

**As Prepared**

**REMARKS FOR ACTING ADMINISTRATOR**

**ROBERT LIGHTFOOT**

**FLORIDA AEROSPACE AND DEFENSE**

**WORKFORCE/STEM SUMMIT**

**Nov 16, 2017**

**It's great to be here today celebrating the Florida workforce.**

**Here on the Space Coast, NASA has always relied on a skilled and diverse workforce, and you've helped us launch some of the greatest missions in human history. Together, we stand tall on the world stage because of the hard work and dedication of this community.**

**My friend Bob Cabana has done a tremendous job in steering the Kennedy Space Center through a time of transition from**

our flagship space shuttle program and guiding the center's transformation into a multi-user spaceport.

If you visit Kennedy today, you can see the **launch pads where our commercial partners launch**, and the pad where we're going to **launch the Space Launch System rocket**, the biggest ever built, by 2020. There's a huge effort to create **cutting edge ground systems** to support a new generation of launches, and the workforce has been critical to helping us not only develop the new infrastructure for this transformation, but also the mindset that keeps us nimble and innovative and thinking of fresh ways to meet the challenges of tomorrow.

We're **always looking toward the future**, and Kennedy represents a very tangible example of how we're bringing it to life.

I always tell my staff that **we need to be looking for our replacements**. We've been given a trust, if you will, the privilege

of guiding NASA for a certain period of time. And I think we all have our hopes and dreams of what we want to accomplish.

But just as we stand on the shoulders of greatness to look towards the next horizon, **we're also building a foundation today for the next generation to achieve its own milestones.**

We like to say **the first person to walk on Mars is in a middle school classroom today**, and I think that's true. Sometimes we imagine them staring out the window dreaming of space travel, but I hope they're paying attention to the blackboard and planning a rigorous academic schedule that will help prepare them for the path ahead!

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 to bear on the challenges of getting more people of all backgrounds following in our footsteps.

**Our field is not easy.** Not only is the course of study challenging, the work itself also requires big vision and big commitment. By necessity, we have to plan for the long term, and there's no guarantee that our mission will survive not only budgeting, but then developing, testing, launch, flight... you name it.

Of course, then you get **the rewards -- the exhilaration of a New Horizons team as their spacecraft zoomed by Pluto**, with many of those people having worked on it for a big chunk of their careers. Or the grand finale of **Cassini** that we just saw at Saturn, which caps decades of work, and the final hurrah of an impressive spacecraft that its team is understandably fond of.

And of course, there are too many **astronaut heroes** to name, most recently Peggy Whitson, who holds the record for cumulative time in space by an astronaut, and our new class of 12

astronaut candidates, who I know are going to shine and engage literally millions of people around the world.

We picked those 12 from a pool of more than 18,000 applicants, so the **dream of becoming an astronaut is certainly alive and well** for a lot of people. And we've got a lot of things for them to do, whether that's flying the upcoming commercial systems our partners are developing to take us back to low-Earth orbit from American soil, or the SLS and Orion, or the missions to the Moon and Mars and possibly other destinations that we're building the foundation for right now.

The excitement of a **Curiosity** rover landing on Mars, or an **astronaut talking to kids from space** -- these are the **kinds of experiences we're trying to create and promote**, not only for the good of humanity, but also to fire up that inspiration that makes others want to follow us. The kinds of things that are going

to make people want to join NASA, or really the entire aerospace field.

Because, again, **the first people going to Mars are walking on this planet today.** And the work NASA is putting forward and safely executing, is the tether that's going to hook them into this great field of ours.

I'm very confident that **our future is going to be in good hands with our young people.** And, I think we're leaving them in pretty good shape, at least in space and technology! Right now we're putting together a mission to Jupiter's moon Europa, another lander to Mars, commercial supersonic air travel, and the technology to take humans to farther destinations in our solar system, just for starters.

This year we celebrated five years of **Curiosity** on Mars, and the **40<sup>th</sup> anniversary of the Voyager launches**, the most durable satellites ever built and now the farthest traveled as well.

We have robust **Earth observation** capabilities, people working around the nation on technologies to live and work in space and on other worlds for the long term, technology demos aboard the station of robotics and habitats and growing plants in space, and research to mitigate the problems from living in microgravity.

Our ongoing “**STEM on Station**” initiative is helping teachers bring space into the classroom with lesson plans, activities, opportunities, videos, still imagery and the latest station news about our astronauts and the hundreds of experiments they’re helping us carry out on orbit at any given time.

The **Year of Education on Station** is another initiative that takes advantage of the unique capability of the space station to

stimulate the interest of students from kindergarteners to post-graduates.

Right now astronaut **astronaut Joe Acaba, a former teacher, is aboard the station and sharing his love of science, technology, engineering and math** and his passion for teaching as he undertakes some of the lesson plans that Christa McAuliffe had planned to do as the first Teacher in Space. He'll be followed by his colleague **Ricky Arnold, another teacher heading to the Space Station next year.**

And just as a side note: we also now have a newly redesigned site, **[interns.nasa.gov](https://interns.nasa.gov)** that students can access if they're interested in employment with NASA.

**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. We're going**

to continue engaging 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.

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 center, or program or mission. We cover a broad spectrum of work that is 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.

And we **never lose sight of the other contributions that our unique achievements make possible**. We see our work in the context of **making life better for everyone on the planet**, and that unfolds in a lot of ways – from **increasing economic opportunities** and **national security**, to enhancing **diplomatic**

**relationships**, and **addressing societal issues** such as how we deal with health issues or natural disasters, that affect people all across the planet.

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 part of our broader quest to explore and understand the universe.

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 NASA employees 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.**

We're going to need the astronauts, but also the mission controllers. We need the engineers to design our human spaceflight systems and the spacecraft and instruments to travel to new worlds and look beyond our solar system. We need the scientists in all fields, as well as the program managers and

storytellers and administrative professionals. So **no matter what your background is, chances are we need your skills in some part of the grand canvas of our exploration endeavor.**

And you know, the **horizon for all this is the civilization-level game changer of humans reaching Mars.** Our world is not going to be the same after that event, just as it was forever changed when we landed on the Moon and newspaper headlines around the world talked about humanity's accomplishment. We were unified and cheering on behalf of the entire human race.

**It's a huge commitment,** and one of the things that keeps us going in this field is the knowledge that we will never be done. I hope those of you who are ready to join us on this journey of discovery will keep working at it, keep trying until you find the place that's right for you. We need new perspectives and ideas. We need it now, and we need it to be there as we hand off the

torch to a new generation. If that's you, **we look forward to you joining us.**

**Thank you.**