
TW@N
THIS WEEK @ NASA

1
00:00:00,560 --> 00:00:03,440
Preparing the space station\h
for solar array upgrades …

2
00:00:03,440 --> 00:00:06,800
Rolling out the spacecraft\h
for our Artemis I mission …

3
00:00:06,800 --> 00:00:09,440
And the Webb Space Telescope team reaches another\h\h

4
00:00:09,440 --> 00:00:13,360
milestone … a few of the stories to\h
tell you about – This Week at NASA!

5
00:00:14,160 --> 00:00:21,280
On March 15, NASA astronauts Kayla Barron and Raja\h
Chari conducted a 6-hour and 54-minute spacewalk\h\h

6
00:00:21,280 --> 00:00:26,960
outside the International Space Station to prepare\h
the station for upcoming solar array upgrades.\h\h

7
00:00:27,520 --> 00:00:34,160
They built a support bracket onto which a future\h
ISS roll out solar array or iROSA will be mounted.\h\h

8
00:00:34,720 --> 00:00:39,280
So far, two of six iROSAs have been\h
deployed on station, with the other four\h\h

9
00:00:39,280 --> 00:00:44,080
arrays to be delivered on future missions.\h
The arrays will eventually help increase the\h\h

10
00:00:44,080 --> 00:00:50,080
station’s total available power from\h
160 kilowatts to up to 215 kilowatts.

11

00:00:50,800 --> 00:00:56,560
On March 17, teams at our Kennedy Space Center\h
began the rollout of the Space Launch System or\h\h

12
00:00:56,560 --> 00:01:03,520
SLS rocket and Orion spacecraft for our upcoming\h
Artemis I Moon mission. After the 4-mile journey\h\h

13
00:01:03,520 --> 00:01:10,400
from Kennedy's Vehicle Assembly Building to Launch\h
Pad 39B, the integrated SLS rocket and Orion will\h\h

14
00:01:10,400 --> 00:01:16,640
eventually undergo a final prelaunch test known as\h
the wet dress rehearsal. This involves loading the\h\h

15
00:01:16,640 --> 00:01:22,800
rocket's fuel tanks with propellant and conducting\h
a launch countdown. The primary goals for Artemis\h\h

16
00:01:22,800 --> 00:01:28,320
I are to demonstrate Orion's systems in a\h
spaceflight environment and ensure a safe\h\h

17
00:01:28,320 --> 00:01:34,640
re-entry, descent, splashdown, and recovery ahead\h
of the first flight with astronauts on Artemis II.

18
00:01:35,440 --> 00:01:40,000
Our James Webb Space Telescope team has\h
reached another milestone in the critical\h\h

19
00:01:40,000 --> 00:01:46,000
process of aligning the telescope's mirrors.\h
After completing "fine phasing," a key alignment\h\h

20
00:01:46,000 --> 00:01:51,280
stage in the commissioning of Webb's Optical\h
Telescope Element, they found that every optical\h\h

21

00:01:51,280 --> 00:01:56,400
parameter that has been checked and tested\h
is performing at, or above, expectations.\h\h

22
00:01:56,960 --> 00:02:02,480
Although there are months to go before Webb\h
ultimately delivers its new view of the cosmos,\h\h

23
00:02:02,480 --> 00:02:07,600
reaching this milestone means the team is\h
confident that Webb’s first-of-its-kind optical\h\h

24
00:02:07,600 --> 00:02:13,840
system is working as well as possible. Learn\h
more about the Webb mission at webb.nasa.gov.

25
00:02:14,560 --> 00:02:19,840
Flight operations for our Ingenuity Mars\h
Helicopter have been extended through September.\h\h

26
00:02:19,840 --> 00:02:25,440
In the months ahead, Ingenuity, the first aircraft\h
to operate from the surface of another world, will\h\h

27
00:02:25,440 --> 00:02:31,760
support our Perseverance rover’s exploration of\h
Jezero Crater. Ingenuity’s mission extension comes\h\h

28
00:02:31,760 --> 00:02:37,040
on the heels of the technology demonstration’s\h
21st successful flight on the Red Planet,\h\h

29
00:02:37,040 --> 00:02:44,160
since April 2021. It was originally expected to\h
attempt just up to 5 flights in 30 Martian days.

30
00:02:45,040 --> 00:02:50,960
Deep Space Station 53, or DSS-53, is the\h
newest member of our Deep Space Network.\h\h

31

00:02:51,520 --> 00:02:55,840
This family of giant antennas\h
enables engineers and scientists\h\h

32
00:02:55,840 --> 00:03:01,520
on Earth to communicate with a growing number\h
of spacecraft exploring our solar system.\h\h

33
00:03:01,520 --> 00:03:09,040
The 111-foot DSS-53 antenna is now operational\h
at the network’s facility outside Madrid, Spain,\h\h

34
00:03:09,040 --> 00:03:14,720
one of three such ground stations around the\h
globe. NASA officials and dignitaries from Spain\h\h

35
00:03:14,720 --> 00:03:19,520
and the U.S. attended an inauguration\h
ceremony to mark the antenna’s debut.