

**REMARKS FOR ACTING ADMINISTRATOR – AS PREPARED
ROBERT LIGHTFOOT
FISCAL YEAR 2018 BUDGET RELEASE
May 23, 2017**

Welcome to everyone across the agency. It's my pleasure to join you for this second half of our budget rollout, which is not going to be that much different than the first, except our Fiscal Year 2018 budget is now no longer skinny. There's some flesh on the bones. It happens to all of us.

But seriously, my basic message, as I said back in March when we first got our numbers for next year, is 'keep going!'

I want to reiterate how proud I am of all of you for your hard work – which is making a real difference around the world. NASA is leading the world in space exploration, and that is only possible through all of your efforts, every day.

I mean, today we'll have an RS-25 engine controller test at Stennis and before that was the 200th spacewalk aboard the ISS, and today astronauts also completed a contingency spacewalk to remove and replace a failed data relay box. Cassini keeps making its daring final dives through Saturn's rings. Later this week, we'll partner with industry and the FAA to test the capabilities of new Unmanned Aircraft Systems, specifically flying drones beyond the pilot's line of sight. Space Tech flies to the station again on the next SpaceX mission, targeted for next week, with the Station Explorer for X-ray Timing and Navigation Technology, or SEXTANT, to examine neutron stars onboard the NICER instrument.

And today, we have the full Fiscal Year 2018 budget. We knew the contours back in March, and that has not changed. We're pleased by our top line number of \$19.1 billion, which reflects the President's confidence in our direction and the importance of everything we've been achieving.

We've had a horizon goal for some time now of reaching Mars, and this budget sustains that work and also provides the resources to keep exploring our solar system and look beyond it. And it enables us to keep innovating and creating the technologies that will take us to deep space and improve the aeronautics systems that all of us rely on.

The hard choices are still there. We can't do everything, but we can certainly do a lot.

If you want to see the documents for yourself, you can go to nasa.gov/budget.

The President has noticed our work, and so has the rest of the world.

- Astronaut Peggy Whitson now holds the record for most time spent in space, and the President called to congratulate her.
- Our rovers on Mars and our orbiters above it continue to outperform expectations and help us prepare for human missions to the Red Planet.

- The James Webb Space Telescope is built! It's done testing at Goddard and now has moved to Johnson for tests to simulate the vacuum of space.
- SLS and Orion are far beyond concepts, and as I mentioned, components are being tested in multiple ways right now as we move toward the first flight of that integrated system.
- Solar electric propulsion for our deep space missions is moving ahead.
- Our next X-plane is in development to advance supersonic flight.

Each of you, every day, is helping to create that future and keeps us focused on the big picture that informs everything we do.

We see our work in the context of making life better for everyone on the planet, and that unfolds in a lot of ways.

I like to say that we can never forget the 'N' in NASA stands for National, because we're not Headquarters, or Johnson or Kennedy or Goddard. We're no single program or mission. We cover a broad spectrum of well-thought-out programs that are still aligned with the Space Act that founded us nearly 60 years ago. We've maintained what we like to call our "continuity of purpose" over time by serving the American public and supporting a number of national priorities

As NASA approaches its 60th anniversary in 2018, the FY18 request will maintain NASA's place as the global leader in space. We appreciate the bipartisan commitment to that continuity of purpose. It's essential that our near term work be stable as we plan for the long term and look toward the next horizons.

NASA's goals extend over decades, and our budget request supports the necessary progress we need to make in FY 2018 toward those long term goals.

The NASA Transition Authorization Act and the FY 2017 appropriation we recently received also represent important contributions to that continuity.

You know, if you can allow me to get a little deep here, NASA has a historic and enduring purpose. It can be summarized in three major strategic thrusts: Discover, Explore, and Develop.

These correspond to our missions of scientific discovery, missions of exploration, and missions of new technology development in aeronautics and space systems.

NASA is focused on these missions, but we never lose sight of the other contributions that our unique achievements make possible. NASA missions inspire the next generation, inject innovation into the national economy, provide critical information needed to address national challenges, and support global engagement and international leadership.

As the President has said, American footprints on distant worlds are not too big a dream. NASA is executing programs, step by step, to make this dream a reality, as well as the broader quest to explore and understand the universe.

Some of our newer missions that will deliver these benefits will reach some significant milestones in the coming years. The list of just a few is pretty amazing: The Solar Probe Plus (SPP), Transiting Exoplanet Survey Satellite (TESS), the InSight Mars lander, and, as I mentioned, the Webb Telescope, are on track to launch in 2018, and the next Mars rover is on pace for a 2020 launch. The first in a new series of those experimental X-planes will fly in 2021 to begin investigating low boom supersonic flight.

Working with commercial partners, NASA will fly astronauts from American soil on the first new crew transportation systems in a generation in the next couple of years. As I mentioned, we are continuing the development of solar electric propulsion for use on future human and robotic missions. NASA is fabricating and assembling the systems to launch humans into lunar orbit by 2023.

Our budget request supports progress toward these and a lot of other major milestones as part of the diverse portfolio of work we execute as we explore, discover, and develop on behalf of the American people.

Each of you in the field knows the full scope of what I'm talking about because you're working it every day. I've had the chance to visit a lot of you where you work, both as Acting Administrator, and in my career here since 1989, and I know about the challenges, and the pride. The dedication and the excitement. It's what fuels our success.

While this budget no longer supports the formal Office of Education, NASA will continue to inspire the next generation through its missions and the many ways that our work excites and encourages discovery by learners and educators. Let me tell you, we are as committed to inspiring the next generation as ever. We're going to engage the public in the compelling story of exploration by the successful and safe execution of our missions, which is where our focus has to be.

At the same time, we're going to take this opportunity for NASA to revisit the public engagement and outreach activities that take place on the ground at centers every day to ensure that we are leveraging the synergies between education and outreach to facilitate meaningful connections.

I don't think there's another workforce that does more to inspire others than all of you do. The willingness to share your time and expertise, to mentor, and the overall impact of your work across the globe, will continue to be a shining beacon for those who want to follow us.

Each of our successes inherently bring with them the inspiration that is going to make someone -- lots of someones -- perhaps on the other side of the globe, want to take up the STEM mantle and see how they can join our journey or carve their own niche.

And we need to do that – inspire and share the excitement of what we do. Each one of us is leading the agency in our own way, across the nation, and we need to be looking for our replacements!

I look at the young faces I see at conferences, at downlinks with astronauts, and in so many other events, and I see the leaders of tomorrow. I see the Mars Generation. They're fired up. And we're going to keep bringing all the special assets and potential of NASA – the things this budget enables -- to bear on the challenges of getting more and diverse people following in our footsteps.

While you can get all the details online, I did want to mention some other specifics about the budget. In Science, for instance, this budget supports about 100 space missions -- 40 missions currently preparing for launch and 60 operating missions, including those I've already mentioned. Our work here leads the world in its size, scope and output.

While we are not proposing to move forward with Orbiting Carbon Observatory-3 (OCO-3), Plankton, Aerosol, Cloud, ocean Ecosystem (PACE), Climate Absolute Radiance and Refractivity Observatory Pathfinder (CLARREO PF), and the Radiation Budget Instrument (RBI), this budget still includes significant Earth Science efforts, including 18 Earth observing missions in space as well as airborne missions.

The budget keeps us on track for the next selection for the New Frontiers program, and includes formulation of a mission to Jupiter's moon Europa. It supports research on space weather and upcoming Heliophysics missions, and continues support for the Wide-Field Infrared Survey Telescope, or WFIRST, which will eventually succeed Webb.

Most of you know that NASA's Aeronautics research program advances U.S. global leadership by developing and transferring key technologies to make aviation safer, greener, and more efficient.

This budget takes the next significant step in the New Aviation Horizons initiative -- the bold series of experimental aircraft known as X-planes that I mentioned -- and systems demonstrations towards revolutionary aircraft and improving the efficiency of the national air transportation system. It helps us demonstrate and validate transformative concepts and technologies in flight. You don't have to be an engineer to appreciate that. Just a traveler.

Our Space Technology program enables rapid development and incorporation of transformative space technologies in NASA's future missions, which increases our nation's overall capabilities and helps industry as well. The budget supports our diverse portfolio, which is creating a technology pipeline to solve the most difficult challenges in

space from solar electric propulsion to laser communications and cross cutting technologies that benefit our work across the board.

While we are ending formulation of a mission to an asteroid, known as the Asteroid Redirect Mission, many of the central technologies in development for that mission will continue, as they constitute vital capabilities needed for future human deep space missions.

We have a budget that provides the necessary resources in the coming year to support our plans to send humans to Mars orbit in the 2030s.

- The European service module will be delivered to Kennedy for integration with Orion in 2018.
- Prototype ground testing of habitat modules under our broad area announcement activity will happen in 2018.
- The International Space Station, commercial crew and cargo, and the Space Launch System and Orion all continue to advance our future in space with this budget.
- Having an additional NASA crew member on ISS will greatly enhance the research and advancement towards exploration, and
- The ISS continues to create new opportunities for collaboration with industry and supports public-private partnerships for exploration systems that will extend human presence into the solar system.

There's a lot to look forward to.

For me, when we look at our overall resource scenario, it's not from an "and/or" perspective. We can't do everything, but we also don't have to exclude small projects because we have only flagships. We need both industry AND government in space exploration.

We've been evolving a new way of doing business that involves industry and international partners on a greater scale, and it includes the amazing work that all of you are doing, and have done historically, in-house, to design and develop some of the most amazing missions this world has ever seen. We need commercial partners to succeed in low-Earth orbit, and we also need the SLS and Orion to take us deeper into space than ever before.

We want big contractors and small contractors. Institutional knowledge and the brightest young minds that are full of ideas but also need training.

It's a combination of a lot of things that makes today's NASA such a vibrant, hopeful place.

The program of exploration and discovery we propose with this budget should be a source of pride for all of you, and our country. Our history gives us confidence that the

resources we are requesting represent an investment that will return to the country multiplied many times.

A big part of that investment is what we put into NASA, together. The impact of our work is immense, and we have great momentum and support to keep moving ahead. I look forward to working with all of you over the coming year and to seeing next year just how far we've come.

Thank you.