1
00:00:00,000 --> 00:00:03,639
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:03,639 --> 00:00:09,620
A Dec. 2 event with the House of Representatives
Committee on Science, Space and Technology,

3
00:00:09,620 --> 00:00:15,139
featured a live chat with NASA’s Scott Kelly
and Kjell Lindgren from onboard the International

4
00:00:15,139 --> 00:00:20,310
Space Station. Kelly and Lindgren answered
questions from Texas Representative and Chairperson

5
00:00:20,310 --> 00:00:25,070
Lamar Smith and other committee members, about
life on the station and the research on the

6
00:00:25,070 --> 00:00:29,510
orbital laboratory. Kelly is in the ninth
month of his year-long mission with Russian

7
00:00:29,510 --> 00:00:34,840
cosmonaut Mikhail Kornienko to gather biomedical
data that will help formulate a human mission

8
00:00:34,840 --> 00:00:43,140
to Mars, while Lindgren is preparing to return
to Earth Dec. 11 to complete a 141-day mission.

9
00:00:43,140 --> 00:00:47,280
Pre-launch activities and preparations continue
for the next crew headed to the International

10
00:00:47,280 --> 00:00:52,590
Space Station. Following traditional ceremonies
in Star City, Russia on Nov. 30, NASA’s

11
00:00:52,590 --> 00:00:58,309
Tim Kopra and his Expedition 46/47 crewmates
-- Yuri Malenchenko of the Russian Federal

12
00:00:58,309 --> 00:01:03,359
Space Agency (Roscosmos) and ESA astronaut
Tim Peake, headed to Kazakhstan to complete

13
00:01:03,359 --> 00:01:08,280
their training. The trio is scheduled to launch
to the station from the Baikonur Cosmodrome

14
00:01:08,280 --> 00:01:10,790
on Dec. 15 for a six-month mission.

15
00:01:10,790 --> 00:01:18,299
A Nov. 30 event at NASA Glenn Research Center's
Plum Brook Station facility in Sandusky, Ohio

16
00:01:18,299 --> 00:01:23,040
featured the full-size test version of the
Orion spacecraft's European Service Module.

17
00:01:23,040 --> 00:01:28,450
The module, provided by the European Space
Agency, will supply power, in-space propulsion

18
00:01:28,450 --> 00:01:33,890
and air and water for astronauts onboard Orion.
Engineers will begin evaluations with the

19
00:01:33,890 --> 00:01:39,750
test module early next year to ensure it can
withstand the rigors of space.

20
00:01:39,750 --> 00:01:44,570
Dec. 5 is the one-year anniversary of the
flight test of Orion – Exploration Flight

21

00:01:44,570 --> 00:01:49,920
Test-1. Launched atop a United Launch Alliance
Delta IV Heavy rocket from Cape Canaveral

22
00:01:49,920 --> 00:01:55,610
Air Force Station in Florida, Orion completed
a two-orbit, 4-and-a-half hour flight to test

23
00:01:55,610 --> 00:02:00,759
critical systems before the spacecraft begins
carrying astronauts on future missions to

24
00:02:00,759 --> 00:02:06,850
an asteroid and on the journey to Mars. Orion
will fly next on NASA's Space Launch System

25
00:02:06,850 --> 00:02:11,569
(SLS) on Exploration Mission-1 (EM-1). That
un-crewed flight will take Orion thousands

26
00:02:11,569 --> 00:02:16,099
of miles beyond the moon over the course of
about a three-week mission. The SLS, which

27
00:02:16,099 --> 00:02:21,330
is currently being developed, is the most
powerful rocket NASA has ever built. The rocket

28
00:02:21,330 --> 00:02:27,110
is on track for launch capability readiness
by 2018 and engineers are hard at work on

29
00:02:27,110 --> 00:02:32,260
completing technical and design reviews for
Orion.

30
00:02:32,260 --> 00:02:38,370
The U.S. is one of about 200 countries participating
in talks at the United Nations Framework Convention

31

00:02:38,370 --> 00:02:43,440
on Climate Change (UNFCCC) Conference of Parties,
in Paris. While NASA has no formal role in

32
00:02:43,440 --> 00:02:48,319
the talks, the agency's Earth observing
missions continue to provide the best information

33
00:02:48,319 --> 00:02:53,180
possible about how our planet is changing,
to help policy makers around the world make

34
00:02:53,180 --> 00:02:57,819
the best decisions. The conference could lead
to an international agreement that would limit

35
00:02:57,819 --> 00:03:03,319
carbon dioxide emissions contributing to the
rise in global temperature.

36
00:03:03,319 --> 00:03:08,290
Preparations are underway at the Kennedy Space
Center to launch NASA's Stratospheric Aerosol

37
00:03:08,290 --> 00:03:14,830
and Gas Experiment III on the International
Space Station, or SAGE III on ISS. The instrument,

38
00:03:14,830 --> 00:03:19,540
which will be delivered to the space station
next year by SpaceX, and mounted to the station's

39
00:03:19,540 --> 00:03:25,750
exterior, belongs to a family of SAGE instruments
dating back to the 1970s. The SAGE mission

40
00:03:25,750 --> 00:03:31,640
measures Earth's ozone, aerosols and other
atmospheric gases, to help us better understand

41

00:03:31,640 --> 00:03:36,530
and protect the atmosphere. SAGE III on ISS
will take advantage of the space station's

42
00:03:36,530 --> 00:03:41,330
orbital path to maximize the scientific value
of its observations.

43
00:03:41,330 --> 00:03:45,069
And that's what's up this week @NASA …