

# **NASA Office of Inspector General**

## **Open Recommendations as of March 15, 2021**

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The National Aeronautics and Space Administration (NASA) Office of the Inspector General (OIG) makes recommendations to improve economy, efficiency, and effectiveness and to identify waste and mismanagement in NASA programs, projects, operations, and contractor activities. This report contains information about 189 recommendations that remained open as of March 15, 2021. Although NASA may have already taken steps to implement these recommendations, a recommendation is not considered closed until it has been fully implemented. Further, the status of open recommendations is subject to change as NASA continues its efforts to implement them and we review those efforts. Therefore, some recommendations identified as open in this report may have subsequently been closed.

**NASA OFFICE OF THE INSPECTOR GENERAL – OPEN RECOMMENDATIONS as of March 15, 2021**

Row no.	Issue Date	Report Title	Report no.	Rec no.	Recommendation	Responsible Office
1	5/15/15	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2014	IG-15-015	5	Include cost-type contract payments in the Agency's recapture audit efforts. If NASA determines this proposal is not cost-effective, the CFO should document its justification for excluding these payments, including demonstrating that costs associated with recovering the funds are projected to be greater than the amount recovered.	Chief Financial Officer
2	5/14/18	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2017	IG-18-017	1	Implement a procedure to use information regarding known improper payments, including the latest available data used for payment recapture reporting, when performing the annual risk assessment.	Chief Financial Officer
3	5/14/18	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2017	IG-18-017	3	Develop a process for tracking overpayments identified and subsequently recovered through reductions in future billings on existing contracts such as contract credits.	Chief Financial Officer
4	6/3/19	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2018	IG-19-020	1	Revise existing policies and procedures for reporting overpayments identified and recaptured from sources outside of the payment recapture audit by documenting the processes developed to gather, track, and report improper payments recaptured through credits on future billings and sustained questioned direct costs from post-award audits.	Chief Financial Officer
5	6/3/19	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2018	IG-19-020	2	Provide training to those organizations or individuals responsible for reporting overpayments from future billing credits and sustained questioned direct costs from post-award audits to ensure they are aware of NASA's reporting requirements and their responsibility for tracking the information and communicating it to OCFO, including specific details of the information to be reported and the format it should be reported.	Chief Financial Officer
6	11/7/19	Review of NASA's Fiscal Year 2019 Digital Accountability and Transparency Act Submission	IG-20-004	2	Incorporate a procedure into the existing Verification and Validation process to verify that procurement data is entered into FPDS-NG within three business days after contract award.	Procurement
7	11/7/19	Review of NASA's Fiscal Year 2019 Digital Accountability and Transparency Act Submission	IG-20-004	5	Incorporate the results of this audit as detailed in this report and specifically identified according to data elements in Appendixes B and C when executing the Agency's Data Quality Plan and determining high risk control areas in FY 2020.	Procurement
8	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	1	Ensure that the information system oversight process identifies delinquent control risk assessments and initiates timely corrective action to ensure that security controls are reviewed and tested in conformance with federal and Agency requirements.	Chief Information Officer

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9	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	4	Update the current training for system owners and system assessment and authorization staff that covers the requirements for maintaining system security plans and supporting plan documentation in RISCs, as well as RISCs's data protection capabilities to keep that data secure.	Chief Information Officer
10	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	5	Issue clarifying policy guidance to ensure that information security controls for all active NASA information systems that are categorized as "other than satisfied" are properly supported by either a POA&M or Risk-Based Decision document and track exceptions in Agency-wide monitoring tools.	Chief Information Officer
11	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	7	Issue clarifying policy guidance that the Agency's system authorizing officials should ensure that all active information systems operated for the benefit of NASA, either by the Agency or other organizations, are covered by an approved contingency plan, when required.	Chief Information Officer
12	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	8	Issue clarifying policy guidance that the Agency's system authorizing officials should implement a formal review process to ensure that contingency plans for all applicable active information systems are reviewed on an annual basis to ensure they accurately reflect system requirements, procedures, organizational structure, and policies.	Chief Information Officer
13	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	9	Develop and implement an effective process to ensure that all IT security handbooks and other IT governance documents are reviewed and updated at least annually in accordance with NASA requirements.	Chief Information Officer
14	5/15/20	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019	IG-20-016	1	Complete steps outlined in the OMB guidance for when an agency is not compliant with IPIA for one fiscal year. Non-compliant agencies must submit a plan to Congress and OMB describing the actions that the agency will take to become compliant.	Chief Financial Officer
15	5/15/20	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019	IG-20-016	2	In accordance with OMB guidance, obtain a statistically valid estimate of the annual amount of improper payments in the SLS program for reporting in the FY 2020 AFR, and complete the associated required reporting.	Chief Financial Officer
16	5/15/20	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019	IG-20-016	3	Ensure that all risk factors are assigned risk ratings appropriately based on the supporting documentation in the risk assessment.	Chief Financial Officer
17	5/15/20	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019	IG-20-016	4	Change the timing of the Improper Payments Data Call so the results are available in time to consider for the improper payment risk assessment.	Chief Financial Officer
18	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	1	Improve the patch and vulnerability management program.	Chief Information Officer

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19	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	2	Eliminate configuration weaknesses.	Chief Information Officer
20	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	3	Improve technical controls, including controls that monitor and control communications at the boundary of information systems.	Chief Information Officer
21	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	4	Improve the scope and extent of segregation of duties monitoring controls.	Chief Information Officer
22	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	5	Improve user administration controls, specifically around temporary elevated access and user access recertification.	Chief Information Officer
23	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	6	Utilize available layers of application security controls to enhance the existing defense in depth approach.	Chief Information Officer
24	11/16/20	Audit of NASA's Fiscal Year 2020 Financial Statements	IG-21-005	7	Improve the scope and extent of financial system, database and infrastructure audit logging and review controls.	Chief Information Officer
25	12/22/20	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, An Agency Common System	IG-21-010	1	Develop a POA&M or Risk-Based Decision document to address the deficiency in control SI-04.	Chief Information Officer
26	12/22/20	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, An Agency Common System	IG-21-010	2	Ensure that control SI-04 is assessed as soon as possible and that all ACS system controls are assessed timely in accordance with FISMA requirements.	Chief Information Officer
27	12/22/20	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, An Agency Common System	IG-21-010	3	Assign the personnel resources necessary to ensure the Agency's security plans for systems that inherit the controls within the Agency's new hybrid common controls system are updated and that those hybrid controls are removed from the ACS system security plan.	Chief Information Officer
28	12/22/20	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, An Agency Common System	IG-21-010	4	Establish a process to ensure that cost estimates are developed and included for all POA&Ms for the ACS system prior to their establishment and approval in RISCs to ensure that costs are properly captured and included in submissions to OMB.	Chief Information Officer
29	12/22/20	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, An Agency Common System	IG-21-010	5	Ensure that accurate cost estimates associated with the remediation of security weaknesses listed in POA&Ms are prepared and included for all open POA&Ms in the ACS system.	Chief Information Officer
30	3/2/21	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, A Center Command and Control System	IG-21-014	1	We recommend that the Information System Owners ensure that all overdue control assessments are performed by an independent security control assessor from the Kennedy IT Security Office.	Kennedy Space Center

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31	3/2/21	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, A Center Command and Control System	IG-21-014	2	We recommend that the Information System Owners implement a monitoring and surveillance process over security controls to ensure that all controls nearing their due date for assessment are properly identified, scheduled for assessment, and assessed prior to the due date.	Kennedy Space Center
32	5/17/17	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	1	Perform a comprehensive review of Program-funded construction projects to ensure adequate analysis, including all life cycle costs, is completed prior to project initiation.	Strategic Infrastructure
33	5/17/17	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	2	Develop additional construction project guidance for establishing unallocated construction reserves for program-direct construction facility projects to better account for significant expected risks.	Strategic Infrastructure
34	5/17/17	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	3	Ensure facility needs, such as construction of new facilities and/or modification of existing facilities, are appropriately included in program planning and scheduling and that testing requirements are adequately understood prior to committing the Agency to construction or modification of test facilities.	Human Exploration and Operations
35	5/23/18	Audit of NASA's Security Operations Center	IG-18-020	1	Develop a charter and set of authorities signed by the NASA constituent executives (including the NASA Administrator) that addresses the SOC's organizational placement, purpose, authority, and responsibilities.	Chief Information Officer
36	5/23/18	Audit of NASA's Security Operations Center	IG-18-020	2	Establish Operational Level Agreements with NASA Centers, Mission Directorates, the Communications Services Office, the End User Services Office, the Agency Applications Office, and Web Services Office to clearly define incident response roles and responsibilities, ensure data storage and sharing needs are addressed, and opportunities to leverage economies of scale are identified and acted upon in support of Agency cybersecurity goals.	Chief Information Officer
37	10/22/18	NASA's Management of Historic Property	IG-19-002	1	Develop a process to more effectively identify, validate ownership of, and coordinate within NASA and/or with other agencies on recovery of historic property.	General Counsel
38	10/22/18	NASA's Management of Historic Property	IG-19-002	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	Strategic Infrastructure
39	10/22/18	NASA's Management of Historic Property	IG-19-002	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.	Strategic Infrastructure
40	10/22/18	NASA's Management of Historic Property	IG-19-002	5	Ensure NASA policy and procedures for using the proceeds from facilities leased under NHPA authority appropriately aligns with Agency goals to minimize excess facilities.	Strategic Infrastructure

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41	10/21/19	NASA's Security Management	IG-20-001	3	Research federal arrest authority (as directed in the Protective Services BSA Decision Memorandum) in conjunction with the Office of the General Counsel, formulate a unified response, and implement a consistent policy across the Agency.	Office of Protective Services
42	10/21/19	NASA's Security Management	IG-20-001	4	Evaluate Agency-wide jurisdictions to determine if it is feasible for all Centers to be under the same jurisdiction or at least to determine if individual Centers should have all of their property under the same type of jurisdiction.	Office of Protective Services
43	10/21/19	NASA's Security Management	IG-20-001	5	Coordinate with the Office of the 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.	Office of Protective Services
44	10/21/19	NASA's Security Management	IG-20-001	8	Develop procedures that require Center protective services officials to be a stakeholder in the planning process to meet protective services requirements for existing and new tenants.	Office of Protective Services
45	3/26/19	Service Contracts	IG-19-014	1	Develop an Agency-wide standardized set of metrics for contracts that can be collected, tracked, and analyzed over time to identify efficiencies resulting from a change in contract structure.	Procurement
46	3/26/19	Service Contracts	IG-19-014	2	Require Center Procurement Offices to formally collect, track, and report data to the Headquarters Office of Procurement on these metrics at least annually.	Procurement
47	3/26/19	Service Contracts	IG-19-014	3	Develop a community of practice to analyze what contract structure changes lead to the greatest efficiencies and to share these lessons learned with the Agency's procurement community.	Procurement
48	10/2/20	Final Memorandum, Audit of NASA's Compliance with the Geospatial Data Act	IG-21-001	1	Appoint a senior agency official for geospatial information to coordinate with the Federal Geographic Data Committee to align NASA's geospatial data strategy with the national strategy and assist in the development of the required data, metadata, and quality standards.	Chief Information Officer
49	10/2/20	Final Memorandum, Audit of NASA's Compliance with the Geospatial Data Act	IG-21-001	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.	Chief Information Officer
50	10/2/20	Final Memorandum, Audit of NASA's Compliance with the Geospatial Data Act	IG-21-001	3	Develop records schedules in coordination with NARA for NASA's historically significant geospatial data assets.	Chief Information Officer
51	10/2/20	Final Memorandum, Audit of NASA's Compliance with the Geospatial Data Act	IG-21-001	4	Collaborate with NARA to determine if there is value in establishing affiliated data archive agreements for NASA's remote sensing/earth observing geospatial data assets.	Chief Information Officer
52	11/2/16	NASA's Portfolio of Earth Science Missions	IG-17-003	1	Update the Architecture Plan every 5 years to align with the release of Earth Science Decadal Surveys and mid-term Surveys and account for portfolio changes.	Science

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53	10/5/17	NASA's Management of Spare Parts for its Flight Projects	IG-18-001	3	Develop a standardized cataloging process for OSCAR to ensure NASA program and project officials can effectively identify and reserve compatible flight inventory.	Strategic Infrastructure
54	10/5/17	NASA's Management of Spare Parts for its Flight Projects	IG-18-001	5	Work with Center logistics officials to develop alternative approaches to ensure Centers can meet the requirement to conduct complete reviews of spare parts inventories every 5 years.	Strategic Infrastructure
55	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	1	Finalize the schedule-driven contingency plan for the community response testing and account for the resources (personnel and costs) it will require to implement.	Aeronautics Research
56	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	6	Establish NASA requirements for programs and projects to perform internal EVM reporting that follow the same timeline as contractor reporting 90 days after the prime contract start date but no later than Key Decision Point (KDP)- C.	Chief Financial Officer
57	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	7	Evaluate whether the monetary threshold for performing internal EVM is sufficient or additional criteria would be beneficial regarding the dollar-value of tasks related to providing Government furnished equipment (GFE) and performing in- house development work (discrete work) compared to NASA personnel performing integration, review, and management functions (level-of-effort work).	Chief Financial Officer
58	5/7/19	NASA's Heliophysics Portfolio	IG-19-018	2	Complete implementation of 2015 NSWAP tasks in accordance with SWORM subcommittee deadlines.	Science
59	5/7/19	NASA's Heliophysics Portfolio	IG-19-018	3	Reassess HPD's capabilities and resources and update the 2014 Roadmap for implementing 2013 Decadal recommendations with expected completion dates based on the Division's updated budget and priorities over the next 5 years.	Science
60	5/7/19	NASA's Heliophysics Portfolio	IG-19-018	4	Establish a formal mechanism to increase collaboration with DOD and the commercial space industry regarding heliophysics research and space weather modeling and forecasting efforts.	Science
61	6/18/19	JPL Network Security	IG-19-022	8	Establish a formal, documented threat-hunting process that includes roles and responsibilities, standard processes for conducting a hunt, and metrics to track success.	NASA Management Office
62	5/29/19	Management of NASA's Europa Mission	IG-19-019	7	Consider requesting the NRC (now the National Academies of Sciences, Engineering, and Medicine) reexamine the Lander's priority under authority in the NASA Authorization Act of 2008.	Science
63	5/29/19	Management of NASA's Europa Mission	IG-19-019	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 conflicts of interest risks.	Science
64	8/27/20	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	1	Fully implement NAC and CDM at all Centers to detect, prevent, and remove unauthorized IT devices accessing NASA networks.	Chief Information Officer

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65	8/27/20	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	2	Incorporate into applicable IT policy and requirements documents IT systems security controls for life cycle management in accordance with NIST Special Publication 800-124.	Chief Information Officer
66	8/27/20	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	3	Define requirements and implement controls to monitor and enforce MDM business rules, including defining the office responsible for performing monitoring and enforcement.	Chief Information Officer
67	8/27/20	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	4	Revise cybersecurity policy, guidance, and requirements to provide OCIO with a level of direct oversight of enterprise-wide IT management to ensure consistent practices across Centers.	Chief Information Officer
68	8/27/20	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	5	Revise NSINS to implement controls to ensure adequate SAISO visibility into cybersecurity practices at the Centers.	Chief Information Officer
69	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	1	Communicate to the National Academies realistic costs of planetary science missions and consider resetting the cost caps and/or the cadence of PSD missions to reflect rising mission costs.	Science
70	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	2	In coordination with the Office of Chief Financial Officer, engage relevant Centers and technical capability leaders to identify budgetary and accounting system solutions within the current budgetary and full cost accounting system to adequately fund and sustain critical technical discipline capabilities needed to support current and future projects.	Science
71	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	3	In coordination with the Office of the Chief Human Capital Officer, review and identify opportunities based on existing NASA leading practices to foster and monitor mentoring to ensure a robust pipeline for PSD-related disciplines.	Science
72	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	4	In coordination with Space Communications and Navigation, complete an assessment of DSN's infrastructure in order to develop and implement a maintenance and upgrade plan to support PSD missions.	Science
73	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	5	In coordination with the Space Technology Mission Directorate, evaluate each Directorate's respective roles in basic research that may affect PSD projects and identify opportunities to advance technologies through flight demonstrations.	Science
74	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	6	Reassess the NEOO Program's priority in meeting the goal of cataloging 90 percent of the NEOs larger than 140 meters, establish cost and schedule estimate with proposed funding profile to meet the NEOO's goal of cataloging, and coordinate with Congress and request funding to support the implementation goal.	Science



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75	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	7	In coordination with the NASA Shared Services Center, comply with the Federal Grant and Cooperative Agreements Act of 1977 on the proper use of grants and contracts to allow Center and Program personnel greater visibility into partner operations and to ensure that funding levels and performance are commensurate with requirements.	Science
76	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	8	Implement the National Academies recommendation to establish a common interface for CLPS contractors between instrument and spacecraft or to require that each commercial provider supply a document that describes provider and payload capabilities.	Science
77	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	9	In coordination with CLPS contracting personnel, establish procedures for evaluation, periodic re-evaluation, and monitoring of current and prospective CLPS contractors' past performance and financial capabilities risk, and steps to mitigate those risks when applicable.	Science
78	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	10	Comply with NASA policy to establish program/project quality assurance surveillance plans, or its intent thereof, for all applicable CLPS task orders.	Science
79	9/16/20	NASA's Management of the Planetary Science Portfolio	IG-20-023	11	Develop procedures for periodic communication of the available hiring authorities, including but not limited to NEX and Pathways, guidance regarding the use of hiring authorities and the tools resident on USAJOBS.gov, monitoring of usage, and identifying and reporting usage challenges to Center and senior management.	Human Capital Management
80	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	1	Ensure that an appropriate organizational manager who is authorized to accept risks on the Center Director's behalf is included in the hazardous materials acquisition process as the concurring authority.	Mission Support
81	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	3	Ensure contractors and tenants at NASA Centers report their hazardous material inventory to Center management at least annually.	Mission Support
82	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	4	Evaluate Centers' application of Agency policy to maintain a list of restricted and prohibited materials and their associated waiver processes and make improvements as warranted.	Mission Support
83	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	5	Assess various options for development and implementation of an Agency-wide hazardous materials information system that tracks hazardous materials throughout the life cycle, and ensure processes are in place to consistently maintain a complete and accurate inventory.	Mission Support
84	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	6	Develop and implement an Agency-wide policy that establishes a standard for storage spaces and facilities used to house hazardous materials.	Mission Support

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85	12/3/20	NASA's Management of Hazardous Materials	IG-21-006	7	Require Center Directors to inspect and replace, as required, laboratory hazardous material storage structures and improve shelters that do not follow CDC guidelines or comply with Agency requirements.	Mission Support
86	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	1	Implement quantifiable research hour requirements.	Science
87	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	2	Establish a requirement for the Program to maximize research hours in the stratosphere that considers implementing an 8-hour, five times per week flight profile whenever SOFIA operates from Palmdale between May and November.	Science
88	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	3	Establish observation program completion metrics, based on science value prioritization, to increase the probability observations result in publications.	Science
89	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	4	Develop and implement a process to increase the timeliness of delivering data to researchers.	Science
90	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	5	Establish science metrics, such as publications and citations per year, as criteria for the performance evaluation of the USRA contract award fee.	Science
91	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	6	Establish a requirement for new technology implementation given the cancellation of HIRMES.	Science
92	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	7	Develop a process for tracking science instrument productivity and cost to maintain and establish an evaluation program to determine when an instrument should be retired.	Science
93	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	8	Reassess SOFIA's strategy and mission to identify and consider implementing alternative operational approaches and models to maximize SOFIA's capabilities within the Astrophysics portfolio and return on investment.	Science
94	9/14/20	Management of Stratospheric Observatory for Infrared Astronomy	IG-20-022	9	Develop consensus between SMD officials and Program management and implement quantifiable operational and science output requirements.	Science
95	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	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.	Office of the Administrator
96	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	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.	Office of the Administrator

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97	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	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.	Office of the Administrator
98	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	4	Prioritize obtaining direct measurements needed to fill the 3 mm and smaller sized debris gap at the 600 to 1,000 km altitude in LEO.	Office of the Administrator
99	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	5	Explore alternative orbital debris radar assets to fill the data gaps caused by the increased costs of utilizing existing radars and the loss of legacy assets.	Safety & Mission Assurance
100	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	6	Explore commercial alternatives to obtaining information on debris smaller than 10 cm until Space Fence becomes fully operational.	Safety & Mission Assurance
101	1/27/21	NASA's Efforts to Mitigate Orbital Debris Hazardous	IG-21-011	7	Coordinate with Mission Directorate officials to develop and document a formal signature process that clarifies needs and expectations and supports the timely delivery of ODARs and EOMPs before critical decision point reviews.	Safety & Mission Assurance
102	3/28/16	Audit of the Spaceport Command and Control System	IG-16-015	1	Commission an independent assessment to evaluate the status of the SCCS software development effort and determine the necessary steps to reduce the risk of further cost, schedule, and performance issues, including consideration of acquiring commercial command and control software to replace some or all of the system currently under development.	Human Exploration and Operations
103	3/9/17	NASA's Management of Electromagnetic Spectrum	IG-17-012	2	Incorporate the Spectrum Guidance for NASA Small Satellite Missions into formal NASA electromagnetic spectrum policies NPD 2570.5E, NASA Electromagnetic Spectrum Management - Revalidated 9/13/16, and NPR 2570.1C, NASA Radio Frequency Electromagnetic Spectrum Management Manual.	Human Exploration and Operations
104	4/13/17	NASA's Plans for Human Exploration Beyond Low-Earth Orbit	IG-17-017	4	Include cost as a factor in NASA's Journey to Mars feasibility studies when assessing various missions and systems	Human Exploration and Operations
105	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long-Duration Human Space Flight and Plans for the Station's Future Disposition	IG-18-021	3	Ensure there is a contingency plan for each exploration-enabling technology demonstration not scheduled to be fully tested by 2024, such as: a. Identification of alternate testing platforms, b. Impact to technical risk of exploration systems, and c. Impact to the technology demonstration schedule.	Human Exploration and Operations
106	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long-Duration Human Space Flight and Plans for the Station's Future Disposition	IG-18-021	4	Complete all end-of-mission critical systems and open work related to nominal and contingency deorbit operations.	Human Exploration and Operations

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107	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long-Duration Human Space Flight and Plans for the Station's Future Disposition	IG-18-021	5	Develop options for obtaining supplemental emergency deorbit propellant support from U.S. commercial vehicles.	Human Exploration and Operations
108	4/26/18	NASA's Management of ISS Commercial Resupply Services Contracts	IG-18-016	5	Ensure the ISS Program decides by January 2020 whether to compete task orders beyond the minimum guarantee of six for each contractor through the existing IDIQ contract or through the On-Ramp clause.	Human Exploration and Operations
109	4/5/18	NASA's Management of the Goddard Institute for Space Studies and Related Activities	IG-18-015	8	To the extent practicable, implement the GAO's best practices for establishing partnerships, including the formalization of agreements that outline the roles and responsibilities of each agency in the performance and application of climate research performed at GISS.	Office of International and Interagency Relations
110	3/17/20	NASA's Management of the Mobile Launcher	IG-20-013	3	Ensure life-cycle and milestone reviews incorporate programmatic and technical risks and are conducted with the Associate Administrator for Human Exploration and Operations Mission Directorate and other senior Agency officials.	Human Exploration and Operations
111	3/17/20	NASA's Management of the Mobile Launcher	IG-20-013	4	Require the ML-2 project to develop an ABC separate from the EGS Program.	Human Exploration and Operations
112	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	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.	Human Exploration and Operations
113	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	2b	Establishing methodologies and processes to track and set cost commitments for Artemis II.	Human Exploration and Operations
114	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	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).	Human Exploration and Operations
115	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	5	Conduct a thorough review of each major SLS contract's scope of work and technical requirements needed to complete the period of performance to assist in eliminating incremental contract value increases to the contract and lessen contract management burden, as in the case of the Boosters contract.	Human Exploration and Operations
116	3/3/20	NASA's Distributed Active Archive Centers	IG-20-011	1	In conjunction with ESDIS, once NISAR and SWOT 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.	Science

Row no.	Issue Date	Report Title	Report no.	Rec no.	Recommendation	Responsible Office
117	3/3/20	NASA's Distributed Active Archive Centers	IG-20-011	3	In coordination with the OCIO, and during the next security plan review cycle, ensure all applicable information types are considered during system categorization, that appropriate premises are used when determining impact levels, and that the appropriate categorization procedures are standardized across ESDIS systems.	Science
118	11/14/19	NASA's Management of Crew Transportation to the International Space Station	IG-20-005	1	Revise current schedules and establish realistic timetables for the remaining reviews and flights occurring before final certification and missions to the ISS.	Human Exploration and Operations
119	11/14/19	NASA's Management of Crew Transportation to the International Space Station	IG-20-005	2	Correct identified safety-critical technical issues before the crewed test flights, including parachute, propulsion, and launch abort systems, to ensure sufficient safety margins exist.	Human Exploration and Operations
120	7/16/20	NASA's Management of the Orion Multi-Purpose Crew Vehicle Program	IG-20-018	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.	Human Exploration and Operations
121	10/27/20	NASA's Management of its Acquisition Workforce	IG-21-002	1	Finalize and fully implement the performance metrics dashboard to measure acquisition performance.	Procurement
122	10/27/20	NASA's Management of its Acquisition Workforce	IG-21-002	2	Document contract assignments to COs, CORs, and program/project managers in a centralized system in the performance metrics dashboard.	Procurement
123	10/27/20	NASA's Management of its Acquisition Workforce	IG-21-002	4	Take action to ensure that active CORs that have not met continuous learning requirements are removed from their COR position in a timely manner.	Procurement
124	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	1	Baseline the Gateway requirements and specifications in contract modifications prior to updating and awarding the PPE and HALO fixed-price contracts.	Human Exploration and Operations
125	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	2	Ensure PPE and HALO delivery and launch dates are realistic by including sufficient schedule margin in their development schedules.	Human Exploration and Operations
126	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	3	Develop a HEOMD policy that establishes a reasonable amount of recommended schedule margin by phase of program or project.	Human Exploration and Operations
127	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	4	Confirm at selection the launch system provider for the co-manifested PPE and HALO will meet spacecraft mass, length, and other requirements.	Human Exploration and Operations
128	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	5	Work with the contractors to obtain a credit for the amount already spent on launch services under the PPE contract.	Human Exploration and Operations
129	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	6	Take action to enforce NASA policy to definitize contracts within 6 months of award.	Human Exploration and Operations
130	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	7	Definitize the remaining development and delivery portion of the HALO contract by PDR plus 3 months.	Human Exploration and Operations

Row no.	Issue Date	Report Title	Report no.	Rec no.	Recommendation	Responsible Office
131	11/10/20	NASA's Acquisition Strategy for the Artemis Missions	IG-21-004	8	Ensure the maturity of system requirements are fully understood before selecting the acquisition method and contract type for future acquisition strategies supporting Artemis and Mars missions by describing the state of the program requirements in the acquisition strategy memorandum for each new acquisition.	Human Exploration and Operations

**Note: This table omits 58 recommendations that NASA determined to be classified or sensitive and are therefore unsuitable for public release.**

**RECENTLY CLOSED RECOMMENDATIONS**

Row No.	Issue Date	Report Title	Report no.	Rec no.	Recommendation	Responsible Office
1	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	3	Perform an assessment to evaluate the feasibility of modifying RISCS to ensure that required data fields, system inventory sections, and other supporting documentation required for the creation or modification of an SSP are completed before a system can be authorized to operate.	Chief Information Officer
2	6/25/20	Review of NASA's Information Security Program under the Federal Information Security Modernization for Fiscal Year 2019 Evaluation	IG-20-017	6	Implement the necessary controls for the management of the hybrid common controls to include assessing control effectiveness and developing a POA&M or Risk-Based Decision document for every control assessed as other than satisfied.	Chief Information Officer
3	2/16/21	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, A Center Communications System	IG-21-013	1	We recommend that the Information System Owner work with the Information System Security Officer to ensure the timely review and approval of the RBDs submitted in September 2020.	Marshall Space Flight Center
4	2/16/21	Fiscal Year 2020 Federal Information Security Modernization Act Evaluation, A Center Communications System	IG-21-013	2	We recommend that the Information System Owner ensure that control CM-08, Information System Component Inventory, is assessed as soon as possible and that all CCS system controls are assessed timely in accordance with FISMA requirements.	Marshall Space Flight Center
5	10/21/19	NASA's Security Management	IG-20-001	2	Standardize and streamline the facility security assessment process across the Agency to increase efficiency and inform decision making.	Office of Protective Services
6	10/27/20	NASA's Management of its Acquisition Workforce	IG-21-002	3	Ensure all certified contracting and COR program participants utilize FAITAS to record their certifications and continuous learning requirements by an established deadline.	Chief Financial Officer