1
00:00:00,960 --> 00:00:06,630
Here’s some of the stories trending This
Week at NASA! A NASA media briefing on Nov.

2
00:00:06,630 --> 00:00:11,780
6 at Kennedy Space Center highlighted the
fully assembled Orion spacecraft and details

3
00:00:11,780 --> 00:00:17,319
of its first test flight, scheduled for Dec.
4. The 4 and-a-half hour flight, called Exploration

4
00:00:17,319 --> 00:00:23,419
Flight Test-1, will send Orion 3,600 miles
from Earth on a two-orbit flight to confirm

5
00:00:23,419 --> 00:00:28,659
its critical systems are ready for the challenges
of eventually sending astronauts on deep space

6
00:00:28,659 --> 00:00:34,260
missions to an asteroid and Mars. During its
test, Orion will return to Earth at speeds

7
00:00:34,260 --> 00:00:40,100
near 20,000 mph -- generating temperatures
up to 4,000 degrees Fahrenheit before making

8
00:00:40,100 --> 00:00:46,760
a parachute-assisted landing in the Pacific
Ocean. On Nov. 5, teams conducted a wet dress

9
00:00:46,760 --> 00:00:52,269
rehearsal at Cape Canaveral Air Force Station’s
Space Launch Complex 37 for the United Launch

10
00:00:52,269 --> 00:00:57,960
Alliance Delta IV Heavy, the rocket that will
launch Orion on its December test. The Orion

11
00:00:57,960 --> 00:01:02,900
crew module, service module, launch abort
system and adapter are scheduled to arrive

12
00:01:02,920 --> 00:01:09,009
at the launch pad on Nov. 11 and then be lifted
on top of the Delta IV Heavy in preparation

13
00:01:09,009 --> 00:01:15,340
for the December flight test. At the Gagarin
Cosmonaut Training Center in Star City, Russia

14
00:01:15,340 --> 00:01:21,680
Expedition 42/43 Soyuz Commander Anton Shkaplerov
of the Russian Federal Space Agency, NASA

15
00:01:21,680 --> 00:01:26,549
Flight Engineer Terry Virts and Flight Engineer
Samantha Cristoforetti of the European Space

16
00:01:26,549 --> 00:01:32,110
Agency are participating in traditional activities
prior to their launch to the International

17
00:01:32,110 --> 00:01:38,119
Space Station. The trio is scheduled to launch
from Kazakhstan Nov. 23, Eastern time, to

18
00:01:38,119 --> 00:01:44,640
begin a five-and-a-half-month mission on the
station. During a Nov. 4 meeting in Paris,

19
00:01:44,640 --> 00:01:49,189
NASA Administrator Charlie Bolden and other
Heads of the International Space Station agencies

20
00:01:49,189 --> 00:01:54,590
-- from Canada, Europe, Japan and Russia,
issued a joint statement reaffirming their

21
00:01:54,590 --> 00:02:00,750
support for continued ISS operations – recognizing
the many benefits of the station – including

22
00:02:00,750 --> 00:02:05,810
breakthrough biomedical research, technology
development, and expanding commercial use

23
00:02:05,810 --> 00:02:12,810
of low-Earth orbit. The U.S. has committed
to extend ISS utilization to at least 2024.

24
00:02:13,810 --> 00:02:18,050
A sample from the first rock drilled at the
base of Mount Sharp by NASA’s Curiosity

25
00:02:18,050 --> 00:02:23,100
Mars rover in September has yielded the mission's
first confirmation of a mineral mapped from

26
00:02:23,100 --> 00:02:29,410
orbit. The iron-oxide mineral, called hematite,
gives clues about ancient environmental conditions

27
00:02:29,410 --> 00:02:35,010
from when it formed. In 2010, NASA's Mars
Reconnaissance Orbiter also provided evidence

28
00:02:35,010 --> 00:02:39,860
of hematite in the area of the drill site.
This confirmation of orbital data could help

29
00:02:39,860 --> 00:02:45,010
researchers predict where to drill for certain
minerals as the rover makes its way up Mount

30
00:02:45,010 --> 00:02:52,010
Sharp. NASA’s Low-Density Supersonic Decelerator
project was the focus of a recent What's New

31
00:02:52,120 --> 00:02:57,420
in Aerospace? A discussion at the Smithsonian
National Air and Space Museum, featuring Principal

32
00:02:57,420 --> 00:03:03,200
Investigator Ian Clark from the Jet Propulsion
Laboratory. LDSD is testing cross-cutting

33
00:03:03,200 --> 00:03:09,560
technologies to safely land heavier payloads
on Mars and other planets with atmospheres.

34
00:03:09,560 --> 00:03:13,890
The successful flight in late June of the
rocket-powered, saucer-shaped test vehicle

35
00:03:13,890 --> 00:03:20,890
into near-space in Kauai, Hawaii was the first
of three planned for the LDSD project. And