National Aeronautics and
Space Administration
Office of the Administrator
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Washington, DC 20546-0001

NPS 1001.103

April 13, 2022

TO: Officials-in-Charge of Headquarters Offices
Directors, NASA Centers

FROM: Administrator

SUBJECT: NASA Administrator's Intent

NASA is at an historic inflection point, poised to begin the most significant series of science and human exploration missions in over a generation. The strategic setting in which NASA continues to push the frontiers of aerospace is complex and continues to evolve. We are encountering robust geopolitical competition that has and will continue to affect our Nation's civil space activities. The growth in government and commercial space capabilities throughout the world presents increasing opportunities for international and industry cooperation–as well as leadership challenges to ensure that our Nation's current and future exploration and scientific activities operate unhindered. While the Agency strives to keep ingenuity and innovation in space science, human exploration, and aerospace technology development unbounded, we must be aware of the fiscal environment and ensure we optimize use of all our resources–our workforce effort, funding, and time.

The purpose of this memo is to establish NASA leadership's overarching priorities for the Agency, in accordance with strategic objectives documented in NASA's quadrennial strategic plan, and to direct the allocation of resources–workforce effort, funding, and time–towards missions, operations, and programs that serve to support those priorities.

NASA Officials-in-Charge (OICs) will ensure that allocation of resources–workforce effort, funding, and time–under their management is aligned to missions, operations, and programs that serve to preserve and strengthen our global competitiveness and leadership in space science and human exploration, aerospace technology development, and space policy and governance. NASA leadership will emphasize the following Agency-wide overarching, time-critical, and cross-cutting activities:

- **Moon-to-Mars Exploration:** Driven by the political, economic, scientific, and inspirational benefits of exploration, NASA will establish and implement a technically and politically resilient architecture for sustained U.S. presence on the Moon, Mars, and throughout the solar system. The architecture should be rooted in strong collaboration with industry and international partners and developed through the following lenses:

    - *Transportation and Habitation*: Develop and demonstrate an integrated system of systems to conduct a campaign of human missions to the Moon and

Mars, living, working, and conducting science on lunar and Martian surfaces, and a safe return to Earth.

- *Infrastructure*: (1) Create a global lunar utilization infrastructure such that U.S. industry and our international partners can maintain a continuous robotic and human presence on the lunar surface for a robust deep space economy without NASA as the sole user, while accomplishing Mars testing and science objectives; (2) Create essential infrastructure to support initial human demonstration missions to Mars.

- *Operations*: (1) Conduct human missions on the surface of and around the Moon followed by missions to Mars; (2) Using a gradual build-up approach, demonstrate technologies and operations to live and work on a planetary surface other than Earth, with a safe return to Earth at the completion of the mission.

- *Science*: (1) Conduct science on the Moon and in cislunar space using integrated human and robotic methods and advanced techniques to address high-priority questions about the Moon and demonstrate methods for future science by astronauts beyond the Earth-Moon system; (2) Address those high-priority planetary science questions best addressed by on-site human explorers aided by robots; (3) Address high-priority heliophysics science and space weather questions best addressed using a combination of humans and robots; (4) Understand fundamental biological effects in fractional gravity and deep space environments to gain new scientific understanding.

- **Climate Change:** NASA is a key stakeholder in mitigating global climate change; direct observations made on and above Earth's surface by NASA show the planet's climate is significantly changing. NASA will continue to lead or partner in providing trusted Earth system research and actionable information, including observations, advanced models, visualizations, and technology to decision makers and the public:

  - *Observations*: Develop and launch the Earth Systems Observatory and other Earth Science satellites to continue to be the world's premier and trusted supplier of climate data.

  - *Accessibility and Outreach*: Elevate NASA Earth Science to the world stage to ensure that all stakeholders have awareness and access to NASA climate and Earth data and new technologies. Set up the Earth Information Center–a multi-agency Earth action-focused center that will share Earth Science data to promote climate equity and help communities and stakeholders prepare for climate change.

  - *Partnerships*: Expand commercial data acquisition and ongoing successful partnerships and determine the appropriate role for NASA in the growing number of commercial entities and not-for-profits conducting climate science research and applications.

- *Technology*: Lead green aerospace–to transform the airline and spaceflight industries and mitigate climate change through vehicle and operations technologies and transition to sustainable fuels.

- *Internal Operations*: Ensure sustainability of NASA operations and institutional programs, including resiliency to changes in climate not only to ensure continued access to space but also to remain a model to the rest of the world as a responsible steward of Earth's environment.

- **Workforce:** People are NASA's most precious resource in enabling our incredible mission. NASA's workforce, spread throughout more than a dozen Centers and facilities, represents the space community's most experienced and skilled personnel and is well-positioned to meet the opportunities and challenges to continue global leadership in space science, human exploration, aerospace innovation, and technology development. We will safeguard this position by:

  - *Shaping the Future*: We will go together–with our workforce and our partners–to meet our mission. We will define and provide clarity on future work content that will drive the Agency continuously forward, resulting in clear and challenging workforce roles needed to enable long-term goals in science, exploration, aerospace, technology, and innovation. We will define the skills needed and move to a shared workforce model that ensures a demand-driven approach to meet future program content and business models.

  - *Fostering and Boosting Agility*: NASA will continue to operate as one inclusive and diverse team across our technical and mission support areas to leverage talent across the entire Agency. Through "Future of Work" we will strive to enable the entire NASA workforce to meet the mission through hybrid work models and responsible infrastructure that rethinks geographical constraints.

  - *Investing in and Empowering our Team*: We will continue to invest in our people today through education and training and for the future through enhancing the use of technology and automated tools. We will inspire our future workforce through a robust communications strategy and internally and externally focused programs related to science, technology, engineering, and mathematics (STEM) education and training. We will continue to empower the workforce at all levels by fostering an environment that values innovation, entrepreneurship, agility, and inclusion.

Given growing capabilities outside NASA, our activities will be increasingly collaborative, both inside the Agency and out, with international partners and with commercial industry, freeing valuable Agency resources to tackle the hardest aspects of space science and exploration. The Agency will bolster these collaborations by encouraging the development of international and commercial aerospace capabilities, promoting market-driven, private-sector space activity in mature operations, while ensuring that the Agency maintains and

nurtures a highly capable aerospace workforce ready for the next pioneering missions, operations, and programs. We will work with our partners to ensure that the United States retains its leadership position in space science, human exploration, aerospace innovation, and technology development, particularly seeking opportunities for early-stage innovation, research, and development. In the implementation of our priorities, we seek to increase decision velocity without compromising safety or performance while following these implementation guidelines and principles:

- NASA will continue to pursue innovative acquisition pathways including partnerships with commercial entities. When making "build-manage-buy-rent" decisions, NASA will focus on roles that are inherently governmental:
    - Direct overall strategic vision for projects, define their architecture, and set their requirements.
    - Support development of projects with workforce effort, management expertise, and funding, taking on the risk of experimental and new innovations.
    - Manage programs with rigor and accountability, maintaining a responsible balance between risk acceptance and mission assurance.
    - Transition to end-users when missions, programs, operations, and technologies are mature and appropriate markets exist in order to facilitate moving Agency resources further out on the technology frontier.
- NASA will strengthen external collaborations with other government agencies, especially in project identification and synergy, early-stage research and development, and technology transfer. Similarly, NASA will seek out international partnerships where partner interests and values are aligned and when such partnerships contribute to overall mission success and timeliness.
- When formulating new and executing existing missions, programs, and operations, NASA will incorporate diversity, equity, inclusion, and accessibility principles, from contracting and procurement to program management and across the entire human capital life cycle. Our programs will utilize the full breadth of our team's talents and will continue to focus on promoting fairness and creating a safe and inclusive workplace. In doing so, we will ensure the desired outcomes of improving all of humanity's access to and use of scientific data and, ultimately, deliver the wonder and inspiration of aerospace to a greater audience.
- As the leading agency in science, space, technology, and engineering, throughout the implementation of these priorities, we will continue to look to inspire, innovate, and create a STEM pipeline for our most precious resource, our next generation. Through Pre-K to Post-Doctorate to our own workforce, the Agency will enhance programs to lead, train, and mentor throughout every directorate, division, department, and Center. We will boldly look for ways to further engage the next generation through

internships and fellowships, competitions and challenges, grants, and programs, and we will explore strengthening our partnerships with other Federal agencies to expand the reach to the student and create a succinct STEM pipeline for future missions to come.

The work conducted at NASA is vital to the strategic interests of the United States and continues to inspire our people at home and throughout the world. We seek to imagine and create "first-ever" missions and approaches that showcase American ingenuity, pioneer new science and technology, improve long-term affordability of aeronautics and space exploration, reinforce U.S. preeminence in space, improve life on Earth, and address critical national challenges. We will continue to incorporate the solar system into our economic sphere and do so sustainably. By responsibly stewarding our resources–workforce effort, funding, and time–and adhering to the overarching priorities discussed above, we will ensure our Nation's continued leadership in aerospace and our Agency's continued pursuit of pioneering, exploration, innovation, and inspiration.