
TW@N
THIS WEEK @ NASA

1
00:00:00,329 --> 00:00:03,580
Our Artemis I flight test is “go for launch”
…

2
00:00:03,580 --> 00:00:07,089
The first deep-space long-duration biology
test …

3
00:00:07,089 --> 00:00:12,070
And the Webb Space Telescope captures new
images of Jupiter … a few of the stories

4
00:00:12,070 --> 00:00:17,039
to tell you about – This Week at NASA!

5
00:00:17,039 --> 00:00:22,630
On Aug. 22, mission managers concluded a Flight
Readiness Review for our uncrewed Artemis

6
00:00:22,630 --> 00:00:26,630
I flight test by giving teams a “go for
launch.”

7
00:00:26,630 --> 00:00:31,189
The review is an in-depth assessment of the
readiness of our Space Launch System rocket

8
00:00:31,189 --> 00:00:36,360
and Orion spacecraft to support the Artemis
I flight test beyond the Moon and back to

9
00:00:36,360 --> 00:00:37,400
Earth.

10
00:00:37,400 --> 00:00:42,390
The primary goal of the mission is to thoroughly
test the integrated systems, from launch to

11
00:00:42,390 --> 00:00:47,070

splashdown, before flying astronauts on subsequent Artemis missions.

12
00:00:47,070 --> 00:00:52,790
Artemis I is currently targeted for launch no earlier than Aug. 29.

13
00:00:52,790 --> 00:00:59,170
BioSentinel – a shoebox-sized CubeSat – is one of several secondary payloads on our uncrewed

14
00:00:59,170 --> 00:01:01,300
Artemis I flight test.

15
00:01:01,300 --> 00:01:06,640
It will perform the first long-duration biology experiment in deep space by monitoring the

16
00:01:06,640 --> 00:01:11,620
vital signs of yeast exposed to deep space radiation.

17
00:01:11,620 --> 00:01:17,360
Yeast cells have some biological similarities to human cells, so BioSentinel could help

18
00:01:17,360 --> 00:01:24,100
us better understand the risks of space radiation to humans and other biological organisms as

19
00:01:24,100 --> 00:01:28,160
we plan crewed exploration missions to the Moon and beyond.

20
00:01:28,160 --> 00:01:33,950
NASA’s James Webb Space Telescope recently captured new images of Jupiter that may give

21
00:01:33,950 --> 00:01:38,159
astronomers even more clues to the planet’s

inner life.

22
00:01:38,159 --> 00:01:44,670
The images, captured by Webb's Near-Infrared Camera or NIRCam, show auroras extending to

23
00:01:44,670 --> 00:01:49,410
high altitudes above the northern and southern poles of Jupiter.

24
00:01:49,410 --> 00:01:54,720
They also provide details about some of the planet's clouds, haze, and other atmospheric

25
00:01:54,720 --> 00:02:00,990
features, such as the Great Red Spot, a storm so big it could swallow Earth.

26
00:02:00,990 --> 00:02:06,170
Researchers have already begun analyzing Webb data to get new science results about our

27
00:02:06,170 --> 00:02:08,990
solar system's largest planet.

28
00:02:08,990 --> 00:02:14,310
NASA and Boeing are targeting as early as February 2023 for the launch of the Boeing

29
00:02:14,310 --> 00:02:17,300
Crew Flight Test to the International Space Station.

30
00:02:17,300 --> 00:02:22,450
The mission will carry NASA astronauts Barry "Butch" Wilmore and Suni Williams to the

31
00:02:22,450 --> 00:02:26,660
space station, where they will live and work for about two weeks.

32
00:02:26,660 --> 00:02:32,280
This is the first flight of the company's
CST-100 Starliner spacecraft with astronauts.

33
00:02:32,280 --> 00:02:37,700
The mission will demonstrate the ability of
Starliner to safely carry astronauts to and

34
00:02:37,700 --> 00:02:39,050
from the station.

35
00:02:39,050 --> 00:02:44,880
Find out more about NASA's Commercial Crew
Program at nasa.gov/commercialcrew.

36
00:02:44,880 --> 00:02:50,420
Engineers recently installed and deployed
the 30-foot-long solar array for our partner

37
00:02:50,420 --> 00:02:56,050
agency NOAA's Joint Polar Satellite System-2
or JPSS-2.

38
00:02:56,050 --> 00:03:01,500
The solar array deployment marked the last
major testing milestone for the weather satellite

39
00:03:01,500 --> 00:03:07,400
ahead of its targeted Nov. 1 launch at Vandenberg
Space Force Base in California.

40
00:03:07,400 --> 00:03:13,590
JPSS-2 will orbit Earth from pole to pole,
taking measurements and snapping images to

41
00:03:13,590 --> 00:03:18,700
help us plan for hurricanes, snowstorms, floods,
and other severe weather.