

# **NASA Office of Inspector General**

## **Open Recommendations as of April 15, 2022**

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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 152 recommendations that remained open as of April 15, 2022.

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 April 15, 2022**

Row no.	Issue Date	Report Title	Report no.	Recommendation	Responsible Office
1	12/1/2023	Audit of NASA's Insider Threat Program	IG-22-009	1. Unclassified Systems Insider Threat Remains Important to Evaluate and Mitigate	Office of Protective Services
2	12/1/2023	Audit of NASA's Insider Threat Program	IG-22-009	2. Establish Cross-Discipline Communications Working Group for Classified + Unclassified Systems	Office of Protective Services
3	1/11/2022	NASA's Management of its Astronaut Corps	IG-22-007	1. Further centralize and maintain its collection, summary, and monitoring of detailed astronaut data to better support the sizing and alignment of the astronaut corps	Human Exploration and Operations
4	1/11/2022	NASA's Management of its Astronaut Corps	IG-22-007	2. Evaluate whether the 15 percent safety margin is sufficient for the current and near future frequency of space flight missions and document the reasoning behind the selected margin.	Human Exploration and Operations
5	1/11/2022	NASA's Management of its Astronaut Corps	IG-22-007	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	Human Exploration and Operations
6	1/11/2022	NASA's Management of its Astronaut Corps	IG-22-007	4. Update internal guidance to document the process for identifying and developing training regimens to align with Artemis mission needs.	Human Exploration and Operations
7	11/30/2021	NASA's Utilization, Management, and Commercialization of Low Earth Orbit	IG-22-005	1. 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.	Human Exploration and Operations
8	11/15/2021	Oversight of FY 2021 Financial Statement Audit	IG-22-004	1. Design and Implement Controls	Chief Financial Officer
9	11/15/2021	Oversight of FY 2021 Financial Statement Audit	IG-22-004	2. Provide Operating Procedures and Training	Chief Financial Officer
10	11/15/2021	Oversight of FY 2021 Financial Statement Audit	IG-22-004	3. Discussions with FASAB personnel	Chief Financial Officer
11	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	1. Develop a realistic, risk-informed schedule that includes sufficient margin to better align Agency expectations with the development schedule	Human Exploration and Operations
12	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	2. Expand upon the existing draft Artemis IMS to include programs outside of AES and ESD to properly align dependencies across directorates	Human Exploration and Operations
13	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	3. Develop an Artemis-wide cost estimate, in accordance with best practices, that is updated on an annual basis.	Human Exploration and Operations
14	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	9. Codify the remaining governance structure such as the Federated Boards and the Joint Directorate Program Management Council (DPMC)	Office of the Administrator
15	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	6. Develop realistic HLS funding profile and schedule given the underfunding of HLS in FY 2021, the selection of one HLS award, and the desire to complete a sustainability contract for future lunar missions.	Human Exploration and Operations
16	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	8. Validate that the annual synchronization reviews meet the intent and expectations of the milestone reviews replaced by the tailored acquisition approach.	Chief Engineer
17	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	7. Identify measurable cost reduction targets for its ESD contractors	Human Exploration and Operations
18	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	4. Maintain an accounting of per-mission costs to increase transparency and establish a benchmark against which NASA can assess the outcome of initiatives to increase the affordability of ESD systems.	Human Exploration and Operations

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19	11/15/2021	NASA's Acquisition Strategy for the Artemis Program	IG-22-003	5. Definitize outstanding Artemis-related contracts and make every effort to definitize contracts within 180 days in accordance with NASA FAR Supplement 1843.7005(a), Definitization (2018)	Human Exploration and Operations
20	11/8/2021	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2020	IG-22-002	1. Reoccurring Training	Procurement
21	11/8/2021	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2020	IG-22-002	2. Correct Inaccuracies	Procurement
22	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	1. Develop and Institute Agency-wide Process to Prioritize and Fund CoF Projects	Strategic Infrastructure
23	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	2a. Revise NPR 8820.2 to Define and Establish Parameters for CoF Funding	Strategic Infrastructure
24	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	2c. Revise NPR 8820.2 to Include Requirements to Reduce and Consolidate the Agency's Footprint	Strategic Infrastructure
25	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	2b. Revise NPR 8820.2 to Require Energy Saving Projects to Consider Life-cycle Costs	Strategic Infrastructure
26	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	3. Institute a Process to Ensure Facility Requirements are Identified and Funding Sources are Specified Early in Development	Strategic Infrastructure
27	9/8/2021	NASA's Management of the Construction of Facilities Process	IG-21-027	4. Reexamine Policies Regarding Oversight of the CoF Program	Strategic Infrastructure
28	8/10/2021	NASA's Development of Next Generation Spacesuits	IG-21-025	2. Develop an Integrated Master Schedule	Human Exploration and Operations
29	8/10/2021	NASA's Development of Next Generation Spacesuits	IG-21-025	1. Adjust xEVA System Schedule to Reduce Risks	Human Exploration and Operations
30	7/14/2021	Universities Space Research Association (USRA)	IG-21-022	12. Transitioning cooperative agreements to contracts	Education Office
31	5/18/2021	Audit of NASA 's Cybersecurity Readiness	IG-21-019	4. Determine Current Cost and Resources	Chief Information Officer
32	5/18/2021	Audit of NASA 's Cybersecurity Readiness	IG-21-019	5. Consolidate A&A as a Single Functional Line of Business within the CyPress Contract	Chief Information Officer
33	5/18/2021	Audit of NASA 's Cybersecurity Readiness	IG-21-019	1. Formalize and integrate EA and ESA and develop metrics	Chief Information Officer
34	5/18/2021	Audit of NASA 's Cybersecurity Readiness	IG-21-019	2. Collaborate with Chief Engineer	Chief Information Officer
35	5/18/2021	Audit of NASA 's Cybersecurity Readiness	IG-21-019	3. Determine Optimal Placement of Enterprise Architect	Chief Information Officer
36	5/18/2021	Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2020	IG-21-020	3. Enhance Guidance	Chief Financial Officer
37	5/18/2021	Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2020	IG-21-020	1. Consultation with OMB	Chief Financial Officer
38	5/18/2021	Audit of NASA's Compliance with the Payment Integrity Information Act for Fiscal Year 2020	IG-21-020	2. Report as instructed by OMB	Chief Financial Officer
39	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	1. Lead Mitigation and Remediation Efforts	Office of the Administrator

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40	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	2. Collaboratively Develop Strategies for ADR and Improving Mitigation Compliance	Office of the Administrator
41	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	3. Invest in Active Debris Removal Methods and Technologies	Office of the Administrator
42	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	4. Prioritize direct measurements needed to fill debris gaps	Office of the Administrator
43	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	5. Explore alternative orbital debris radar assets	Chief, Safety and Mission Assurance
44	1/27/2021	NASA's Efforts to Mitigate Risks Posed by Orbital Debris	IG-21-011	7. Develop and document a formal signature process	Chief, Safety and Mission Assurance
45	12/3/2020	Audit of NASA's Management of Hazardous Material	IG-21-006	6. Standardization for housing of hazardous materials is needed	Chief, Safety and Mission Assurance
46	12/3/2020	Audit of NASA's Management of Hazardous Material	IG-21-006	7. Some hazardous materials shelters not in compliance with guidelines/requirements	Chief, Safety and Mission Assurance
47	12/3/2020	Audit of NASA's Management of Hazardous Material	IG-21-006	5. NASA lacks processes to consistently maintain complete and accurate inventory of hazardous materials	Chief, Safety and Mission Assurance
48	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	6. NASA policy to definitize contracts is not enforced	Human Exploration and Operations
49	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	1. Baseline Gateway requirements and specifications in contract modifications	Human Exploration and Operations
50	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	8. Mature System Requirements Before Acquisitions	Human Exploration and Operations
51	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	5. Credit for Amount Paid to SpaceX	Human Exploration and Operations
52	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	2. Sufficient schedule margin needed for PPE and HALO launch dates	Human Exploration and Operations
53	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	3. HEOMD policy needed for recommended schedule margin	Human Exploration and Operations
54	10/27/2020	NASA's Management of Its Acquisition Workforce	IG-21-002	1. Performance metrics dashboard implementation	Procurement
55	10/27/2020	NASA's Management of Its Acquisition Workforce	IG-21-002	2. Centralized system needed to document contract assignments	Procurement
56	10/27/2020	NASA's Management of Its Acquisition Workforce	IG-21-002	4. Verify if active CORs have met learning requirements	Procurement
57	10/2/2020	Geospatial Data Act Audit	IG-21-001	3. Develop Records Schedules	Chief Information Officer
58	10/2/2020	Geospatial Data Act Audit	IG-21-001	4. Collaborate with NARA Concerning Affiliated Archive Agreements	Chief Information Officer
59	10/2/2020	Geospatial Data Act Audit	IG-21-001	2. Develop Geospatial Data Strategy	Chief Information Officer
60	9/16/2020	Planetary Science Division Portfolio	IG-20-023	9. Procedures lacking for CLPS contractors' past performance and financial risk	Science

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61	9/16/2020	Planetary Science Division Portfolio	IG-20-023	6. Prioritize meeting congressional mandate; cost schedule; request funding	Science
62	9/16/2020	Planetary Science Division Portfolio	IG-20-023	2. Engage Centers and leaders to implement budgetary and accounting system options	Science
63	9/16/2020	Planetary Science Division Portfolio	IG-20-023	7. Proper grant use guidance	Science
64	9/16/2020	Planetary Science Division Portfolio	IG-20-023	3. Instituting mentoring	Science
65	9/16/2020	Planetary Science Division Portfolio	IG-20-023	8. CLPS Interface	Science
66	9/16/2020	Planetary Science Division Portfolio	IG-20-023	10. Quality assurance surveillance plans needed	Science
67	9/16/2020	Planetary Science Division Portfolio	IG-20-023	5. Mission Directorate role in TRL development	Science
68	9/14/2020	Audit of NASA's Management of the SOFIA Airborne Observatory	IG-20-022	7. Tracking science instrument productivity process needed	Science
69	8/27/2020	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	2. Life-cycle management requirements needed	Chief Information Officer
70	8/27/2020	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	3. Controls to monitor and enforce MDM business rules needed	Chief Information Officer
71	8/27/2020	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	4. Revision of cybersecurity policy, guidance, and requirements is needed	Chief Information Officer
72	8/27/2020	NASA's Policy and Practices Regarding the Use of Non-Agency IT Devices	IG-20-021	5. Revision of NSINS is needed	Chief Information Officer
73	7/16/2020	Audit of NASA's Management of the Orion Multi Purpose Crew Vehicle	IG-20-018	2. Adjustment of production schedules for Artemis 4 and 5 is needed	Human Exploration and Operations
74	6/25/2020	FY 2019 FISMA (Review of NASA's Information Security Program)	IG-20-017	IG-20-017 - Recommendation # 9. Implement Process to Review IT Documents Annually	Chief Information Officer
75	5/15/2020	Audit of NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2019	IG-20-016	2. Statistically Valid Estimate	Chief Financial Officer
76	3/31/2020	FY 2020 FISMA (Review of NASA's Information Security Program)	IG-21-014	2. Implement and Monitoring and Surveillance Process	Chief Information Officer
77	3/17/2020	Audit of the Mobile Launcher	IG-20-013	3. Ensure Life-Cycle and Milestone Reviews Include Risks	Human Exploration and Operations
78	3/17/2020	Audit of the Mobile Launcher	IG-20-013	4. Require Separate ABC	Human Exploration and Operations
79	3/10/2020	NASA's Cost Management of the Space Launch System	IG-20-012	2. Review of HEOMD and NASA program management policies	Human Exploration and Operations
80	3/10/2020	NASA's Cost Management of the Space Launch System	IG-20-012	2b. Establish methodologies and processes to track set cost commitments	Human Exploration and Operations
81	3/10/2020	NASA's Cost Management of the Space Launch System	IG-20-012	2c. Determine reporting and tracking procedures for setting cost and schedule commitments	Human Exploration and Operations
82	3/10/2020	NASA's Cost Management of the Space Launch System	IG-20-012	5. Review of each major contract's scope of work is needed	Human Exploration and Operations
83	3/3/2020	Audit of NASA's Management of the Distributed Active Archive Data Centers	IG-20-011	1. Complete an Independent Analysis	Science

Row no.	Issue Date	Report Title	Report no.	Recommendation	Responsible Office
84	11/14/2019	NASA's Management of Crew Transportation to the International Space Station	IG-20-005	2. Fix Safety-Critical Systems Before Crewed Flights	Human Exploration and Operations
85	11/7/2019	Audit of NASA's Compliance with the Digital Accountability and Transparency Act for FY 2019	IG-20-004	2. Assess Timeliness in Verification and Validation Process	Procurement
86	10/21/2019	Audit of NASA's Security Management	IG-20-001	4. Jurisdiction - Agency Wide	Office of Protective Services
87	10/21/2019	Audit of NASA's Security Management	IG-20-001	5. Firearm Carry Policy	Office of Protective Services
88	5/29/2019	Audit of NASA's Europa Mission	IG-19-019	9. Isolating Key Project Personnel from Instrument Selection	Science
89	5/7/2019	NASA's Management of the Heliophysics Portfolio	IG-19-018	2. Implement National Space Weather Action Plan Tasks	Science
90	5/7/2019	NASA's Management of the Heliophysics Portfolio	IG-19-018	3. Reassess HPD's Capabilities and Resources	Science
91	5/7/2019	NASA's Management of the Heliophysics Portfolio	IG-19-018	4. Establish Official Framework for Collaborating	Science
92	3/26/2019	Audit of NASA's Service Contracts	IG-19-014	3. Analyze and Share Lessons Learned Efficiencies	Procurement
93	3/26/2019	Audit of NASA's Service Contracts	IG-19-014	1. Develop Standardized Set of Metrics	Procurement
94	3/26/2019	Audit of NASA's Service Contracts	IG-19-014	2. Require Procurement to Report Data	Procurement
95	10/22/2018	Audit of NASA's Historic Property Management	IG-19-002	2. Develop Comprehensive Procedures for Identifying and Managing Heritage Assets	Strategic Infrastructure
96	10/22/2018	Audit of NASA's Historic Property Management	IG-19-002	3. Evaluate and Justify Existing List of Heritage Assets	Strategic Infrastructure
97	10/22/2018	Audit of NASA's Historic Property Management	IG-19-002	5. Ensure Policy for Using Proceeds Aligns with Agency Goals	Strategic Infrastructure
98	5/14/2018	Audit of NASA's Compliance with the Improper Payments Information Act for Fiscal Year 2017	IG-18-017	3. Develop Process for Tracking Overpayments Identified but Recovered through Contract Credits	Chief Financial Officer
99	4/5/2018	NASA's Management of Goddard Institute for Space Studies and Related Activities	IG-18-015	8. Implement Partnership Best Practices	International and Interagency Relations
100	5/17/2017	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	2. Develop additional construction project guidance	Strategic Infrastructure
101	5/17/2017	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	1. Perform comprehensive review of program-funded construction projects	Strategic Infrastructure
102	5/17/2017	Audit of the Construction of Test Stands 4693 and 4697 at Marshall Space Flight Center	IG-17-021	3. Ensure facility needs are included in program planning and scheduling	Human Exploration and Operations
103	3/9/2017	NASA's Management of Electromagnetic Spectrum	IG-17-012	2. Incorporate SmallSat Guidance into NPD 2570.5 and NPR 2570.1	Human Exploration and Operations
104	11/2/2016	NASA's Management of the Earth Science Portfolio	IG-17-003	1. Update Architecture Plan Every 5 Years	Science

**Note: This table omits 48 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.	Recommendation	Responsible Office
1	3/26/2019	Audit of NASA's Service Contracts	IG-19-014	3. Analyze and Share Lessons Learned Efficiencies	Mission Support Directorate
2	11/10/2020	NASA's Acquisition Strategy for the Lunar Gateway and Artemis Missions	IG-21-004	8. Mature System Requirements Before Acquisitions	Human Exploration and Operations Mission Directorate