TW@N

THIS WEEK @ NASA

1
00:00:00,149 --> 00:00:03,010
Relocating a commercial spacecraft at the
space station …

2
00:00:03,010 --> 00:00:06,130
While another one gets ready to launch to
the station …

3
00:00:06,130 --> 00:00:11,570
And Perseverance prepares for a mission milestone
on Mars … a few of the stories to tell you

4
00:00:11,570 --> 00:00:16,480
about – This Week at NASA!

5
00:00:16,480 --> 00:00:22,300
On July 21, our SpaceX Crew-2 astronauts moved
their Crew Dragon Endeavour spacecraft from

6
00:00:22,300 --> 00:00:27,160
the forward port of the International Space
Station’s Harmony module to the station’s

7
00:00:27,160 --> 00:00:28,419
space-facing port.

8
00:00:28,419 --> 00:00:34,230
The relocation sets the stage for an historic
first when two different U.S. commercial spacecraft

9
00:00:34,230 --> 00:00:39,260
built for crew will be docked to the station
at the same time.

10
00:00:39,260 --> 00:00:43,740
Boeing’s CST-100 Starliner will be the other
spacecraft of this anticipated and historic

11
00:00:43,740 --> 00:00:45,070

docked duo.

12
00:00:45,070 --> 00:00:49,870
The Starliner is expected to join the Crew
Dragon at the space station on our uncrewed

13
00:00:49,870 --> 00:00:53,750
Boeing Orbital Flight Test-2 or (OFT-2) mission.

14
00:00:53,750 --> 00:01:00,200
OFT-2 is targeted for launch July 30 and will
provide valuable data toward certifying Boeing's

15
00:01:00,200 --> 00:01:06,460
crew transportation system for regular flights
with astronauts to and from the space station.

16
00:01:06,460 --> 00:01:11,500
The Perseverance Mars rover is preparing to
collect its first-ever sample of Martian rock,

17
00:01:11,500 --> 00:01:15,580
which future planned missions will transport
to Earth for study.

18
00:01:15,580 --> 00:01:20,310
This important mission milestone is expected
to begin within the next two weeks.

19
00:01:20,310 --> 00:01:25,500
The rover will be looking for a scientifically
interesting target in a part of Jezero Crater

20
00:01:25,500 --> 00:01:28,120
called the "Cratered Floor Fractured Rough."

21
00:01:28,120 --> 00:01:33,720
The Mars 2020 Perseverance mission is part
of NASA's Moon to Mars exploration approach,

22
00:01:33,720 --> 00:01:38,290
which includes Artemis missions to the Moon
that will help prepare for human exploration

23
00:01:38,290 --> 00:01:40,229
of the Red Planet.

24
00:01:40,229 --> 00:01:45,420
Data captured by our InSight spacecraft of
seismic activity on Mars – or marsquakes

25
00:01:45,420 --> 00:01:50,950
– were used in three papers published in
Science detailing the depth and composition

26
00:01:50,950 --> 00:01:56,210
of Mars' crust, mantle, and core, including
confirmation that the planet's center is

27
00:01:56,210 --> 00:01:57,440
molten.

28
00:01:57,440 --> 00:02:01,740
Part of InSight's mission was to measure
the depth, size, and structure of these three

29
00:02:01,740 --> 00:02:02,740
layers.

30
00:02:02,740 --> 00:02:07,150
The mission can help improve our understanding
of how all rocky planets formed, including

31
00:02:07,150 --> 00:02:08,860
Earth.

32
00:02:08,860 --> 00:02:13,660
The science instruments on our Hubble Space
Telescope have returned to full operation,

33
00:02:13,660 --> 00:02:18,329
after recovering from a computer anomaly that
suspended the telescope’s observations for

34
00:02:18,329 --> 00:02:19,900
more than a month.

35
00:02:19,900 --> 00:02:25,470
The telescope’s first observations since
resuming its 32nd year of discovery included

36
00:02:25,470 --> 00:02:31,629
a large spiral galaxy with unusual extended
arms, and the first high-resolution glimpse

37
00:02:31,629 --> 00:02:35,700
at an intriguing pair of colliding galaxies
in the southern hemisphere.

38
00:02:35,700 --> 00:02:38,730
Keep up with Hubble and its mission at nasa.gov/hubble.