1
00:00:00,780 --> 00:00:03,669
"Launch day approaches for NASA's next Mars
mission ..."

2
00:00:03,669 --> 00:00:06,149
"A show of power from our Sun ..."

3
00:00:06,149 --> 00:00:11,249
"And activity picks up on The International
Space Station ...Those are some of the stories

4
00:00:11,249 --> 00:00:14,620
trending, This Week at NASA!"

5
00:00:14,620 --> 00:00:19,170
During a news briefing at NASA headquarters
officials and scientists discussed MAVEN,

6
00:00:19,170 --> 00:00:21,070
the agency's next mission to Mars.

7
00:00:21,070 --> 00:00:26,060
"When we send human missions we want to understand
what the structure, the composition is at

8
00:00:26,060 --> 00:00:29,870
all parts of the atmosphere, including the
upper atmosphere."

9
00:00:29,870 --> 00:00:34,350
Scheduled to launch November 18 from Cape
Canaveral Air Force Station in Florida, MAVEN

10
00:00:34,350 --> 00:00:41,030
will study the history and change of Mars'
atmosphere, climate, and planetary habitability.

11
00:00:41,030 --> 00:00:45,199
NASA Administrator Charlie Bolden visited

Langley Research Center to thank employees

12
00:00:45,199 --> 00:00:49,800
for the great work they're doing and for their
patience during the recent government shutdown.

13
00:00:49,800 --> 00:00:54,069
Langley's history of aviation research goes
back almost a hundred years - to nineteen

14
00:00:54,069 --> 00:00:55,649
seventeen.

15
00:00:55,649 --> 00:01:00,819
The Orion spacecraft came to life at Kennedy
Space Center as engineers powered up the spacecraft

16
00:01:00,819 --> 00:01:05,780
to check out avionics and flight hardware
for the very first time. The power-up is a

17
00:01:05,780 --> 00:01:10,430
major milestone in Orion's preparation for
a September 2014 flight test.

18
00:01:10,430 --> 00:01:17,430
A power up of another kind from the middle
of our solar system. Lots of "X" and "M" class

19
00:01:17,460 --> 00:01:22,340
solar flare activity from the Sun recently.
We're protected by our atmosphere from the

20
00:01:22,340 --> 00:01:26,740
powerful bursts of radiation, but they can
disrupt GPS and other satellite communication

21
00:01:26,740 --> 00:01:27,590
signals.

22
00:01:27,590 --> 00:01:33,299
A busy time at the International Space Station
-- after delivering over seven tons of cargo,

23
00:01:33,299 --> 00:01:39,490
the "Albert Einstein" Automated Transfer Vehicle
4 left on Oct. 28 ... not long after, the

24
00:01:39,490 --> 00:01:44,439
crew hopped into a Soyuz spacecraft and changed
parking spots -- from the Rassvet module to

25
00:01:44,439 --> 00:01:49,759
the Zvezda Service module to make room for
the arrival of Expedition 38 and the Olympic

26
00:01:49,759 --> 00:01:56,149
Torch. Rick Masstracchio of NASA, Russian
Mikhail Tyurin and Koichi Wakata of JAXA -- arrive

27
00:01:56,149 --> 00:02:01,479
with the torch on November 7 -- it returns
to Earth with Expedition 36 November 10 and

28
00:02:01,479 --> 00:02:06,479
will be used in the Winter Games in Sochi
, Russia in February 2014.

29
00:02:06,479 --> 00:02:11,030
Although the first approach-and-landing free-flight
test of Sierra Nevada Corporation's Dream

30
00:02:11,030 --> 00:02:16,180
Chaser spacecraft experienced an anomaly with
the left landing gear deployment, the high-quality

31
00:02:16,180 --> 00:02:20,819
flight and telemetry data through the critical
phases of the test will help refine Dream

32
00:02:20,819 --> 00:02:26,450
Chaser's design. SNC is one of three companies
working with NASA to develop spaceflight systems

33
00:02:26,450 --> 00:02:33,450
that could eventually launch astronauts to the International Space Station from U.S. soil.

34
00:02:35,310 --> 00:02:40,750
Data on seasonal land and sea ice melt in Greenland collected by a NASA C-130 research
plane from Wallops Flight Facility may give

35
00:02:40,750 --> 00:02:45,540
researchers better context and a more comprehensive
view of seasonal changes in the region, when

36
00:02:45,540 --> 00:02:51,519
compared with measurements of future satellite
missions, such as ICESat-2. The C-130 uses

37
00:02:51,519 --> 00:02:57,790
laser sensing technology called LVIS, or Land,
Vegetation and Ice Sensor, to map terrain.

38
00:02:57,790 --> 00:03:00,060
And that's what's up ... This Week at NASA.