

A photograph of the Space Shuttle Challenger in orbit, viewed from a low angle. The white orbiter is on the left, and the large orange external tank is on the right. The background is the blackness of space with some stars.

TW@N

THIS WEEK @ NASA

1
00:00:00,400 --> 00:00:03,440
Tracking our next Mars landing ...
The science on the next\h\h

2
00:00:03,440 --> 00:00:06,240
station resupply mission ...
And the newest space station\h\h

3
00:00:06,240 --> 00:00:10,320
flight directors ... a few of the stories\h
to tell you about – This Week at NASA!
\h

4
00:00:13,680 --> 00:00:19,600
After nearly seven months and 300 million miles,\h
our Mars 2020 Perseverance rover and Ingenuity\h\h

5
00:00:19,600 --> 00:00:26,080
helicopter arrive at the Red Planet on Feb. 18.\h
Perseverance will use its suite of instruments to\h\h

6
00:00:26,080 --> 00:00:32,000
search for signs of ancient microbial life,\h
and test technologies to help pave the way\h\h

7
00:00:32,000 --> 00:00:36,800
for future human exploration of Mars.
“The rover exemplifies the spirit\h\h

8
00:00:36,800 --> 00:00:43,440
of exploration as it pulls on science technology\h
and human exploration to work to advance our goals\h\h

9
00:00:43,440 --> 00:00:50,240
in many areas. And Perseverance, by its very name,\h
describes the human spirit that gets us there.”
\h

10
00:00:51,280 --> 00:00:57,600
You can track the home stretch of the spacecraft’s\h

journey to Mars at mars.nasa.gov/mars2020,\h\h

11
00:00:57,600 --> 00:01:04,000
and watch landing day coverage on NASA TV and\h
on our website starting at 2:15 p.m. EST.
\h

12
00:01:04,720 --> 00:01:09,520
The research and technology on the next Northrop\h
Grumman Cygnus spacecraft to the International\h\h

13
00:01:09,520 --> 00:01:15,360
Space Station includes an experiment to study\h
manufacturing artificial retinas in space,\h\h

14
00:01:15,360 --> 00:01:19,760
an investigation using worms that could\h
help us better understand muscle weakening\h\h

15
00:01:19,760 --> 00:01:25,600
that astronauts experience in microgravity, a\h
radiation detection system for use on our first\h\h

16
00:01:25,600 --> 00:01:30,720
Artemis mission to the Moon with astronauts,\h
and more. Launch is targeted for no earlier\h\h

17
00:01:30,720 --> 00:01:37,920
than Feb. 20 from our Wallops Flight Facility.
NASA's four newest additions to its 2021 flight\h\h

18
00:01:37,920 --> 00:01:44,400
director's class are Diane Dailey, Chloe Mehring,\h
Fiona Turett, and Brandon Lloyd. After a rigorous\h\h

19
00:01:44,400 --> 00:01:49,440
training program that includes technical knowledge\h
and leadership skills, they will work in Mission\h\h

20
00:01:49,440 --> 00:01:54,880

Control at our Johnson Space Center overseeing\h
human spaceflight missions to, from, and aboard\h\h

21
00:01:54,880 --> 00:01:59,760
the International Space Station, as well as\h
lunar missions for NASA's Artemis program.
\h

22
00:02:00,720 --> 00:02:05,200
Technicians at our Kennedy Space Center\h
are prepping our Orion spacecraft to manage\h\h

23
00:02:05,200 --> 00:02:10,240
oxygen flow and cabin pressure for astronauts\h
inside the capsule on our Artemis II mission,\h\h

24
00:02:10,240 --> 00:02:14,800
the first flight to carry astronauts to the\h
Moon aboard Orion. The mission will help\h\h

25
00:02:14,800 --> 00:02:18,880
pave the way for sustainable exploration\h
at the Moon and future missions to Mars.

26
00:02:19,680 --> 00:02:24,480
The spacecraft for our Lucy mission received\h
its third and final scientific instrument.\h\h

27
00:02:24,480 --> 00:02:29,040
The mission, targeted for launch this October,\h
will be the first to explore the Trojan\h\h

28
00:02:29,040 --> 00:02:34,960
asteroids — a population of small bodies that\h
share an orbit with Jupiter. This last instrument,\h\h

29
00:02:34,960 --> 00:02:40,240
named, "L'Ralph," is actually two instruments in\h
one that will help Lucy determine the composition\h\h

30

00:02:40,240 --> 00:02:45,120

of the Trojan asteroids, and provide insight
into the early history of our solar system.
\h

31

00:02:45,920 --> 00:02:51,920

On Feb. 10, we featured a virtual Black History
Month event on NASA TV and the agency's website
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32

00:02:51,920 --> 00:02:57,200

focused on the impact of African American
Leadership in NASA. NASA is proud to observe
\h

33

00:02:57,200 --> 00:03:02,160

this and other months throughout the year during
which we celebrate diverse individuals and their
\h

34

00:03:02,160 --> 00:03:08,880

contributions to our agency and to our nation.
That's what's up this week @NASA ... For more on
\h