## NASA Office of Inspector General Open Recommendations as of May 15, 2020

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 172 recommendations that remained open as of May 15, 2020. 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 May 15, 2020

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	5/12/16	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2015	IG-16-021	5	Obtain management decision letters issued by contracting officers to identify potential overpayments and report any overpayments determined to be improper in the AFR as overpayments identified from outside of payment recapture audits.	Chief Financial Officer
3	5/15/17	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2016	IG-17-020	3	Revisit the description of the scoring criteria for all risk factors, particularly the risk factors under the External Monitoring and Materiality of Disbursements risk conditions, to ensure the criteria for each level is a fair representation of the risk.	Chief Financial Officer
4	2/28/18	Review of NASA's Purchase and Travel Charge Card Programs	IG-18-014	1	Establish a procedure, which may be risk-based, to monitor whether travelers are using their travel cards for all official travel expenses. Possible options include, but are not limited to: (a) modifying NSSC's existing pre- and post-payment procedures performed on travel vouchers and (b) instructing CAPCs to include this review as part of their oversight responsibilities.	Chief Financial Officer
5	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
6	5/14/18	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2017	IG-18-017	2	Revise the existing risk assessment process by considering improper payments from prior years identified in external reports reviewed in the assessment year to determine program susceptibility to significant improper payments.	Chief Financial Officer
7	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

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8	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
9	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
10	6/3/19	NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2018	IG-19-020	3	Enhance the annual payment recapture training provided to Centers with a focus on what constitutes an improper payment and how to improve the accuracy of their reporting, to include, but not limited to: a. definition of an improper payment, b. sufficiency of explanations for transactions excluded from reporting, c. types of overpayments experienced and whether the Centers consider the transactions reportable, and d. specific transactions that appear often in the system query and treatment.	Chief Financial Officer
11	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	1	Improve the patch and vulnerability management program.	Chief Information Officer
12	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	2	Eliminate configuration weaknesses.	Chief Information Officer
13	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	3	Improve technical controls, including controls that monitor and control communications at the boundary of information systems.	Chief Information Officer
14	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	4	Improve the scope and extent of segregation of duties monitoring controls.	Chief Information Officer
15	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	5	Improve user administration controls, specifically around temporary elevated access and user access recertification.	Chief Information Officer
16	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	6	Utilize available layers of application security controls to enhance the existing defense in depth approach.	Chief Information Officer
17	11/15/19	Audit of NASA's Fiscal Year 2019 Financial Statements	IG-20-006	7	Improve the scope and extent of financial system audit logging and review controls.	Chief Information Officer

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18	11/7/19	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2019	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
19	11/7/19	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2019	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
20	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
21	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
22	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
23	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
24	2/8/17	Audit of Industrial Control System Security over NASA's Critical Infrastructure	IG-17-011	3	Ensure OCIO and OSI representatives are included in functional reviews of NASA's critical infrastructure assets and facility security assessments so that cyber and facility interdependencies are addressed appropriately.	Office of the Administrator
25	2/8/17	Audit of Industrial Control System Security over NASA's Critical Infrastructure	IG-17-011	4	Coordinate the development of a methodology for the identification and protection of interdependencies (either within the facility security assessment or facility security level designation process).	Office of the Administrator
26	2/8/17	Audit of Industrial Control System Security over NASA's Critical Infrastructure	IG-17-011	5	Develop security policy based on NIST Special Publication (SP) 800-53, Revision 4, and NIST SP 800-82 guidance for managing the protection of OT within the mission and institutional directorates.	Office of the Administrator

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27	2/7/17	Audit of Information Security Controls over NASA's Cloud Computing Services	IG-17-010	4	Ensure all approved cloud services are registered with FedRAMP and are FedRAMP compliant.	Chief Information Officer
28	2/7/17	Audit of Information Security Controls over NASA's Cloud Computing Services	IG-17-010	6	Direct all NASA Centers, Mission Directorates, and Program and Project Offices to review their current cloud computing services and take steps necessary to ensure that existing services meet FedRAMP requirements.	Chief Information Officer
29	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
30	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
31	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
32	5/24/18	Audit of NASA's Information Technology Supply Chain Risk Management Efforts	IG-18-019	2	Ensure NASA's assessed and cleared listing (ACL) is updated weekly and that it contains a selection of cleared IT and communications products and services sufficient to meet Agency needs.	Chief Information Officer
33	5/24/18	Audit of NASA's Information Technology Supply Chain Risk Management Efforts	IG-18-019	7	Direct all NASA Centers, Mission Directorates, and Program/Project Offices to review and strengthen their current supply chain risk management efforts to ensure only assessed and cleared IT and communications products and services enter the Agency's supply chain.	Chief Information Officer
34	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

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35	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
36	5/23/18	Audit of NASA's Security Operations Center	IG-18-020	6	Identify and reduce unnecessary duplication of the incident monitoring, detection, and response capabilities, including toolsets and competencies available Agency-wide to enhance the capabilities and resources of the SOC and realize efficiencies in the management of these capabilities.	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
41	10/21/19	NASA's Security Management	IG-20-001	1	Establish and implement an enterprise-level governance structure to identify, assess, and prioritize protective services risks and deficiencies, and fund applicable countermeasure(s) to mitigate or formally accept risk.	Office of Protective Services
42	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

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43	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
44	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
45	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
46	10/21/19	NASA's Security Management	IG-20-001	6	In collaboration with the Office of Safety and Mission Assurance, evaluate fire services policies and functions Agency-wide, reconcile duties and responsibilities, and determine under which office, protective services or safety and mission, these responsibilities should reside.	Office of Protective Services
47	10/21/19	NASA's Security Management	IG-20-001	7	Establish an Agency-wide policy on calculating protective services costs associated with tenant reimbursable expenses.	Office of Protective Services
48	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
49	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
50	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
51	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

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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
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	2	Perform a cost-benefit analysis of implementing internal EVM during Phase D of LBFD development.	Aeronautics Research
57	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	3	Document and provide the project management approach used by LBFD to the NASA Chief Knowledge Officer to serve as a reference for future large- scale X-plane development projects to be shared across the Agency.	Aeronautics Research
58	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	4	Document and provide the Joint Cost and Schedule Confidence Level (JCL) analysis approach used by LBFD to the NASA Chief Knowledge Officer to serve as a reference for future large-scale X-plane development projects.	Aeronautics Research
59	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	5	Establish a process to be used during source evaluation boards and source selections that includes direct contact with the Center EVM Working Group Representative and cognizant Defense Contract Management Agency (DCMA) office to verify all contractor proposed information related to EVM.	Chief Financial Officer
60	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

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61	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
62	5/6/20	Management of Low-Boom Flight Demonstrator Project	IG-20-015	8	Provide information and training to contracting officers and source evaluation board members on the availability, use, and responsibilities of DCMA during source evaluation boards and source selections. Specifically, the NASA Federal Acquisition Regulation (FAR) Supplement and NASA-DCMA Memorandum of Understanding for Earned Value Management.	Procurement
63	5/7/19	NASA's Heliophysics Portfolio	IG-19-018	2	Complete implementation of 2015 NSWAP tasks in accordance with SWORM subcommittee deadlines.	Science
64	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
65	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
66	11/28/18	NASA's ETDY Travel	IG-19-007	1	Review the ETDY travel authorization and lodging costs after the first 30 days of ETDY travel to validate, adjust, and update, if necessary, the authorized lodging reimbursements to more closely match actual lodging expenses, but not to exceed the 65 percent maximum per diem rate.	Chief Financial Officer
67	11/28/18	NASA's ETDY Travel	IG-19-007	2	Revise NASA policy to explicitly state that actual lodging costs will be reviewed after the first 30 days of ETDY travel and authorizations adjusted, if needed.	Chief Financial Officer
68	11/28/18	NASA's ETDY Travel	IG-19-007	3	Include in all ETDY travel authorizations a statement that lodging costs will be reviewed after the first 30 days of ETDY travel with the corresponding authorized reimbursements adjusted to more closely match actual lodging expenses, but not to exceed the 65 percent maximum per diem rate.	Chief Financial Officer

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69	6/18/19	JPL Network Security	IG-19-022	1	Require all system administrators to review and update the ITSDB to ensure all system components are properly registered in the database, and require the JPL CITO to periodically review the ITSDB for compliance with this requirement.	NASA Management Office
70	6/18/19	JPL Network Security	IG-19-022	2	Segregate shared environments connected to the network gateway for all partners accessing the JPL network and monitor partner activity when accessing the network.	NASA Management Office
71	6/18/19	JPL Network Security	IG-19-022	3	Review and update ISAs for all partners connected to the network gateway to ensure they are up-to-date and made available to the NASA OCIO.	NASA Management Office
72	6/18/19	JPL Network Security	IG-19-022	4	Require the JPL CITO to identify and remediate weaknesses in the SPL ticket process and provide periodic aging reports to the JPL CIO detailing the status of open SPL tickets, pending patches, and outdated security waivers.	NASA Management Office
73	6/18/19	JPL Network Security	IG-19-022	5	Require the JPL CITO to complete its validation and updates of open waivers, perform annual reviews to ensure system representatives are validating the need for the waiver, and provide NASA documentation of these waivers.	NASA Management Office
74	6/18/19	JPL Network Security	IG-19-022	6	Clarify the division of responsibility between the JPL OCIO and system administrators for conducting routine log reviews and monitor their compliance with this requirement on a more frequent basis.	NASA Management Office
75	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
76	6/18/19	JPL Network Security	IG-19-022	9	Develop and implement a comprehensive strategy for institutional IT knowledge and incident management that includes the dissemination of lessons learned to system administrators and other appropriate personnel.	NASA Management Office
77	5/29/19	Management of NASA's Europa Mission	IG-19-019	1	Evaluate current and future critical technical staffing requirements by project over the next 5 years. Assess each Center's ability to provide needed technical staff in critical skills based on projected surplus or shortfall of personnel for current and prospective projects.	Science

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78	5/29/19	Management of NASA's Europa Mission	IG-19-019	4	Continue to implement the instrument cost control plan, including de-scope options, based on balancing cost and Level 1 science requirements for future missions. Include the de- scope option in JCL calculations based on an assessment of the projects' Science Traceability and Alignment Framework.	Science
79	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
80	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
81	3/19/20	Management of Ground and Flight Application Software Development	IG-20-014	1	Establish procedures for continually revising documentation and processes for efficient integration of flight software development and testing requirements to minimize the risks associated with parallel program development.	Human Exploration and Operations
82	3/19/20	Management of Ground and Flight Application Software Development	IG-20-014	2	Document and implement lessons learned regarding the process of identifying, negotiating, and implementing information technology security mitigation steps to obtain remote access and functionality with contractor laboratories.	Human Exploration and Operations
83	9/17/15	NASA's Response to Orbital's 2014 Launch Failure: Impacts on Commercial Resupply of the International Space Station	IG-15-023	7	Consider whether contract provisions relating to the boards should be revised to more closely align with NASA Mishap Investigation Board procedures (NASA Procedural Requirements 8621.1B, Chapter 4).	Human Exploration and Operations
84	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
85	2/18/16	Audit of NASA Space Grant Awarded to the University of Texas at Austin	IG-16-013	3	Establish policies and procedures as part of the NASA Grant and Cooperative Agreement Manual to periodically review a recipient's actual cost match and document award requirements are met prior to obligating the next increment of funding.	Chief Financial Officer

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86	6/28/16	NASA's Response to SpaceX's June 2015 Launch Failure: Impacts on Commercials Resupply of the International Space Station	IG-16-025	6	Update NPR 8621.1B to include commercial space launches with NASA payloads in official mishap policies. a. define commercial space launches with NASA payloads; b. determine the extent to which official NASA mishap policies apply in commercial space launches with NASA payloads; c. describe what types of investigations may occur and the processes to be followed in lieu of an Official MIB; and d. clarify the scope and purpose of each investigation, such as a NASA defined root cause.	Safety & Mission Assurance
87	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
88	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
89	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long- Duration Human Space Fight 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
90	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long- Duration Human Space Fight 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
91	7/30/18	NASA's Efforts to Complete ISS Research to Enable Long- Duration Human Space Fight 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
92	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

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93	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
94	3/17/20	NASA's Management of the Mobile Launcher	IG-20-013	1	Identify immature vehicle load and interface requirements for the ML-2 project and coordinate with appropriate offices to mitigate cost and schedule risks.	Human Exploration and Operations
95	3/17/20	NASA's Management of the Mobile Launcher	IG-20-013	2	Develop a process to ensure contractor performance ratings and related award fees for the ML-2 contract are consistent with established criteria and project outcomes.	Human Exploration and Operations
96	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
97	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
98	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	1	Notify Congress that the SLS Program has exceeded its ABC by at least 30 percent.	Human Exploration and Operations
99	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
100	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	2a	Rebaselining Artemis I costs to appropriately and transparently track costs that include SLS development costs and activities tied to the first SLS launch	Human Exploration and Operations
101	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
102	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
103	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	3	For new acquisitions of SLS deliverables, develop a cost accounting model that separates each deliverable into its own CLIN for tracking costs, performance, and award fees.	Human Exploration and Operations

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104	3/10/20	NASA's Cost Management of the Space Launch System	IG-20-012	4	For large award fee contracts where NASA has on-site personnel, ensure they are appointed in writing and clearly assigned the task of monitoring and reporting on the performance of the contractor.	Human Exploration and Operations
105	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
106	3/19/19	NASA's Progress with Environmental Remediation Activities of the Santa Susana Field Laboratory	IG-19-013	1	Pursue all available options, administrative, legal, or political, to ensure NASA's SSFL soil cleanup is performed in an environmentally and financially responsible manner based on the intended future use of the property.	Marshall Space Flight Center
107	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
108	3/3/20	NASA's Distributed Active Archive Centers	IG-20-011	2	In conjunction with the Earth Science Division, provide comments during the NPR review cycle to the Office of the Chief Engineer for incorporating in both NPR 7120.5E and NPR 7120.8A, language specifying coordination with ESDIS and the OCIO early in a mission's life cycle during data management plan development.	Science
109	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
110	11/14/19	NASA's Management of Crew Transportation to the International Space Station	IG-20-005	5	Continue to ensure the purchase of future commercial space services complies with government contracting regulations.	Human Exploration and Operations

Note: This table omits 62 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	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	1	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
2	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	2	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
3	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	3	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
4	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	4	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
5	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	5	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
6	12/6/18	Memorandum on the Quality Control Review of the Fiscal Year 2016 Audit of Stone Aerospace, Inc. Issued by DeLeon & Stang	IG-19-008	6	NASA determined that this recommendation was classified or sensitive and was therefore unsuitable for public release.	Non-NASA
7	11/7/19	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2019	IG-20-004	1	Reinforce to contracting officers their responsibility to follow the FAR requirement to report procurement award data elements in FPDS-NG within three business days after contract award.	Procurement

Row No.	Issue Date	Report Title	Report no.	Rec no.	Recommendation	Responsible Office
8	11/7/19	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2019	IG-20-004	4	Instruct contracting officers how to complete data fields in FPDS-NG that require manual input, such as the Current Total Value of Award and Potential Total Value of Award fields, and instruct contracting officers to verify that the data in FPDS-NG is consistent with the latest information in SAM when executing an award action.	Procurement
9	5/29/19	Management of NASA's Europa Mission	IG-19-019	3	Evaluate the impact on the entire Planetary Science Division budget portfolio if Clipper's increased funding levels were disrupted and develop mitigation strategies.	Science
10	5/29/19	Management of NASA's Europa Mission	IG-19-019	5	Reassess the Europa Lander prospective project timeline given resource availability, including the SLS Block 1B with the EUS and the inherent project complexities of this magnitude.	Science
11	5/29/19	Management of NASA's Europa Mission	IG-19-019	6	Evaluate the impact that starting Lander Phase-A, delaying the start date, or continuing Pre-phase A research under multiple funding scenarios would have on the entire Planetary Science Division portfolio and report those estimates to stakeholders.	Science
12	5/29/19	Management of NASA's Europa Mission	IG-19-019	8	Coordinate with Congress and other stakeholders to develop achievable project timelines and corresponding funding levels to maintain a balanced science portfolio supportive of NRC priorities.	Science
13	5/29/19	Management of NASA's Europa Mission	IG-19-019	10	Evaluate current and future critical technical staffing requirements, make staffing adjustments to the Clipper project as necessary, and reassess Lander commitments.	Jet Propulsion Laboratory
14	4/5/18	NASA's Management of the Goddard Institute for Space Studies and Related Activities	IG-18-015	4	Hire a senior administrator to serve as a Deputy Chief of GISS for Administration to manage the Institute's grants, cooperative agreements, personnel, and procurement actions.	Goddard Space Flight Center