



TW@N

THIS WEEK @ NASA

1
00:00:00,480 --> 00:00:01,760
Preparing the space station\h\h

2
00:00:01,760 --> 00:00:04,400
for a future power boost ...
A mission extension for a\h\h

3
00:00:04,400 --> 00:00:08,320
couple of station crew members ...
And a spaceflight first for one of our\h\h

4
00:00:08,320 --> 00:00:12,400
commercial partners ... a few of the stories\h
to tell you about – This Week at NASA!
\h

5
00:00:13,440 --> 00:00:19,200
On Sept. 12, astronauts Akihiko Hoshide of the\h
Japan Aerospace Exploration Agency and Thomas\h\h

6
00:00:19,200 --> 00:00:25,120
Pesquet of the European Space Agency conducted a\h
nearly 7-hour spacewalk outside the International\h\h

7
00:00:25,120 --> 00:00:30,160
Space Station. The pair attached a support\h
bracket needed for the future installation\h\h

8
00:00:30,160 --> 00:00:34,960
of the station's third new solar array.\h
Six of the station's eight existing power\h\h

9
00:00:34,960 --> 00:00:40,240
channels are being augmented with new arrays\h
to ensure there is sufficient power for future\h\h

10
00:00:40,240 --> 00:00:46,560
Artemis exploration technology demonstrations and\h
other activities. This was the first spacewalk\h\h

11
00:00:46,560 --> 00:00:51,120
conducted by two international partner
astronauts out of the station's Quest airlock.

12
00:00:52,000 --> 00:00:55,840
NASA's Mark Vande Hei and Pyotr
Dubrov of Roscosmos have had

13
00:00:55,840 --> 00:01:00,560
their stay onboard the International
Space Station extended to March 2022.

14
00:01:01,120 --> 00:01:04,480
For Vande Hei, that means he will
hold the record for the longest

15
00:01:04,480 --> 00:01:08,960
single spaceflight for an American when
he returns to Earth. His extended stay

16
00:01:08,960 --> 00:01:14,480
could also provide valuable insight into how the
human body adapts to long-duration spaceflight,

17
00:01:14,480 --> 00:01:19,120
which could help us prepare for Artemis
missions to the Moon and eventually to Mars.

18
00:01:19,120 --> 00:01:25,280
"I think all astronauts are explorers at heart and
having the opportunity to contribute to furthering

19
00:01:25,280 --> 00:01:32,480
exploration is a great opportunity. It's a
new experience and I'm looking forward to,

20
00:01:32,480 --> 00:01:35,600
as a human being, understanding how
it feels to do something like this."

21
00:01:36,560 --> 00:01:42,000
On Sept. 15, our commercial partner, SpaceX\h
launched its Inspiration4 mission from our\h\h

22
00:01:42,000 --> 00:01:46,960
Kennedy Space Center. Inspiration4 is a\h
non-NASA mission and the company's first\h\h

23
00:01:46,960 --> 00:01:52,640
orbital spaceflight featuring an entire crew of\h
private astronauts. NASA has an agreement with\h\h

24
00:01:52,640 --> 00:01:57,040
another company – Axiom Space – for the first\h
private astronaut mission to the International\h\h

25
00:01:57,040 --> 00:02:02,320
Space Station. That mission is currently\h
targeted for no earlier than January 2022.

26
00:02:03,040 --> 00:02:06,640
Technicians at our Michoud Assembly\h
Facility recently completed welding\h\h

27
00:02:06,640 --> 00:02:10,880
of the Orion spacecraft's pressure vessel\h
for our Artemis III mission to the Moon.\h\h

28
00:02:11,440 --> 00:02:16,720
The structure is the underlying frame of Orion's\h
crew module – the air-tight compartment designed\h\h

29
00:02:16,720 --> 00:02:22,080
to carry astronauts. It is also the first\h
major piece of hardware off the line as NASA\h\h

30
00:02:22,080 --> 00:02:26,160
shifts from the development phase to\h
the production phase of the spacecraft.\h\h

31
00:02:26,160 --> 00:02:30,640
Through Artemis, NASA will land the first woman\h
and the first person of color on the Moon,\h\h

32
00:02:30,640 --> 00:02:35,840
establish a long-term presence on the lunar\h
surface, and prepare for human missions to Mars.

33
00:02:36,800 --> 00:02:41,680
We recently teamed with Joby Aviation to\h
flight test an all-electric vertical takeoff\h\h

34
00:02:41,680 --> 00:02:46,320
and landing (eVTOL) aircraft as part of NASA's\h
Advanced Air Mobility (AAM) National Campaign.\h\h

35
00:02:46,880 --> 00:02:50,720
It was the first time NASA has tested\h
one of these aircraft as part of the\h\h

36
00:02:50,720 --> 00:02:56,320
campaign. These could be used in the future\h
to transport people, packages, or other goods\h\h

37
00:02:56,320 --> 00:03:01,680
within cities and surrounding areas throughout\h
the country. Learn more about NASA's work to\h\h

38
00:03:01,680 --> 00:03:07,440
help incorporate next-generation aircraft into\h
the National Airspace System at nasa.gov/aam.