



1
00:00:00,919 --> 00:00:05,370

“Here’s some of the stories trending This Week at NASA!”

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00:00:05,370 --> 00:00:10,080

During his State of the Union address Jan. 20, President Obama emphasized the importance

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00:00:10,080 --> 00:00:16,040

of Science, Technology, Engineering and Math or STEM, to maintaining a strong and competitive

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00:00:16,040 --> 00:00:17,050

American economy.

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00:00:17,050 --> 00:00:21,410

“I want Americans to win the race for the kinds of discoveries that unleash new jobs

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00:00:21,410 --> 00:00:29,070

– pushing out into the Solar System not just to visit, but to stay.”

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00:00:29,070 --> 00:00:32,489

On hand as an invited guest, was NASA astronaut Scott Kelly.

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00:00:32,489 --> 00:00:39,440

“In two months, to prepare us for those missions, Scott Kelly will begin a year-long

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00:00:39,440 --> 00:00:41,129

stay in space.

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00:00:41,129 --> 00:00:45,760

Good luck, Captain – and make sure to Instagram it.”

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00:00:45,760 --> 00:00:50,559

The President acknowledged how this and other NASA research and technology efforts are preparing

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00:00:50,559 --> 00:00:55,699

the United States for deep space travel and returning benefits to humanity.

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00:00:55,699 --> 00:01:00,229

The next day, NASA helped highlight and expand on the STEM messages from the President's

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00:01:00,229 --> 00:01:04,850

address during the White House's third annual State of STEM event.

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00:01:04,850 --> 00:01:09,049

During the event, NASA Administrator Charlie Bolden, White House officials, and middle

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00:01:09,049 --> 00:01:13,729

and high school students discussed research happening on the space station as part of

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00:01:13,729 --> 00:01:16,520

an in-flight event with NASA astronauts.

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00:01:16,520 --> 00:01:22,390

NASA Chief Scientist Ellen Stofan also participated in a panel discussion of women and girls in

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00:01:22,390 --> 00:01:25,500

STEM fields.

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00:01:25,500 --> 00:01:31,640

Also on Jan. 21, NASA's Technology Transfer program released the 2015 edition of its annual

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00:01:31,640 --> 00:01:33,229

Spinoff publication.

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00:01:33,229 --> 00:01:39,770
Published every year since 1976, Spinoff highlights
NASA initiatives that have resulted in technologies

23
00:01:39,770 --> 00:01:43,430
with commercial and societal benefits across
the economy.

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00:01:43,430 --> 00:01:50,469
To request free print copies or download digital
versions, go to spinoff.nasa.gov.

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00:01:50,469 --> 00:01:57,060
New software by NASA and Microsoft announced
on Jan. 21, called OnSight, will use the company's

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00:01:57,060 --> 00:02:03,180
HoloLens device to allow scientists to see
objects on Mars in 3-D and perform virtual

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00:02:03,180 --> 00:02:05,310
work on the Martian surface.

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00:02:05,310 --> 00:02:10,069
Developed by NASA's Jet Propulsion Laboratory
(JPL), OnSight, which uses real data from

29
00:02:10,069 --> 00:02:15,730
the Mars Curiosity rover, will let researchers
examine the rover's worksite almost as if

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00:02:15,730 --> 00:02:18,810
they were standing on the Red Planet, right
beside it.

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00:02:18,810 --> 00:02:23,099
Investigators around the world will be able
to meet in a 3-D simulation of the Martian

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00:02:23,099 --> 00:02:28,420

environment and preview the results of their work firsthand.

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00:02:28,420 --> 00:02:33,540

New images taken by NASA's Dawn spacecraft as it closes in on the dwarf planet Ceres

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00:02:33,540 --> 00:02:39,209

are almost three times more detailed than calibration images taken in early December.

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00:02:39,209 --> 00:02:43,940

Over the next several weeks, Dawn will deliver increasingly better images, leading up to

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00:02:43,940 --> 00:02:48,340

the spacecraft's capture into orbit around Ceres on March 6.

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00:02:48,340 --> 00:02:53,190

Dawn's arrival at Ceres for a 16-month study will mark the first time a spacecraft has

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00:02:53,190 --> 00:02:55,840

ever visited a dwarf planet.

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00:02:55,840 --> 00:03:01,530

NASA's Space Communications and Navigation, or SCA_N program hosted a workshop recently

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00:03:01,530 --> 00:03:07,400

at NASA headquarters to review and assess emerging space navigation and communications

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00:03:07,400 --> 00:03:12,680

technologies for possible use on future missions, and identify any potential knowledge and/or

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00:03:12,680 --> 00:03:14,950

capability gaps that exist.

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00:03:14,950 --> 00:03:21,120

The SCaN program is part of NASA's Human Exploration and Operations Mission Directorate.

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00:03:21,120 --> 00:03:25,930

The 2014 Zero Robotics Championship recently took place aboard the International Space

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00:03:25,930 --> 00:03:26,930

Station.

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00:03:26,930 --> 00:03:32,280

The competition allows students to program robots aboard the ISS known as SPHERES to

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00:03:32,280 --> 00:03:36,879

solve a challenge in microgravity – with station astronauts helping to conduct the

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00:03:36,879 --> 00:03:37,879

championship.

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00:03:37,879 --> 00:03:43,270

It's also a unique and valuable opportunity to promote student interest in Science, Technology,

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00:03:43,270 --> 00:03:44,900

Engineering and Math careers.

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00:03:44,900 --> 00:03:48,560

And that's what's up this week @NASA ...