

AS PREPARED
REMARKS FOR ACTING ADMINISTRATOR LIGHTFOOT
CHALLENGER CENTER ANNUAL CONFERENCE
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It's great to be here with all of you. The work you are doing to carry on the legacy of the Challenger crew and to create our next generation of explorers is tremendously important.

I know you've heard from a lot of people who work every day in education and help to make sure our young people have the information and inspiration they need to make the commitment to science, technology, engineering and math, but I wanted you to know it's a priority for me as well.

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 schedule that will help prepare them for the path ahead!

Because being in 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 have to imagine the exhilaration of a New Horizons team as their spacecraft zoomed by Pluto, with many of them having worked on it for a big chunk of their careers. Or the upcoming finale of Cassini, 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 as they fly the first commercial space flights and the first missions aboard Orion and the Space Launch System rocket. By the way, they report for work on Aug. 21, solar eclipse day. I don't know if that's an omen of awesomeness, but it's pretty cool.

These are the kinds of experiences I know all of us are 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.

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

We have a rich history and an exciting future. I want to give another shout-out to some of the heroes who have come before us, including Katherine Johnson, the subject of the Hidden Figures book and movie, who turns 99 in just a couple of weeks. People like Katherine demonstrate the dedication our field inspires – to overcome personal, professional and societal obstacles to get down to basics and achieve mission success. I know John Glenn was happy that Katherine persevered in her work!

Coming up just around the corner, as I mentioned, is one of these great opportunities to capture interest in what we do – a total solar eclipse – the first one visible across North America in 99 years. We've been working with Mother Nature to coordinate things, and it's going pretty well.

NASA is going to have people at "totality cities" across the nation, at universities and museums and science centers, explaining what's happening and talking about the vast array of cool things we're studying not only in heliophysics and space weather, but across the board.

I'm pleased to join a number of experts aboard a plane flying from the West Coast, where we'll be able to see this incredible natural event above the clouds. Not too many people have that chance, so I'm proud of the work NASA is doing to maximize the impact of this once in a lifetime occurrence, and I know the Challenger Center is also capitalizing on this opportunity.

You know, as I travel around the world, I've been struck by a certain commonality among our young people. It's not that they're the same, but that they share a deep and infectious enthusiasm – for the future, for their aspirations in science, technology, and space, and their willingness to be part of a global community working on something greater for all humanity.

So I'm very confident that our future is going to be in good hands with these 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.

We just celebrated five years of Curiosity on Mars. Upcoming is the 40th 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.

A sounding rocket launching from Wallops on Saturday is going to carry student payloads from 15 institutions across the country. Students have built and launched small sats on the space station, including STMSat-1, built by middle schoolers. Boy Scouts in California spoke to space station astronauts on Monday. Our astronauts engage millions on social media. Universities are involved in our 3-D Printed Habitat Challenge and the Mars Ice Challenge, where students designed technology for extracting Martian subsurface ice. Many other challenges are active right now that invite student participation, such as the CubeQuest Challenge, where teams build flight ready satellites and compete to become a secondary payload on Orion. There are a lot of opportunities for hands on experiences right now – no matter where you are in the education pipeline.

So the legacy of the Challenger crew is strong.

You know, the Challenger tragedy was fresh in everyone's minds when I started at NASA in 1989. We hadn't even been flying again for a year yet when I reported for duty at the Marshall Space Flight Center as an engineer working on space shuttle main engines. I think anyone working at NASA at that time has never forgotten what it meant to carry on the work of those who had sacrificed so much to push the boundaries of human achievement.

That's why I'm so grateful to Ricky Arnold and Joe Acaba for taking Christa McAuliffe's lesson plans and doing them from space. Finally, actual teachers will be doing what Christa had envisioned back when she was training for her mission.

And I thank the Challenger Center for archiving these lessons and making them available. It's a really moving and important commitment by Joe and Ricky, and I applaud them. And that work will be available and have an impact for a long time. It's an amazing opportunity to inspire the next generation of explorers while paying tribute to Christa's legacy and teachers around the world.

Our ongoing "STEM on Station" is an example of how NASA creates opportunities solidly anchored in our primary mission as an exploration and technology agency. Since this is evolving over a year, please continue to check back at the STEM on Station website for new ways to get involved.

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.

We may not be funding a formal office of education in the current budget request, but that doesn't mean NASA won't be inspiring and contributing to learning and classroom experiences across the world. 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 NASA's. The willingness to share its time and expertise, to mentor, and the overall impact of its work across the globe, will continue to be a shining beacon for those who want to follow us.

And the Challenger Centers are a critical part of that work to build bridges, to collaborate and make the most of the amazing material we have to educate and inspire. Have you seen the pictures Juno's been sending back of Jupiter? Will Cassini figure into lesson plans about our solar system and astrophysics? Will today's astronauts and their missions inspire others to follow in their footsteps? You bet.

What you're doing is very important. Together, we take the amazing things happening in space today, and bring today's students into a sense of ownership and inclusion in what can seem daunting and huge. It's been over a generation now since we lost Challenger, but the impact of that crew and your work to carry on their legacy is still deeply felt, so I think it's pretty clear that what we're doing today is going to matter tomorrow.

Thank you for everything you're doing, and keep going!