
P2006T

1
00:00:00,789 --> 00:00:05,020
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:05,020 --> 00:00:10,940
The 21st NASA Extreme Environment Mission
Operations got underway July 21 in the Florida

3
00:00:10,940 --> 00:00:12,019
Keys.

4
00:00:12,019 --> 00:00:17,720
NASA astronauts Reid Wiseman and Megan McArthur
are part of the international crew of NEEMO-21

5
00:00:17,720 --> 00:00:23,330
aquanauts performing research during the 16-day
mission, which takes place about 60 feet below

6
00:00:23,330 --> 00:00:28,340
the surface of the Atlantic Ocean, in the
Aquarius habitat – the world's only undersea

7
00:00:28,340 --> 00:00:30,430
science station.

8
00:00:30,430 --> 00:00:35,180
Simulated spacewalks are designed to evaluate
tools and mission operation techniques that

9
00:00:35,180 --> 00:00:37,930
could be used on future space missions.

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00:00:37,930 --> 00:00:43,400
NEEMO-21’s objectives include testing a
mini DNA sequencer similar to the one NASA

11
00:00:43,400 --> 00:00:48,930
astronaut Kate Rubins also will test aboard

the International Space Station, and a telemedicine

12
00:00:48,930 --> 00:00:52,500
device that will be used for future space
applications.

13
00:00:52,500 --> 00:00:56,940
The mission also will simulate communications
delays like those that would be encountered

14
00:00:56,940 --> 00:00:58,950
on a mission to Mars.

15
00:00:58,950 --> 00:01:05,500
NASA’s Ground Systems Development and Operations
Program has reached the halfway point in retrofitting

16
00:01:05,500 --> 00:01:09,910
Kennedy Space Center’s Vehicle Assembly
Building (VAB) with new work platforms.

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00:01:09,910 --> 00:01:14,409
The platforms will provide workers with access
to the Space Launch System rocket and Orion

18
00:01:14,409 --> 00:01:20,200
spacecraft during prelaunch processing before
their first test flight in 2018.

19
00:01:20,200 --> 00:01:25,250
Five of the 10 levels of platforms now are
in place inside the iconic building.

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00:01:25,250 --> 00:01:30,700
Installation of the rest should be completed
by spring 2017.

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00:01:30,700 --> 00:01:35,140
Engineers from Armstrong Flight Research Center
and Langley Research Center were on hand at

22
00:01:35,140 --> 00:01:41,460
a small airport near Pismo Beach, California
for the arrival of the Tecnam P2006T, that

23
00:01:41,460 --> 00:01:46,840
will be converted into NASA's X-57 aircraft
named, "Maxwell" – the first manned

24
00:01:46,840 --> 00:01:50,880
X-plane to feature a distributed electric
propulsion system.

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00:01:50,880 --> 00:01:56,950
The event signifies a large step toward NASA's
goal of developing and validating technologies

26
00:01:56,950 --> 00:02:01,549
that will make aviation more efficient, quieter
and more environmentally friendly.

27
00:02:01,549 --> 00:02:07,020
We'll update the progress of the work and
testing of the all-electric-powered X-57 on

28
00:02:07,020 --> 00:02:10,050
future episodes of This Week at NASA.

29
00:02:10,050 --> 00:02:16,129
NASA's Origins Spectral Interpretation Resource
Identification Security - Regolith Explorer

30
00:02:16,129 --> 00:02:19,239
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OSIRIS-REx -- spacecraft is scheduled for

31
00:02:19,239 --> 00:02:25,150
launch Sept. 8 to retrieve a surface sample
of the near-Earth asteroid Bennu.

32
00:02:25,150 --> 00:02:29,580
One of the science instruments aboard the spacecraft -- the OSIRIS-REx Visible and Infrared

33
00:02:29,580 --> 00:02:35,930
Spectrometer or (OVIRS) – uses visible and near-infrared imaging technology to find areas

34
00:02:35,930 --> 00:02:40,129
of the asteroid potentially rich in organic molecules.

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00:02:40,129 --> 00:02:46,519
The science team will rely on OVIRS to identify possible sample sites of high science value.

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00:02:46,519 --> 00:02:51,340
OVIRS works in tandem with another instrument — the Thermal Emission Spectrometer, or

37
00:02:51,340 --> 00:02:54,969
(OTES), which images in the thermal infrared.

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00:02:54,969 --> 00:03:00,109
Using both instruments enables the spacecraft to map the entire asteroid over a range of

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00:03:00,109 --> 00:03:06,980
wavelengths that are most interesting to scientists searching for organics and water.

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00:03:06,980 --> 00:03:11,169
Astronaut Kjell Lindgren was one of several NASA representatives at Comic-Con International,

41
00:03:11,169 --> 00:03:15,489
July 21-24 at the San Diego Convention Center.

42
00:03:15,489 --> 00:03:20,989

Lindgren and others participated in several activities and panel events, including a discussion

43
00:03:20,989 --> 00:03:27,329
about mobile gaming being used to inspire and educate future explorers and NASA technology.

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00:03:27,329 --> 00:03:32,700
NASA also teamed with representatives of Star Trek – to mark the 50th anniversary of the

45
00:03:32,700 --> 00:03:38,049
television and motion picture franchise – and to discuss its influence on the infinite possibilities

46
00:03:38,049 --> 00:03:43,409
of space exploration, including NASA’s Journey to Mars.

47
00:03:43,409 --> 00:03:45,340
And that’s what’s up this week @NASA …