



Science Day on the Hill



0:00

1
00:00:07,509 --> 00:00:11,590
This Week at NASA...

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00:00:11,590 --> 00:00:16,200
The NASA Science Day on Capitol Hill provided an opportunity to showcase for members of

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00:00:16,200 --> 00:00:21,250
Congress and the public, the work and accomplishments of the agency's Science programs.

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00:00:21,250 --> 00:00:26,180
Associate Administrator for Science John Grunsfeld was among NASA officials at the event, which

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00:00:26,180 --> 00:00:31,119
included exhibits and presentations, on the agency's work with asteroids and other Near

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00:00:31,119 --> 00:00:32,119
Earth Objects ...

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00:00:32,119 --> 00:00:37,390
"We want to know their size, we want to know their shape, we want to know how they spin.

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00:00:37,390 --> 00:00:39,480
We want to know what they're made of."

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00:00:39,480 --> 00:00:42,659
Space observatories like the Hubble and James Webb Space Telescopes ...

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00:00:42,659 --> 00:00:45,409
"Our ambition is to see as far back as you could see.

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00:00:45,409 --> 00:00:49,800
To see the very first objects that formed

after the early universe."

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00:00:49,800 --> 00:00:54,639

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

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00:00:54,639 --> 00:00:59,469

programs conducted by NASA for the benefit of all humankind.

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00:00:59,469 --> 00:01:05,420

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

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00:01:05,420 --> 00:01:10,110

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

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00:01:10,110 --> 00:01:15,370

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

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00:01:15,370 --> 00:01:16,900

a virtual desktop.

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00:01:16,900 --> 00:01:22,290

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

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00:01:22,290 --> 00:01:25,260

market.

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00:01:25,260 --> 00:01:31,240

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

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00:01:31,240 --> 00:01:36,500

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

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00:01:36,500 --> 00:01:37,500

Orbiter.

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00:01:37,500 --> 00:01:38,500

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

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00:01:38,500 --> 00:01:39,500

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

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00:01:39,500 --> 00:01:43,490

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

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00:01:43,490 --> 00:01:49,070

on sand dunes in Utah and California.

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00:01:49,070 --> 00:01:56,050

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

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00:01:56,050 --> 00:02:01,570

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

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00:02:01,570 --> 00:02:06,060

Worcester Polytechnic Institute in Massachusetts.

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00:02:06,060 --> 00:02:15,090

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

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00:02:15,090 --> 00:02:20,439

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

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00:02:20,439 --> 00:02:26,030

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

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00:02:26,030 --> 00:02:29,720

Directorate.

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00:02:29,720 --> 00:02:34,840

NASA Administrator Charlie Bolden handed out certificates and congratulations to graduates

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00:02:34,840 --> 00:02:40,040

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

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00:02:40,040 --> 00:02:41,340

at NASA Headquarters.

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00:02:41,340 --> 00:02:46,170

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

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00:02:46,170 --> 00:02:50,099

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

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00:02:50,099 --> 00:02:55,170

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

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00:02:55,170 --> 00:02:59,760

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

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00:02:59,760 --> 00:03:07,560

of systems engineering leadership at NASA.

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00:03:07,560 --> 00:03:12,889

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

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00:03:12,889 --> 00:03:17,469

of students from Washington's Amidon-Bowen Elementary School for the culmination of the

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00:03:17,469 --> 00:03:19,610

six week I'm an Engineer!

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00:03:19,610 --> 00:03:24,680

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

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00:03:24,680 --> 00:03:27,290

as build and testing their own space vehicles.

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00:03:27,290 --> 00:03:32,370

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

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00:03:32,370 --> 00:03:35,840

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

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00:03:35,840 --> 00:03:41,269

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

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00:03:41,269 --> 00:03:42,650

I'm and Engineer!

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00:03:42,650 --> 00:03:47,040

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

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00:03:47,040 --> 00:03:51,489

and Equal Opportunity.

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00:03:51,489 --> 00:03:56,569

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

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00:03:56,569 --> 00:04:00,150

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

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00:04:00,150 --> 00:04:04,730

The interns will get work experience in areas ranging from the robotics lab to the Office

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00:04:04,730 --> 00:04:09,340

of Communications and have an opportunity at the conclusion of the program to showcase

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00:04:09,340 --> 00:04:11,290

their accomplishments.

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00:04:11,290 --> 00:04:16,169

Programs like this help NASA engage students in the science, technology, engineering and

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00:04:16,169 --> 00:04:22,700

math disciplines, as well as communications and other areas vital to business.

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00:04:22,700 --> 00:04:28,840

Thirty years ago on June 18, 1983 the late Sally Ride began her first spaceflight ...

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00:04:28,840 --> 00:04:35,250

"And liftoff, liftoff of STS-7 and America's first woman astronaut."

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00:04:35,250 --> 00:04:39,930

Becoming the first American woman to travel to space, as she and her four crewmates launched

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00:04:39,930 --> 00:04:43,850

from Kennedy Space Center aboard space shuttle Challenger, on STS-7.

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00:04:43,850 --> 00:04:49,040

"The fact that I was going to be the first American woman to go into space carried huge

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00:04:49,040 --> 00:04:51,320

expectations along with it.

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00:04:51,320 --> 00:04:56,500

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

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00:04:56,500 --> 00:05:02,090

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

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00:05:02,090 --> 00:05:08,300

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

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00:05:08,300 --> 00:05:11,750

and inspire students in STEM education.

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00:05:11,750 --> 00:05:16,930

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

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00:05:16,930 --> 00:05:21,750

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

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00:05:21,750 --> 00:05:23,400

Ride EarthKAM.

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00:05:23,400 --> 00:05:27,220

Ride passed away in July 2012.

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00:05:27,220 --> 00:05:29,070

And that's This Week @NASA.