Continued coordination with NARA to establish the appropriate level of scientific data for inclusion in NARA-approved records schedules.	6/30/2025	\$0
IG-22-014, 6/28/2022	NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2021		
	3. Complete the OMB data call process for all programs with outlays over \$10 million.	5/31/2024	\$0
	4. Ensure that program outlays exclude any transactions that do not meet the outlay definition provided by OMB.	5/31/2024	\$0
	5. Revise the materiality risk calculation methodology and sampling and estimation methodology plan to include payment transactions only.	5/31/2024	\$0
	7. Develop a detailed review process, such as a checklist or job aid, outlining the review procedures performed by the Quality Assurance Division within the reporting process for overpayments from sources other than recapture audits to ensure that the primary reviewer and the supervisory quality control reviewers are performing a thorough review of the aggregated submissions of overpayments. Necessary review steps include ensuring overpayments are not reported twice, capturing issues with overpayments submitted for the incorrect period, and tracking identified and collected portions that occur in different FYs for accurate reporting.	5/31/2024	\$0

<sup>&</sup>lt;sup>a</sup> There is no estimated completion date and the OIG and NASA are working on corrective actions to address the recommendation.

#### **TABLE 4: AUDITS WITH QUESTIONED COSTS**

	Total Questioned Costs	Total Unsupported Costs	
A. Management decisions pending from previous reporting period			
No reports	\$0	\$0	
B. Issued during period			
IG-24-002	\$2,000,000	\$0	
Needing management decision during period (A+B)	\$2,000,000	\$0	
Management Decision Made During Period			
Amounts agreed to by management			
IG-24-002	\$2,000,000	\$0	
Amounts not agreed to by management			
N/A	\$0	\$0	
No Management Decision at End of Period			
Less than 6 months old			
No reports	\$0	\$0	
More than 6 months old			
No reports	\$0	\$0	

Notes: Questioned costs (the Inspector General Act of 1978, as amended) are costs 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—an "unsupported cost"; or (3) a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable.

Management decision (the Inspector General Act of 1978, as amended) is the evaluation by management of the findings and recommendations included in an audit report and the issuance of a final decision by management concerning its response to such findings and recommendations, including actions that management concludes are necessary.

b This table omits 2 recommendations from IG-12-017 that NASA determined to be sensitive or classified and therefore unsuitable for release.

This table omits 4 recommendations from IG-23-019 that NASA determined to be sensitive or classified and therefore unsuitable for release.

#### TABLE 5: AUDITS WITH RECOMMENDATIONS THAT FUNDS BE PUT TO BETTER USE

There were no audits with recommendations that funds be put to better use for this reporting period. A recommendation that funds be put to better use (the Inspector General Act of 1978 definition) is 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 a grantee; (5) avoidance of unnecessary expenditures noted in pre-award reviews of contract or grant agreements; or (6) any other savings that are specifically identified. (Dollar amounts identified in this category may not always allow for direct budgetary actions but generally allow the Agency to use the amounts more effectively in the accomplishment of program objectives.)

#### **TABLE 6: OTHER MONETARY SAVINGS**

For this reporting period there were no audits reporting other monetary savings. These would be savings resulting from actions taken by NASA due to conclusions or information disclosed in an OIG audit report that were not identified as questioned costs or funds to be put to better use in Tables 4 and 5, respectively.

TABLE 7: STATUS OF SINGLE AUDIT FINDINGS AND QUESTIONED COSTS RELATED TO NASA AWARDS

Audits with Findings	7		
Findings and Questioned Costs			
	Number of Findings	Questioned Costs	
Management decisions pending from previous reporting period		\$0	
Findings added during the reporting period	9	\$43,260	
Management decisions made during reporting period	7	\$0	
Agreed to by management		\$0	
Not agreed to by management		\$0	
Management decisions pending, end of reporting period	2	\$0	

Note: The Single Audit Act, as amended, requires federal award recipients to obtain audits of their federal awards. The data in this table is provided by NASA.

#### **DEFENSE CONTRACT AUDIT AGENCY AUDITS OF NASA CONTRACTORS**

The Defense Contract Audit Agency (DCAA) provides audit services to NASA on a reimbursable basis.

DCAA provided the following information during this period on reports involving NASA contract activities.

#### **DCAA AUDIT REPORTS ISSUED**

During this period, DCAA issued 23 audit reports involving contractors who do business with NASA. Corrective actions taken in response to DCAA audit report recommendations usually result from negotiations between the contractors and the government contracting officer with cognizant responsibility (e.g., the Defense Contract Management Agency and NASA). The agency responsible for administering the contract negotiates recoveries with the contractor after deciding whether to accept or

reject the questioned costs and recommendations that funds be put to better use. The following table shows the amounts of questioned costs and funds to be put to better use included in DCAA reports issued during this semiannual reporting period and the agreed-upon amounts.

TABLE 8: DCAA AUDIT REPORTS WITH QUESTIONED COSTS AND RECOMMENDATIONS THAT FUNDS BE PUT TO BETTER USE

	Amounts in Issued Reports	Amounts Agreed To
Questioned costs	\$1,754,000	\$388,000
Funds to be put to better use	\$0	\$0

Note: This data is provided to the NASA OIG by DCAA and may include forward pricing proposals, operations, incurred costs, cost accounting standards, and defective pricing audits. Because of limited time between availability of management information system data and legislative reporting requirements, there is minimal opportunity for DCAA to verify the accuracy of reported data. Accordingly, submitted data is subject to change based on subsequent DCAA authentication. The data presented does not include statistics on audits that resulted in contracts not awarded or in which the contractor was not successful.

#### **AUDITS OF NASA CONTRACTORS**

NASA contracts with independent public accounting firms and the U.S. Department of the Interior's Interior Business Center to perform a broad range of contract audits on the companies that conduct business with the Agency. The purpose of the audits is to assist procurement officials with financial information and advice relating to contractual matters and to assess the effectiveness, efficiency, and economy of contractor operations. Contract audits also assist NASA in the negotiation, award, administration, and settlement of contracts. During the period covered in this Semiannual Report, independent public accounting firms and the Interior Business Center issued 34 audit reports that involved contractors who do business with NASA. The auditors questioned \$4.3 million in costs.

TABLE 9: AUDIT REPORTS OF NASA CONTRACTORS WITH QUESTIONED COSTS AND RECOMMENDATIONS THAT FUNDS BE PUT TO BETTER USE

	Amounts in Issued Reports	Amounts Agreed To
Questioned costs	\$4,286,789	\$111,490
Funds to be put to better use	\$0	\$0



NASA's James Webb Space Telescope's view of Cassiopeia A.

The Office of Investigations investigates fraud, waste, abuse, misconduct, and mismanagement involving NASA personnel and contractors.

# PROCUREMENT, ACQUISITION, AND GRANT FRAUD

#### **Contractor Agrees to a Civil Settlement**

Based on a qui tam filed with the United States District Court for the Western District of Texas and a joint investigation by NASA OIG and the Defense Criminal Investigative Service (DCIS), a Small Business Innovative Research contractor agreed to a civil settlement of \$1.35 million to resolve claims that it violated export control laws and misrepresented its eligibility to receive contracts under the program.

#### **Contractor Pleads Guilty to Wire Fraud**

As the result of a NASA OIG investigation, the CEO of a Florida company pleaded guilty to wire fraud for submitting nearly two hundred fraudulent quality control documents for parts destined for NASA's SLS. In addition, the company sold non-conforming products, which resulted in a \$680,000 loss to NASA.

# Contractor Agrees to Settlement Following Disclosure

As the result of a NASA OIG-lead investigation with 11 other federal agencies, a contractor agreed to a civil settlement of \$465,000 after voluntarily disclosing that it incorrectly transferred labor hours between government projects over a 9-year period.

# Costs Recovered from University Following False Statements

The Ohio State University agreed to repay \$214,000 to NASA after an internal investigation found that a principal investigator on numerous NASA grants failed to disclose his concurrent participation in a foreign talent program.

### Contractor Employee Enters into a Pre-Trial Diversion

A Glenn Research Center contractor employee was charged by the Cuyahoga County Ohio prosecutor's office with felony theft and falsification of records after a NASA OIG investigation revealed he removed approximately 1,000 pounds of insulated copper wire from NASA property to sell for scrap. As the result of a guilty plea, the employee was accepted into a pre-trial diversion program whereby he was ordered to serve 12 months of probation and pay restitution and court costs. This matter was first reported in September 2023.

#### **NASA Contractor Employee Terminated**

As the result of a joint investigation by NASA OIG and DCIS, a contractor employee providing contract administration services to NASA was terminated by his employer after it was discovered that he was concurrently working numerous full-time contract positions with other federal agencies. The employee in question was also serving as an active duty service member during the period under investigation.

## Contractor Employee Resigns in Lieu of Termination

A contract Emergency Response Team member at Kennedy Space Center resigned in lieu of termination for misusing NASA resources and theft of NASA property after he wrongfully accessed a NASA machine shop during work hours and used government materials to fabricate items for personal use.

#### **COMPUTER CRIMES**

#### **NASA Employee Charged with Sexual Assault**

The NASA OIG Cyber Crimes Division and Procurement Fraud investigative team led a complex investigation in support of local law enforcement to identify the subject, victims, and witnesses of numerous sexual assault allegations, support formal criminal charges, and affect the arrest of the employee in question.

#### **Contractor Employee Terminated**

Johnson Space Center (JSC) reported an incident wherein an unknown event caused multiple JSC Security Operations Center employees' mobile devices to freeze or crash simultaneously. An OIG investigation confirmed the involvement of a contractor employee, who admitted he caused the incident. The admission led to his termination, preventing his continued ability to compromise sensitive NASA and communications networks.

#### **EMPLOYEE MISCONDUCT**

#### Former NASA Employee and Spouse Indicted

A former NASA OIG employee and her husband were charged with conspiracy to make false statements to a mortgage lender in order to secure a loan for a debt elimination scheme. The government issued a forfeiture notice for the residential property in question.

#### **NASA Childcare Employee Terminated**

As the result of a NASA OIG investigation, a JSC childcare center employee was terminated and received deferred adjudication for felony injury to a child after causing a bone fracture to a toddler under her supervision. Investigation further determined that the facility was not in compliance with a Texas childcare licensing requirement to allow unrestricted access to investigators conducting inspections and investigations.

#### **Child Caregiver Pleads Guilty to Assault**

As the result of a NASA OIG investigation, a former childcare worker at the Marshall Space Flight Center Child Development Center pleaded guilty to one count of harassment for pushing a child to the ground while under her care. The subject's employment was terminated on the day of the incident.

#### **NASA Employee Suspended for Nepotism**

As the result of a NASA OIG investigation, a senior NASA employee received a 5-day suspension for misusing her position to secure an internship for her child at NASA Headquarters.

#### **PANDEMIC RELIEF FRAUD**

#### **Contractor Sentenced for Pandemic Relief Fraud**

A former California Institute of Technology employee working at NASA's Jet Propulsion Laboratory was sentenced to 2 years of probation and ordered to pay \$167,000 in restitution and a \$10,000 fine for committing wire fraud in order to fraudulently secure an Economic Injury Disaster Loan from the U.S. Small Business Administration. The proceeds of the loan were used to repay personal real estate debt and fund illegal marijuana cultivation.

# Employee Repays Fraudulent Economic Injury Disaster Loan

As the result of a NASA OIG investigation, a NASA headquarters employee voluntarily repaid \$12,000 for an Economic Injury Disaster Loan she received under fraudulent circumstances.

#### **NASA Employee Terminated**

As the result of a NASA OIG investigation, a NASA JSC employee was terminated for committing unemployment insurance and pandemic relief fraud whereby she misrepresented her employment status in order to receive unemployment benefits and made false representations to secure pandemic relief funds, which she used for an unapproved purpose.

#### STATISTICAL DATA

#### TABLE 10: OFFICE OF INVESTIGATIONS COMPLAINT INTAKE DISPOSITION

Source of Complaint	Zero Filesª	Administrative Investigations <sup>b</sup>	Management Referrals <sup>c</sup>	Preliminary Investigations <sup>d</sup>	Total
Hotline	6	10	2	16	34
All others	23	19	2	55	99
Total	29	29	4	71	133

<sup>&</sup>lt;sup>a</sup> Zero files are those complaints for which no action is required or that are referred to NASA management for information only or to another agency.

#### TABLE 11: FULL INVESTIGATIONS OPENED THIS REPORTING PERIOD

Full Criminal/Civil Investigations <sup>a</sup>	19
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<sup>&</sup>lt;sup>a</sup> Full investigations evolve from preliminary investigations that result in a reasonable belief that a violation of law has taken place.

#### TABLE 12: INVESTIGATIONS CLOSED THIS REPORTING PERIOD

Full, Preliminary, and Administrative Investigations
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Note: The NASA OIG uses closing memorandums to close investigations. Investigative reports are used for presentation to judicial authorities, when requested.

#### **TABLE 13: CASES PENDING AT END OF REPORTING PERIOD**

Preliminary Investigations	56
Full Criminal/Civil Investigations	136
Administrative Investigations	107
Total	299

#### **TABLE 14: QUI TAM INVESTIGATIONS**

Qui Tam Matters Opened This Reporting Period	1
Qui Tam Matters Pending at End of Reporting Period	12

Note: The number of qui tam investigations is a subset of the total number of investigations opened and pending.

<sup>&</sup>lt;sup>b</sup> Administrative investigations include non-criminal matters initiated by the Office of Investigations as well as hotline complaints referred to the Office of Audits.

Management referrals are those complaints referred to NASA management for which a response is requested.

d Preliminary investigations are those complaints where additional information must be obtained prior to initiating a full criminal or civil investigation.

#### **TABLE 15: JUDICIAL ACTIONS**

Total Cases Referred for Prosecution <sup>a</sup>	23
Individuals Referred to the U.S. Department of Justice <sup>b</sup>	21
Individuals Referred to State and Local Authorities <sup>b</sup>	2
Indictments/Informations <sup>c</sup>	6
Convictions/Plea Bargains	4
Sentencing/Pretrial Diversions	4
Civil Settlements/Judgments	3

<sup>&</sup>lt;sup>a</sup> This includes all referrals of individuals and entities to judicial authorities.

#### **TABLE 16: ADMINISTRATIVE ACTIONS**

Referrals			
Referrals to NASA Management for Review and Response	11		
Referrals to NASA Management—Information Only	8		
Referrals to the Office of Audits	1		
Referrals to Security or Other Agencies	6		
Total	26		
Recommendations to NASA M	anagement		
Recommendations for Disciplinary Action			
Involving a NASA Employee	2		
Involving a Contractor Employee	6		
Involving a Contractor Firm	1		
Other			
Recommendations on Program Improvements			
Matters of Procedure	6		
Total	15		
Administration/Disciplinary A	ctions Taken		
Against a NASA Employee	3		
Against a Contractor Employee	4		
Against a Contractor Firm	1		
Other	3		
Procedural Change Implemented	5		
Total	16		
Suspensions or Debarments from Government Contracting			
Involving an Individual			
Involving a Contractor Firm			
Total			

b The number of individuals referred to federal, state, and local authorities are a subset of the total cases referred for prosecution.

<sup>&</sup>lt;sup>c</sup> This includes indictments/informations on current and prior referrals.

#### **TABLE 17: INVESTIGATIVE RECEIVABLES AND RECOVERIES**

Judicial	\$3,931,583
Administrative <sup>a</sup>	\$222,568
Total <sup>b</sup>	\$4,154,151
Total NASA	\$1,185,169

<sup>&</sup>lt;sup>a</sup> Includes amounts for cost savings to NASA as a result of investigations.

#### **TABLE 18: WHISTLEBLOWER INVESTIGATIONS**

For the reporting period, no officials were found to have engaged in retaliation.

#### TABLE 19: SENIOR GOVERNMENT EMPLOYEE INVESTIGATIONS REFERRED FOR PROSECUTION

Case Number	Allegation	Referral Date	Disposition
24-0100-P	Conflict of Interest	3/18/24	Declined in lieu of admin actions taken by Agency.

#### TABLE 20: SENIOR GOVERNMENT EMPLOYEE CASES NOT DISCLOSED TO THE PUBLIC

Case Number	Allegation	Closure Date	Disposition
22-0106-S	Misuse of Position	2/9/24	Resignation in lieu admin action
23-0038-HL-S	Program Management Irregularities	1/31/24	Unsubstantiated-No issues found
23-0174-P	Online Child Sexual Exploitation	1/25/24	Unsubstantiated
23-0202-HL-S	Conflict of Interest and Program Management Irregularities	2/13/24	No conflict of interest found. Directorate Standard Operating Procedures and Policies to be updated.

<sup>&</sup>lt;sup>b</sup> Total amount collected may not solely be returned to NASA but may be distributed to other federal agencies.





Orion with Moon and Earth.

## KEY CHALLENGES FACING NASA'S ARTEMIS CAMPAIGN

#### CT-24-001, JANUARY 17, 2024

On January 17, 2024, NASA Acting Inspector General, George A. Scott, testified before the U.S. House of Representatives Committee on Science, Space, and Technology, on significant challenges impacting the Artemis campaign. After more than a decade of preparation and several delays, in December 2022, NASA successfully completed Artemis I—an uncrewed test flight to lunar orbit. Artemis I was a significant achievement for NASA, providing important data and lessons learned. Despite this achievement, our oversight has identified several interrelated challenges NASA must address to achieve its Artemis goals. Of utmost importance is the resolution of technical challenges that could threaten astronaut safety while also addressing historical challenges related to unsustainable costs and a lack of transparency into funding needs.

The Agency's immediate challenge is preparing for Artemis II—the first crewed test flight of the SLS heavy-lift rocket and Orion Multi-Purpose Crew Vehicle system—which will return humans to lunar orbit for the first time in more than 50 years. The Artemis II mission intends to safely fly four astronauts to lunar orbit for 10 days. While considered a near-perfect flight by NASA officials, Artemis I revealed technical issues such as the unexpected erosion of protective material on the Orion heat shield, and the mobile launcher (ML-1) sustained more damage than expected. Recently, NASA delayed the Artemis II mission to September 2025. For missions beyond Artemis III, ML-2 is a critical part of the infrastructure. In June 2022, we reported that the ML-2 project is significantly behind schedule and over budget. We estimate completion of ML-2 will not occur until late 2026 at the earliest, 2.5 years behind the project's originally scheduled date.

The second challenge is the Artemis campaign's enormous expense. Overall, we project NASA's total Artemis campaign costs to reach \$93 billion between FYs 2012 and 2025. Given these estimated costs and the significant challenge they pose to the long-term sustainability of the Artemis campaign, it is critical that the Agency identify and implement effective ways to reduce costs. This will be especially important as NASA—and much of the federal government—may be operating under a flat annual budget. Our recent work has shown that some key cost reduction efforts may fall short of expectations.

While Artemis I was a significant achievement for NASA, the Agency faces higher stakes as it flies astronauts on its Artemis II mission. We urge NASA leadership to continue balancing the achievement of its mission objectives and schedule with prioritizing the safety of its astronauts and to take the time needed to minimize any undue risk on this first crewed Artemis mission. The Agency must continue to look for ways to reduce the enormous costs of the systems required to transport humans to the Moon and Mars safely within the funding allocated by Congress. At the same time, improved transparency of Artemis costs will be crucial to its success. Without NASA fully accounting for and accurately reporting the overall cost of current and future missions, it will be difficult for Congress. OMB, and the American public to make informed decisions about NASA's long-term funding needs.

# ADVANCING SCIENTIFIC DISCOVERY: ASSESSING THE STATUS OF NASA'S SCIENCE MISSION DIRECTORATE PORTFOLIO

CT-24-02, MARCH 24, 2024

On March 21, 2024, NASA Acting Inspector General, George A. Scott, testified before the Committee on Science, Space, and Technology of the U.S. House of Representatives about the Science Mission Directorate portfolio and the challenges it faces. NASA's Science Mission Directorate portfolio consists of approximately 150 individual missions in operations and development, which NASA directly operates or supports in some way. The portfolio not only provides scientists with the ability to make firstof-their-kind discoveries but provides tangible benefits to society through both technology enhancements and better understanding of Earth. Effectively managing development of some major programs and projects has been a challenge with cost and schedule overruns of particular concern. Some of NASA's most impressive missions now in operation—Hubble Space Telescope, the Mars Science Laboratory's Curiosity rover, and the James Webb Space Telescope—experienced significant cost increases and schedule slippages from what was planned. These cost increases and schedule delays on large projects often have a cascading effect across the remainder of the portfolio.

NASA's success in managing its major projects begins with proper stewardship of taxpayer funds and the Agency's adherence to cost and schedule commitments it makes to Congress and other stakeholders. NASA does this via an Agency Baseline Commitment (ABC) that establishes and documents project requirements, cost, schedule, and technical content. In turn, the ABC is based on a Joint Cost and Schedule Confidence Level to support NASA's commitment to OMB and Congress. Our recent work has found instances where the Agency failed to establish ABCs that consider the entirety of the program and project risks.

Part of the issue can be traced to the expectations established in the National Academies of Sciences, Engineering, and Medicine's decadal surveys that guide the Science Mission Directorate in its

development of the portfolio. The decadal surveys of the Science Mission Directorate's Astrophysics, Biological and Physical Sciences, Earth Science, Heliophysics, and Planetary Science portfolios identifies what the Academies believe are the most pressing science questions based on input from the wider science community. The surveys also provide life-cycle cost estimates for the recommended missions. The challenge for the Academies, and then subsequently for NASA, is coming up with a mission that is executable on the timetable designated with a corresponding cost estimate that has some level of reliability.

NASA should establish sustainable budgets and realistic timelines that consider the Agency's overall goals and priorities. As we pointed out in our audit of the Mars Sample Return Program, characteristics intrinsic to big and complex missions are difficult to quantify in estimates but can drive project costs upwards. These characteristics include a less than a full understanding of the mission's complexity and optimal design at inception, over-optimism, and assumptions regarding the project team and contractors' ability to perform to expectations. To this end, NASA must redouble its efforts to ensure that its science projects are grounded in accurate estimates, while also addressing those additional challenges that can affect the operational performance of its portfolio. In turn, this should allow Congress and other decision-makers to have the confidence to provide the consistent and stable funding required for mission success.





A total solar eclipse is seen in Dallas, Texas, on April 8, 2024. During the majority of the reporting period and temporary absence of the Counsel to the Inspector General, the Office of Counsel was managed by an Acting Counsel, who is the incumbent Eastern Field Office (EFO) Regional Counsel.

### ETHICS, TRAINING, AND DIVERSITY AND INCLUSION ACTIVITIES

The Office of Counsel provided training on developments in electronic evidence to EFO special agents at their off-site meeting held in Chicago. Office of Counsel participated in de-escalation training with agents to provide a legal perspective on the subject matter. Legal guidance was issued in the OIG Winter Newsletter that advised employees on recent changes in ethics rules related to what constitutes a "covered relationship" for the purposes of maintaining an appearance of impartiality. Legal staff collaborated with the Agency's developer of its outside activity form and database to improve review processes and tracking. The legal office also partnered with the Counsel for the Council of Inspectors General on Integrity and Efficiency (CIGIE) to establish the information management requirements for a pilot job shadow training program to be initiated by NASA OIG on behalf of CIGIE.

#### WHISTLEBLOWER PROTECTION

The Whistleblower Protection Coordinator (WPC) participated in a CIGIE's WPC Whistleblower Working Group survey that benchmarked OIGs' contractor employee and grantee whistleblower complaint investigative processes under 41 U.S.C. § 4712(a)(1)/10 U.S.C. § 4701(a)(1). The WPC also prepared OIG responses for 2023 Whistleblower Activity—Annual Occupational Safety and Health Administration Report.

#### **REGULATORY REVIEW**

During this reporting period, the legal office managed the processing of over 150 intra- and inter-agency requests for review of proposed regulations. Following triage of these requests, 18 regulations were substantively reviewed. The following are several of the more significant reviews.

# NASA Interim Directive (NID) 2810.2A, Possession and Use of NASA Information and Information Systems Outside of the United States

This NID establishes requirements and responsibilities for the access, operation, and handling of NASA information, IT, and networks by NASA IT users outside of the United States. The NID (1) allows the use of NASA IT that has passed a security configuration check for travel to/from lower-risk countries; (2) limits the use of NASA IT for travel to/from the higher-risk countries to only Workplace and Collaboration Services (WCS)managed locked-down loaners (other loaner pools are no longer allowed for those countries); (3) establishes an automated pre-travel process for verifying devices before travel outside the United States and ensuring appropriate export control approval and loaner device are obtained; (4) implements NASA-SPEC-2675, International Travel, to document the security controls for the highrisk travel loaner devices; (5) allows limited admin user privileges if needed to accomplish a required task while on foreign travel; and (6) clarifies that travelers must use NASA-approved secure access methods. To ensure compliance with E.O. 14028, Improving the Nation's Cybersecurity (May 2021), the NASA OIG recommended that data-in-rest encryption be included as part of the minimum security requirements for WCS-provided loaner devices used on travel to/from high-risk countries.

### NID 8900.X, Policy for the Handling of Active Astronaut Mortality Related to Human Spaceflight

This NID establishes NASA policy for implementing and processing agreements with internal and external stakeholders concerning medical investigations of spaceflight-related mishaps that result in the death of a NASA or International Partner (IP) astronaut. This NID also enables private human spaceflight by providing for consultation with other federal agencies to ensure necessary mishap plans for medical investigations are in place when launching on federal property and assisting private entities when a spaceflightrelated mortality mishap occurs on federal property. The NASA OIG initially withheld concurrence in the NID subject to the inclusion of a mandatory requirement that the NASA OIG be promptly notified of information potentially related to criminal activity or other wrongdoing in connection with spaceflight-related mishaps that result in the death of a NASA or IP astronaut. The NID was subsequently revised to include the requirement, and the NASA OIG provided its concurrence.

### NASA Procedural Requirements (NPR) 8705.4B, Risk Classification for NASA Payloads

This NPR sets (1) the criteria for mission directorates to define the risk tolerance classes for NASA missions and instruments, and (2) the corresponding Agency-level assurance expectations that drive design and analysis, test philosophy, and common assurance practices.

The NPR also provides several "stop gap" changes deemed necessary by the Office of Safety and Mission Assurance to address significant or potential gaps between current policy (i.e., NPR 8705.4A) and day-to-day implementation on programs/projects. The NASA OIG recommended that the NPR's scope be extended to cover any NASA space flight project, irrelevant of whether it is managed under NPR 7120.5, NASA Space Flight Program and Project Management Requirements, or NPR 7120.8, NASA Research and Technology Program and Project Management Requirements. The NASA OIG also recommended that NPR 8715.6, NASA Procedural Requirements for Limiting Orbital Debris and Evaluating the Meteoroid and Orbital Debris Environments, and NASA-STD-8719.14, Process for Limiting Orbital Debris, be added as accepted standards for protecting spacecrafts against natural and human-made hazards, including micrometeroids and orbital debris.

NPR 9470.1A, Budget Execution

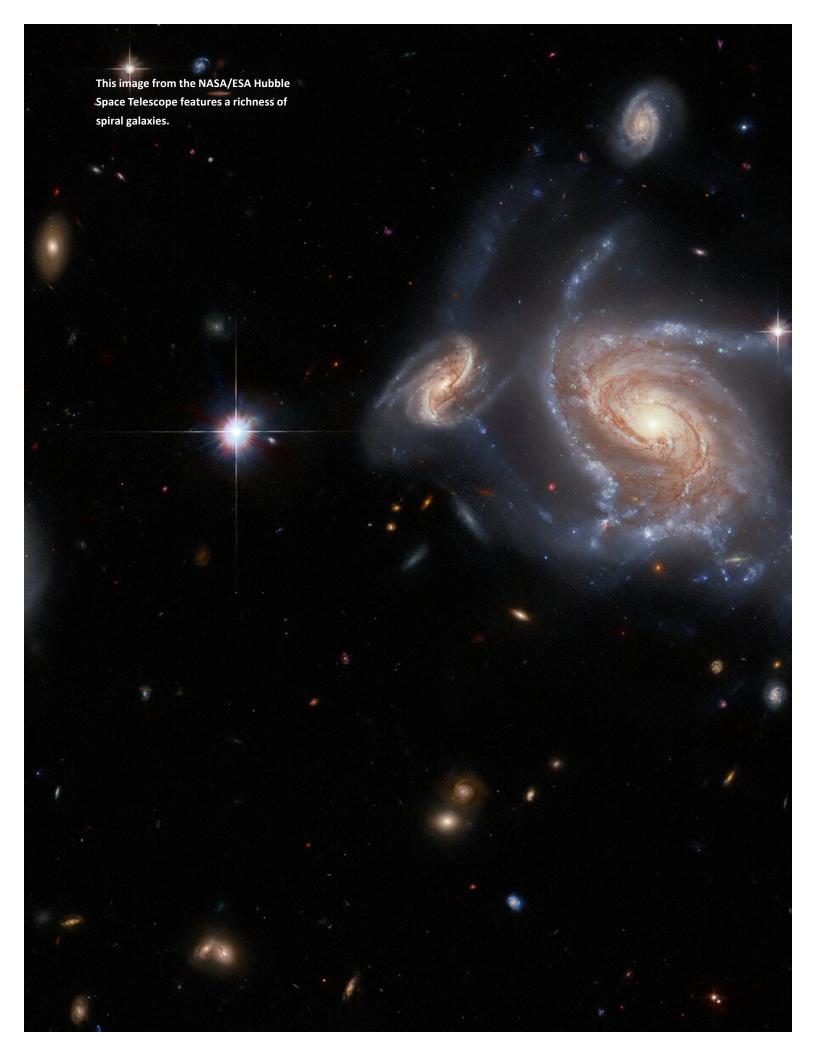
This NPR provides updated financial management requirements for budget execution and financial

management practices necessary for budget authority planning, spending, recording, controlling, and reporting, including performance reporting in the conduct of NASA's work. The NPR updates the Agency's budget processing flow to reflect updates made in NPR 9420.1, Budget Formulation, and deduplicates information that is covered more appropriately by other directives, such as NPD 9050.3F, Administrative Control of Appropriations and Funds, and NPR 9050.3A, The Antideficiency Act – Compliance, Violations, and Investigations. The NPR also incorporates information on funds transfers, reprogramming, and supplemental appropriations that impact NASA but are often overlooked. The NASA OIG recommended changes to the NPR intended to ensure that the financial management responsibilities of NASA officials/employees are clearly defined to avoid confusion as to whether a prescribed action is mandatory, a recommended good practice, or merely permissive, among others.

### STATISTICAL DATA

#### **TABLE 21: LEGAL ACTIVITIES AND REVIEWS**

Freedom of Information Act Matters	55
Appeals	0
Inspector General Subpoenas Issued	24
Regulations Reviewed	18





# **APPENDIXES**

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### APPENDIX A. INSPECTOR GENERAL ACT REPORTING REQUIREMENTS

Inspector General Act Citation	Requirement Definition	Cross Reference Page Numbers
Section 404(a)(2)	Review of legislation and regulations	47-49
Section 405(b)(1)	Description of significant problems, abuses, and deficiencies relating to the administration of programs and operations of the establishment and associated reports and recommendations for corrective action made by NASA OIG	6-32
Section 405(b)(2)	Identification of each recommendation made before the reporting period for which corrective action has not been completed, including the potential cost savings associated with the recommendation	22-32
Section 405(b)(3)	Summary of significant investigations closed during the reporting period	36-37
Section 405(b)(4)	Identification of the total number of convictions during the reporting period resulting from investigations	39
Section 405(b)(5)	Information regarding each audit, inspection, or evaluation report issued during the reporting period, including a listing of each audit, inspection, or evaluation, and if applicable, the total dollar value of questioned costs (including a separate category for the dollar value of unsupported costs) and the dollar value of recommendations that funds be put to better use, including whether a management decision had been made by the end of the reporting period	22-34
Section 405(b)(6)	Information on management decisions made during the reporting period with respect to any audit, inspection, or evaluation issued in a previous reporting period	32-33
Section 405(b)(7)	Information described under section 804(b) of the Federal Financial Management Improvement Act of 1996	_
Section 405(b)(8)	Peer review conducted by another OIG	55
Section 405(b)(9)	Outstanding recommendations from peer reviews of NASA OIG	_
Section 405(b)(10)	List of any peer reviews conducted by the Inspector General of another OIG during the reporting period, including a list of any outstanding recommendations made from any previous peer review (including any peer review conducted before the reporting period) that remain outstanding or have not been fully implemented	-
Section 405(b)(11)	Statistical tables showing the total number of investigative reports issued during the reporting period, the total number of persons referred to the Department of Justice for criminal prosecution during the reporting period, the total number of persons referred to state and local prosecuting authorities for criminal prosecution during the reporting period, and the total number of indictments and criminal informations during the reporting period that resulted from any prior referral to prosecuting authorities	39
Section 405(b)(12)	Description of the metrics used for developing the data for the statistical tables	38-40
Sections 405(b)(13)(A) and (B)(i)(ii)	Summary of investigations involving senior government employees	40
Section 405(b)(14)	Summary of whistleblower investigations	40
Sections 405(b)(15)(A) and (B)	Agency attempts to interfere with OIG independence	-
Section 405(b)(16)(A)	Closed inspections, evaluations, and audits not disclosed to the public	20
Section 405(b)(16)(B)	Closed investigations of senior government employees not disclosed to the public	40

### APPENDIX B. DEBT COLLECTION

The Senate Report accompanying the supplemental Appropriations and Rescissions Act of 1980 (Pub. L. No. 96-304) requires Inspectors General to report amounts due to the Agency, as well as amounts that are overdue and written off as uncollectible. The NASA Shared Services Center provides this data each November for the previous fiscal year. For the period ending September 30, 2023, the receivables due from the public totaled \$664,708, of which \$198,555 is delinquent. The amount written off as uncollectible for the period October 1, 2022, through September 30, 2023, was \$206,662.

#### APPENDIX C. PEER REVIEWS

The Dodd-Frank Wall Street Reform and Consumer Protection Act requires the OIG to include in its semiannual reports any peer review results provided or received during the relevant reporting period. Peer reviews are required every 3 years. In compliance with the Act, we provide the following information.

#### **Office of Audits**

The Legal Services Corporation OIG completed a peer review of the NASA OIG Office of Audits in December 2021. NASA OIG received a peer review rating of "pass" and has taken all corrective actions to address the recommendations included in the Letter of Comment. We performed an external peer review of the Federal Housing Finance Agency OIG for the 3-year period ending March 31, 2022, and issued our report on September 21, 2022. We also performed an external peer review of the Board of Governors of the Federal Reserve System and Consumer Financial Protection Bureau OIG for the 3-year period ending March 31, 2023, and issued that report on September 18, 2023. The Department of Interior is scheduled to perform our next peer review for the 3-year period ending March 31, 2024.

#### Office of Investigations

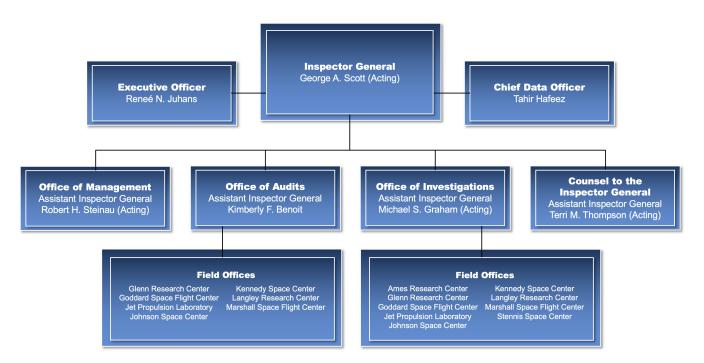
In October 2023, the Office of Investigations completed an external peer review of the Department of Education Office of Investigations. In January 2023, the U.S. Department of Transportation OIG completed its review of the NASA OIG's Office of Investigations and found the office to be compliant with all relevant guidelines. There are no unaddressed recommendations outstanding from this review.

### **APPENDIX D. ACRONYMS**

Al	artificial intelligence	ML-1	mobile launcher	
ABC	Agency Baseline Commitment	ML-2	Mobile Launcher 2	
CIGIE	Council of Inspectors General on	MSR	Mars Sample Return	
	Integrity and Efficiency	NID	NASA Interim Directive	
CLPS	Commercial Lunar Payload Services	NPD	NASA Policy Directive	
DCAA	Defense Contract Audit Agency	NPR	NASA Procedural Requirement	
DCIS	Defense Criminal Investigative Service	OIG	Office of Inspector General	
DST	Deep Space Transport	OMB	Office of Management and Budget	
EFO	Eastern Field Office	OSAM	On-Orbit Servicing, Assembly, and Manufacturing	
EPOC	Exploration Production and Operations Contract	PII	personally identifiable information	
ERO	Earth Return Orbiter	PIIA	Payment Integrity Information Act of 2019	
ESA	European Space Agency	SDB	small disadvantaged business	
FY	fiscal year	SLS	Space Launch System	
GDA	Geospatial Data Act	SRL	Sample Retrieval Lander	
HEC	high-end computing	STEM	science, technology, engineering, and	
IP	International Partner		mathematics	
ISCM	Information Security Continuous Monitoring	VIPER	Volatiles Investigating Polar Exploration Rover	
ISS	International Space Station	wcs	Workplace and Collaboration Services Whistleblower Protection Coordinator	
IT	information technology			
JSC	Johnson Space Center	WPC		
KSC	Kennedy Space Center		Coordinator	
MAP	Mission Support Future Architect Program			

#### APPENDIX E. OFFICE OF INSPECTOR GENERAL ORGANIZATIONAL CHART

The OIG's FY 2024 budget of \$47.6 million supports the work of 187 employees in their audit, investigative, and administrative activities.



#### THE NASA OFFICE OF INSPECTOR GENERAL

conducts audits, reviews, and investigations of NASA programs and operations to prevent and detect fraud, waste, abuse, and mismanagement and to assist NASA management in promoting economy, efficiency, and effectiveness.

THE INSPECTOR GENERAL provides policy direction and leadership for the NASA OIG and serves as an independent voice to the NASA Administrator and Congress by identifying opportunities for improving the Agency's performance. The Deputy Inspector General assists the Inspector General in managing the full range of the OIG's programs and activities and provides supervision to the Assistant Inspectors General, Counsel, and Investigative Counsel in the development and implementation of the OIG's diverse audit, investigative, legal, and support operations. The Executive Officer serves as the

OIG liaison to Congress and other government entities, conducts OIG outreach both within and outside NASA, and manages special projects. The Investigative Counsel serves as a senior advisor for OIG investigative activities and conducts special reviews of NASA programs and personnel.

THE OFFICE OF AUDITS conducts independent and objective audits and reviews of NASA programs, projects, operations, and contractor activities. In addition, the office oversees the work of independent public accounting firms in conducting NASA's annual information security program evaluation and financial statement audits.

**THE OFFICE OF COUNSEL TO THE INSPECTOR GENERAL** provides legal advice and assistance to OIG managers, auditors, and investigators. The office serves as OIG counsel in administrative litigation and assists the Department of Justice

when the OIG participates as part of the prosecution team or when the OIG is a witness or defendant in legal proceedings. In addition, the office is responsible for educating Agency employees about prohibitions on retaliation for protected disclosures and about rights and remedies for protected whistleblower disclosures.

THE OFFICE OF DATA ANALYTICS provides analytic consultation and data services and develops data products to support audits, investigations, and management and planning functions. Composed of statisticians, data scientists, and data engineers, the office also develops a secure data analytic infrastructure that automates processes; secures data in cloud and on-premises environments; and rapidly disseminates critical information to decision-makers to detect and deter fraud, waste, and abuse.

THE OFFICE OF INVESTIGATIONS investigates allegations of cybercrime, fraud, waste, abuse, and misconduct that may affect NASA programs, projects, operations, and resources. The office refers its findings either to the Department of Justice for criminal prosecution and civil litigation or to NASA management for administrative action. Through its investigations, the office develops recommendations for NASA management to reduce the Agency's vulnerability to criminal activity and misconduct.

**THE OFFICE OF MANAGEMENT** provides financial, procurement, human resources, administrative, and IT services and support to OIG staff.

#### APPENDIX F. MAP OF OIG FIELD OFFICES

#### NASA OIG OFFICES OF AUDITS AND INVESTIGATIONS



#### **A** NASA OIG HEADQUARTERS

300 E Street SW, Suite 8U71 Washington, DC 20546-0001 Tel: 202-358-1220

#### **B** AMES RESEARCH CENTER

NASA Office of Inspector General Ames Research Center Mail Stop 11, Building N207 Moffett Field, CA 94035-1000 Tel: 650-604-3682 (Investigations)

#### **C** GLENN RESEARCH CENTER

NASA Office of Inspector General Mail Stop 14-9 Glenn Research Center at Lewis Field Cleveland, OH 44135-3191 Tel: 216-433-9714 (Audits) Tel: 216-433-5414 (Investigations)

#### **D** GODDARD SPACE FLIGHT CENTER

NASA Office of Inspector General Code 190 Goddard Space Flight Center Greenbelt, MD 20771-0001 Tel: 301-286-6443 (Audits) Tel: 301-286-9316 (Investigations)

NASA Office of Inspector General Office of Investigations 402 East State Street, Room 3036 Trenton, NJ 08608 Tel: 609-656-2543 or 609-656-2545

#### **E** JET PROPULSION LABORATORY

NASA Office of Inspector General Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109-8099

> Office of Audits Mail Stop 180-202 Tel: 818-354-3451

Office of Investigations Mail Stop 180-203 Tel: 818-354-6630

NASA Office of Inspector General Office of Investigations Glenn Anderson Federal Building 501 West Ocean Boulevard, Suite 5120 Long Beach, CA 90802-4222 Tel: 562-951-5485

NASA Office of Inspector General Office of Investigations 6430 South Fiddlers Green Circle, Suite 350 Greenwood Village, CO 80111 Tel: 303-689-7042

#### **F** JOHNSON SPACE CENTER

NASA Office of Inspector General Johnson Space Center 2101 NASA Parkway Houston, TX 77058-3696

> Office of Audits Mail Stop W-JS Building 1, Room 161 Tel: 281-483-9572

Office of Investigations Mail Stop W-JS2 Building 45, Room 514 Tel: 281-483-8427

#### **G** KENNEDY SPACE CENTER

NASA Office of Inspector General Mail Stop W/KSC-OIG Post Office Box 21066 Kennedy Space Center, FL 32815 Tel: 321-867-3153 (Audits) Tel: 321-867-4093 (Investigations)

#### **H** LANGLEY RESEARCH CENTER

NASA Office of Inspector General Langley Research Center 9 East Durand Street Mail Stop 375 Hampton, VA 23681 Tel: 757-864-8562 (Audits) Tel: 757-864-3263 (Investigations)

#### MARSHALL SPACE FLIGHT CENTER

NASA Office of Inspector General Mail Stop M-DI Marshall Space Flight Center, AL 35812-0001 Tel: 256-544-0501 (Audits) Tel: 256-544-9188 (Investigations)

#### STENNIS SPACE CENTER

NASA Office of Inspector General Office of Investigations Building 3101, Room 119 Stennis Space Center, MS 39529-6000 Tel: 228-688-1493





### **NASA OFFICE OF INSPECTOR GENERAL**

# **HELP FIGHT**FRAUD. WASTE. ABUSE.

1-800-424-9183 TDD: 1-800-535-8134 https://oig.nasa.gov/hotline.html

If you fear reprisal, contact the
OIG Whistleblower Protection Coordinator to learn more about your rights:

https://oig.nasa.gov/whistleblower.html

https://oig.nasa.gov

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