



1  
00:00:07,149 --> 00:00:13,300  
This Week at NASA...

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00:00:13,300 --> 00:00:17,680  
During a Google+ Hangout NASA announced its newest class of astronaut trainees.

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00:00:17,680 --> 00:00:23,820  
The eight candidates selected to the 2013 astronaut class were chosen from a pool of

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00:00:23,820 --> 00:00:27,470  
63-hundred applications -- the second largest NASA has ever received.

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00:00:27,470 --> 00:00:33,110  
"This new class of four women and four men comes from diverse backgrounds.

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00:00:33,110 --> 00:00:38,230  
But they share the qualities our astronauts have always had; a desire to excel and reach

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00:00:38,230 --> 00:00:43,369  
new frontiers and to keep America the world's leader in space exploration."

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00:00:43,369 --> 00:00:47,869  
In August, the group will begin a wide array of technical training at Johnson Space Center,

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00:00:47,869 --> 00:00:51,440  
other NASA centers and space agencies around the world.

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00:00:51,440 --> 00:00:59,650  
For more details on the 2013 NASA Astronaut Candidates visit <http://www.nasa.gov/astronauts/2013astroclass.html>.

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00:00:59,650 --> 00:01:07,680

The  
NASA Science Day on Capitol Hill provided

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00:01:07,680 --> 00:01:12,470

an opportunity to showcase for members of  
Congress and the public, the work and accomplishments

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00:01:12,470 --> 00:01:14,970

of the agency's Science programs.

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00:01:14,970 --> 00:01:19,900

Associate Administrator for Science John Grunsfeld  
was among NASA officials at the event, which

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00:01:19,900 --> 00:01:24,850

included exhibits and presentations, on the  
agency's work with asteroids and other Near

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00:01:24,850 --> 00:01:25,850

Earth Objects ...

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00:01:25,850 --> 00:01:31,130

"We want to know their size, we want to know  
their shape, we want to know how they spin.

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00:01:31,130 --> 00:01:33,200

We want to know what they're made of."

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00:01:33,200 --> 00:01:36,390

Space observatories like the Hubble and James  
Webb Space Telescopes ...

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00:01:36,390 --> 00:01:39,770

"Our ambition is to see as far back as you  
could see.

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00:01:39,770 --> 00:01:43,510

To see the very first objects that formed  
after the early universe."

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00:01:43,510 --> 00:01:48,360

And also discussed were planetary missions, space weather and a host of other Science

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00:01:48,360 --> 00:01:53,200

programs conducted by NASA for the benefit of all humankind.

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00:01:53,200 --> 00:01:59,140

NASA's Dryden Flight Research Center recently conducted a Technology Day, giving center

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00:01:59,140 --> 00:02:03,840

employees an opportunity to learn about the diverse range of technologies being developed

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00:02:03,840 --> 00:02:09,110

by their colleagues, including air traffic control innovations, fiber optic sensors and

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00:02:09,110 --> 00:02:10,619

a virtual desktop.

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00:02:10,619 --> 00:02:15,920

These projects not only have real-world applications to aviation, but also potential in the consumer

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00:02:15,920 --> 00:02:18,980

market.

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00:02:18,980 --> 00:02:24,969

NASA research indicates that hunks of frozen carbon dioxide, or dry ice may be responsible

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00:02:24,969 --> 00:02:30,379

for gullies seen on Martian sand dunes in images taken by NASA's Mars Reconnaissance

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00:02:30,379 --> 00:02:31,379

Orbiter.

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00:02:31,379 --> 00:02:32,379

Researchers believe the gullies are created when the chunks of dry ice glide down the

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00:02:32,379 --> 00:02:33,379

sand dunes on cushions of gas, like mini-hovercraft.

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00:02:33,379 --> 00:02:37,209

Scientists came to this conclusion by examining the images taken by MRO and performing experiments

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00:02:37,209 --> 00:02:42,879

on sand dunes in Utah and California.

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00:02:42,879 --> 00:02:49,769

Eleven robotics teams from the US, Canada and Estonia competed for a possible \$1.5 million

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00:02:49,769 --> 00:02:55,310

in prize money during the second NASA Centennial Challenges Sample Return Robot Challenge at

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00:02:55,310 --> 00:02:59,680

Worcester Polytechnic Institute in Massachusetts.

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00:02:59,680 --> 00:03:08,819

"Team Survey" of Los Angeles, the winning squad was awarded \$5,000 for successfully

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00:03:08,819 --> 00:03:14,180

completing Level 1 of the competition The two-day challenge, designed to encourage innovations

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00:03:14,180 --> 00:03:19,969

in autonomous navigation and robotics technologies is part of NASA's Space Technology Mission

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00:03:19,969 --> 00:03:23,439

Directorate.

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00:03:23,439 --> 00:03:28,559

NASA Administrator Charlie Bolden handed out certificates and congratulations to graduates

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00:03:28,559 --> 00:03:33,829

of the agency's Systems Engineering Leadership Development Program during a recent ceremony

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00:03:33,829 --> 00:03:35,069

at NASA Headquarters.

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00:03:35,069 --> 00:03:39,779

"One of the things that is so good about this and many of the other leadership training

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00:03:39,779 --> 00:03:43,879

programs we do is that it brings people together from diverse backgrounds."

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00:03:43,879 --> 00:03:48,739

The year-long program includes mentoring, coaching, technical training and developmental

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00:03:48,739 --> 00:03:53,480

assignments to help develop knowledge, skills, and experience needed to meet the challenges

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00:03:53,480 --> 00:04:01,279

of systems engineering leadership at NASA.

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00:04:01,279 --> 00:04:06,599

Also at NASA headquarters, Associate Administrator for Education, Leland Melvin welcomed a group

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00:04:06,599 --> 00:04:11,189

of students from Washington's Amidon-Bowen

Elementary School for the culmination of the

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00:04:11,189 --> 00:04:13,330

six week I'm an Engineer!

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00:04:13,330 --> 00:04:18,400

program, which engages students in Engineering Science and Technology with activities such

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00:04:18,400 --> 00:04:21,019

as build and testing their own space vehicles.

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00:04:21,019 --> 00:04:26,110

"So all these people together, like your teachers, your parents, the people here working, are

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00:04:26,110 --> 00:04:29,569

all a team to help you get to Mars one day, right?"

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00:04:29,569 --> 00:04:35,000

Part of NASA's Beginning Engineering Science and Technology, or BEST activity guides, the

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00:04:35,000 --> 00:04:36,370

I'm and Engineer!

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00:04:36,370 --> 00:04:40,760

program is jointly sponsored by the agency's Office of Education and the Office of Diversity

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00:04:40,760 --> 00:04:45,060

and Equal Opportunity.

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00:04:45,060 --> 00:04:50,290

Goddard Space Flight Center recently welcomed nearly 300 college students to an orientation

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00:04:50,290 --> 00:04:53,880

for the Center's 12-week summer internship program.

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00:04:53,880 --> 00:04:58,449  
The interns will get work experience in areas ranging from the robotics lab to the Office

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00:04:58,449 --> 00:05:03,070  
of Communications and have an opportunity at the conclusion of the program to showcase

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00:05:03,070 --> 00:05:04,680  
their accomplishments.

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00:05:04,680 --> 00:05:09,569  
Programs like this help NASA engage students in the science, technology, engineering and

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00:05:09,569 --> 00:05:16,419  
math disciplines, as well as communications and other areas vital to business.

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00:05:16,419 --> 00:05:22,460  
Thirty years ago on June 18, 1983 the late Sally Ride began her first spaceflight ...

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00:05:22,460 --> 00:05:28,919  
"And liftoff, liftoff of STS-7 and America's first woman astronaut."

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00:05:28,919 --> 00:05:33,740  
Becoming the first American woman to travel to space, as she and her four crewmates launched

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00:05:33,740 --> 00:05:37,599  
from Kennedy Space Center aboard space shuttle Challenger, on STS-7.

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00:05:37,599 --> 00:05:42,659  
"The fact that I was going to be the first

American woman to go into space carried huge

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00:05:42,659 --> 00:05:45,480

expectations along with it.

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00:05:45,480 --> 00:05:50,220

I tried to block out pretty much everything that was going on around me because it would

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00:05:50,220 --> 00:05:55,819

have been way too easy to just be lost in the moment."

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00:05:55,819 --> 00:06:02,020

A long time advocate of education, Ride later founded Sally Ride Science to educate, engage,

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00:06:02,020 --> 00:06:05,479

and inspire students in STEM education.

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00:06:05,479 --> 00:06:10,659

NASA recently honored Ride by creating a new agency internship program in her name and

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00:06:10,659 --> 00:06:15,490

renaming the EarthKAM science instrument aboard the International Space Station, the Sally

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00:06:15,490 --> 00:06:17,169

Ride EarthKAM.

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00:06:17,169 --> 00:06:20,949

Ride passed away in July 2012.

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00:06:20,949 --> 00:06:22,810

And that's This Week @NASA.