



1

00:00:00,669 --> 00:00:05,110

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

2

00:00:05,110 --> 00:00:10,380

On May 16, the International Space Station completed its 100,000th orbit of Earth since

3

00:00:10,380 --> 00:00:14,990

the launch of the first component on Nov. 20, 1998.

4

00:00:14,990 --> 00:00:19,800

In that time, the station has traveled more than 2.6 billion miles – which is roughly

5

00:00:19,800 --> 00:00:25,480

the equivalent of about 10 round trips between Earth and Mars, at the average distance between

6

00:00:25,480 --> 00:00:26,800

the two planets.

7

00:00:26,800 --> 00:00:32,320

The space station zips around our planet at 17,500 miles per hour – completing each

8

00:00:32,320 --> 00:00:38,149

orbit in just 90 minutes – giving the crew onboard the unique opportunity to experience

9

00:00:38,149 --> 00:00:44,079

16 sunrises and sunsets per day and to capture some great images of Earth.

10

00:00:44,079 --> 00:00:49,139

To help mark the occasion the Expedition 47 crew, including station Commander Tim Kopra

11

00:00:49,139 --> 00:00:54,959  
and Jeff Williams of NASA, posed for this  
snapshot – the 3 millionth image taken from

12  
00:00:54,959 --> 00:00:58,260  
onboard the ISS!

13  
00:00:58,260 --> 00:01:04,239  
May 16 also saw the much anticipated launch  
of several small satellites from the ISS.

14  
00:01:04,239 --> 00:01:10,200  
Students at St. Thomas More Cathedral School  
in Arlington, Virginia watched as their STMSat-1

15  
00:01:10,200 --> 00:01:14,299  
was deployed from the station's NanoRacks  
CubeSat Deployer.

16  
00:01:14,299 --> 00:01:20,049  
STMSat-1, the first-ever CubeSat built by  
elementary school students, is an educational

17  
00:01:20,049 --> 00:01:25,659  
mission designed to transmit images of Earth  
to ground stations around the country.

18  
00:01:25,659 --> 00:01:30,850  
Meanwhile, NASA's two Nodes satellites were  
also deployed into low-Earth orbit.

19  
00:01:30,850 --> 00:01:35,729  
These tiny devices are part of a technology  
demonstration mission to exhibit new network

20  
00:01:35,729 --> 00:01:41,940  
data and command handling capabilities needed  
for collaborative operation of swarms of multiple

21  
00:01:41,940 --> 00:01:43,009

spacecraft.

22  
00:01:43,009 --> 00:01:49,470  
Both missions launched to the ISS on Dec.  
6 aboard Orbital ATK's Cygnus cargo resupply

23  
00:01:49,470 --> 00:01:51,689  
spacecraft.

24  
00:01:51,689 --> 00:01:56,069  
Deputy Administrator Dava Newman was among  
the NASA officials to attend the Humans to

25  
00:01:56,069 --> 00:02:01,240  
Mars Summit 2016 at The George Washington  
University, in Washington.

26  
00:02:01,240 --> 00:02:06,299  
The three-day event, which kicked off May  
17, addressed the technical, scientific and

27  
00:02:06,299 --> 00:02:11,409  
policy challenges of making human exploration  
of Mars a reality.

28  
00:02:11,409 --> 00:02:16,620  
In addition to remarks by Newman, the event  
also featured NASA's Chief Scientist Ellen

29  
00:02:16,620 --> 00:02:21,970  
Stofan, Steve Jurczyk, the agency's Associate  
Administrator for Space Technology, as well

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00:02:21,970 --> 00:02:25,450  
as other well-known figures in the space community.

31  
00:02:25,450 --> 00:02:30,450  
NASA is on an ambitious journey to Mars that  
includes sending humans to the Red Planet

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00:02:30,450 --> 00:02:33,590

in the 2030s.

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00:02:33,590 --> 00:02:39,120

When NASA's Orion spacecraft makes water landings at the end of future deep space missions,

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00:02:39,120 --> 00:02:43,260

astronauts inside will experience the mission's greatest deceleration and some of the greatest

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00:02:43,260 --> 00:02:44,849

forces on the human body.

36

00:02:44,849 --> 00:02:49,939

So, engineers at NASA's Langley Research Center in Hampton, Virginia, are conducting

37

00:02:49,939 --> 00:02:56,700

water-impact tests of an Orion test capsule with suited crash test dummies inside.

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00:02:56,700 --> 00:03:01,689

Data gathered with the help of these special passengers will be used to design safeguards

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00:03:01,689 --> 00:03:07,100

and features to reduce the risk of astronauts being injured during splashdown landings in

40

00:03:07,100 --> 00:03:09,550

the ocean.

41

00:03:09,550 --> 00:03:14,819

On May 18, NASA Administrator Charlie Bolden participated in "Transformers" – a live

42

00:03:14,819 --> 00:03:19,549

journalism event hosted by the Washington

Post, to explore the breakthroughs pushing

43  
00:03:19,549 --> 00:03:24,150  
the boundaries of knowledge and setting the stage for inevitable change.

44  
00:03:24,150 --> 00:03:28,879  
The Administrator was part of a panel discussion titled, "There's No Place Like Space",

45  
00:03:28,879 --> 00:03:33,480  
about recent milestones and developments in commercial spaceflight and their potential

46  
00:03:33,480 --> 00:03:37,459  
to open up new frontiers for business and exploration.

47  
00:03:37,459 --> 00:03:42,519  
Other panelists included Julie Van Kleeck of Aerojet Rocketdyne, George Whitesides of

48  
00:03:42,519 --> 00:03:47,569  
Virgin Galactic, and Andy Weir, author of the book "The Martian".

49  
00:03:47,569 --> 00:03:52,769  
A farewell event was held on May 19 at NASA Headquarters in recognition of the nearly

50  
00:03:52,769 --> 00:03:58,500  
four decades of science and exploration achievements of John Grunsfeld, who is retiring at the

51  
00:03:58,500 --> 00:04:02,709  
end of May as the agency's Associate Administrator for science.

52  
00:04:02,709 --> 00:04:08,200  
Administrator Charlie Bolden and other well-wishers

were on hand to thank the hall of fame astronaut

53

00:04:08,200 --> 00:04:11,270

for his contributions to the agency and its  
missions.

54

00:04:11,270 --> 00:04:15,000

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