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Statement of

The Honorable Bill Nelson Administrator National Aeronautics and Space Administration

before the

Subcommittee on Commerce, Justice, Science, and Related Agencies Committee on Appropriations United States Senate

Chair Shaheen, Vice Chair Moran, and Members of the Subcommittee, I am pleased to be here to discuss the President's \$27.2 billion request for NASA for Fiscal Year 2024. NASA has set a bold vision for the future, one defined by innovation and exploration throughout the heavens. This request will help prepare NASA to make that vision a reality, through investments in human and robotic exploration throughout our solar system, Earth science, groundbreaking technology, the next generation of air travel, and educating our Nation's future explorers. It's an investment to support good-paying jobs, businesses, and schools that partner with NASA in all 50 states. This request supports almost 150 missions, and I would like to highlight a few for you today.

In November 2022, NASA took the first major step in America's return to the Moon with the Artemis I mission. That historic launch and 25-day mission tested the Space Launch System, Orion spacecraft, and Exploration Ground Systems in preparation for Artemis II in 2024, which will carry humans beyond low-Earth orbit for the first time in more than 50 years. That mission will be followed by Artemis III in 2025, which will return astronauts to the surface of the Moon. The Budget requests more than \$8 billion for the Artemis program, putting the nation on a path to annual crewed missions to the surface of the Moon starting with Artemis IV in 2028.

Through the Artemis campaign, NASA is partnering with the broadest exploration coalition in history, including multiple international and commercial partners. Together, we will continue to develop the technology and systems needed to live and work on and around the Moon in preparation for human missions to Mars. The Budget makes investments in the long-term architecture for Artemis, including enhancements to the Space Launch System, new ground infrastructure, the Gateway lunar space station, space suits, and competition in the Human Landing System program that will enable the first woman and person of color to walk on the Moon.

The missions of tomorrow will be enabled by the technology development of today. With an investment of nearly \$1.4 billion for space technology, the Budget funds development of communications and power systems needed for long-duration stays on the Moon. Investments in new capabilities like advanced propulsion and landing systems will enable humanity's next giant leap to Mars.

The \$4.5 billion request for Space Operations supports continued research on the International Space Station (ISS) with regular crewed missions to this orbiting laboratory through 2030. There, NASA astronauts conduct research on the risks associated with future deep space exploration missions and perform groundbreaking experiments on human health that benefit life on Earth. Increasingly, the ISS is hosting experiments that look back at Earth to help us observe and understand changes to the planet. The Budget positions NASA to continue the space station's legacy in low-Earth orbit after its planned retirement in 2030, with investment in the development of commercial space stations, while also investing in a U.S. capability to safely deorbit ISS at the end of its life. Collectively, these investments will pave the way for sustained American presence in orbit and create scientific and economic opportunities.

In 2022, NASA had the world on the edge of their seats as we revealed the first images from the James Webb Space Telescope. The \$8.3 billion request for science will continue world-leading missions like Webb, Hubble, and Perseverance, as well as enable the next generation of great science with the Nancy Grace Roman Space Telescope, Mars Sample Return, Europa Clipper, Dragonfly, and more. The FY 2024 Request is the highest request for NASA science in history, supporting over 120 NASA science missions and 10,000 U.S. scientists through more than 4,000 openly competed research awards.

Over the past three decades, much of what we have learned about the Earth system has been built on NASA satellite observations and research. The Budget will build on that legacy by funding the next generation of Earth observatories that will give us a 3D-holistic understanding the Earth's systems. The Budget request will make NASA's Earth science data more accessible to Federal, state, and local governments, universities, researchers, and the public through the development of the Earth Information Center and other data initiatives. NASA's direct observations, made on and above Earth's surface, put humanity in the best position to measure and respond to changes in our environment while confronting challenges that impact all of humanity. Focusing our efforts on the Earth, planetary defense, orbital debris, and the safety, security, and sustainability of space will equip policymakers with the best information possible to protect our planet.

Through ambitious experimental programs, including the X-57 electric aircraft, X-59 low boom supersonic aircraft, and the Sustainable Flight Demonstrator, NASA is poised to revolutionize the future of air travel and keep U.S. industry competitive in the global marketplace. The Aeronautics budget request of almost \$1 billion will put the U.S. aviation industry on a path to meet the ambitious goal of net zero emissions by 2050. We are accelerating research and development of aircraft technologies that are safer, faster, and more fuel efficient.

NASA has always dared to make the impossible possible. To do so, the \$158 million request for the Office of STEM Engagement will build the workforce of tomorrow by broadening student participation, expanding K-12 student engagement, and building partnerships to magnify our reach.

NASA's success is made possible by our world class workforce and enabled by our physical infrastructure. The Budget request contains investments to ensure NASA infrastructure, laboratories and critical facilities are safe, secure, and mission ready. Robust investment in construction, revitalization, and maintenance of facilities is essential to ensure NASA can meet our mission requirements.

The President's Budget request for NASA is an investment in our Nation's future. It is an investment in U.S. innovation and competitiveness, and it is an investment in our next generation of workers. It will prepare America to compete – and succeed – in the 21st century.