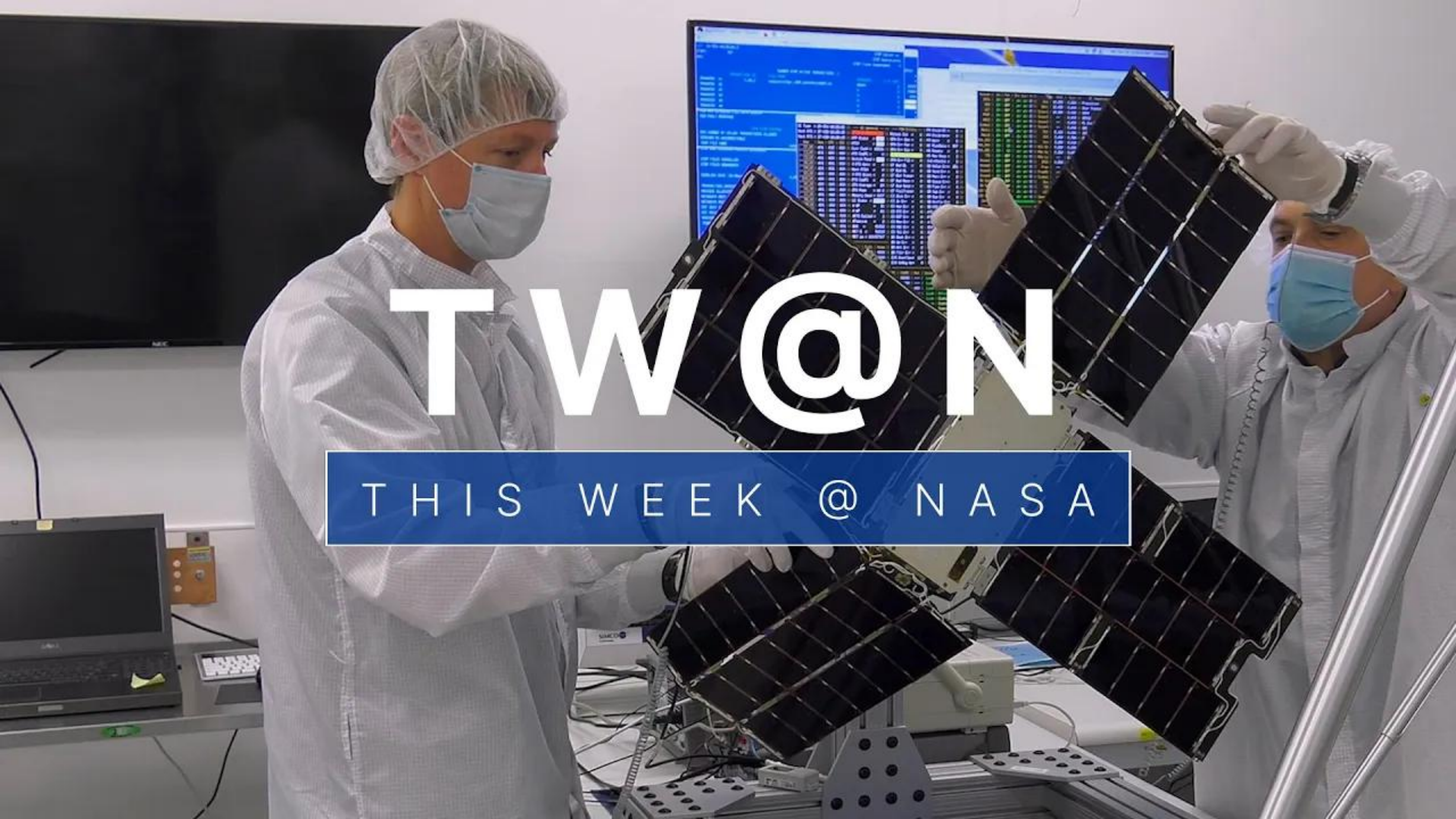
TW@N
THIS WEEK @ NASA

1
00:00:00,320 --> 00:00:03,440
Preparing a small satellite\h
to conduct some big science …

2
00:00:03,440 --> 00:00:07,200
An update on our upcoming mission\h
to a metal-rich asteroid …

3
00:00:07,200 --> 00:00:09,520
And a new director for the International Space\h\h

4
00:00:09,520 --> 00:00:13,120
Station … a few of the stories to\h
tell you about – This Week at NASA!

5
00:00:14,160 --> 00:00:18,720
Our Ames Research Center in California is in\h
the final stages of preflight preparations\h\h

6
00:00:18,720 --> 00:00:24,080
of BioSentinel. The CubeSat is one of several\h
secondary payloads targeted for launch on the\h\h

7
00:00:24,080 --> 00:00:30,320
uncrewed Artemis I mission to the Moon with our\h
Space Launch System rocket and Orion spacecraft.\h\h

8
00:00:30,320 --> 00:00:34,880
BioSentinel will eventually fly past\h
the Moon and into orbit around the Sun,\h\h

9
00:00:34,880 --> 00:00:40,480
to conduct a six-month investigation on the\h
effects of deep-space radiation on yeast, a living\h\h

10
00:00:40,480 --> 00:00:46,160
organism. This will be the first long-duration\h
biology experiment in deep-space and could\h\h

11

00:00:46,160 --> 00:00:51,840
help us better understand the radiation risks to\h
humans during long-duration deep-space missions.

12
00:00:52,960 --> 00:00:58,800
The Solar Electric Propulsion or (SEP) Chassis\h
for our Psyche spacecraft has been delivered to\h\h

13
00:00:58,800 --> 00:01:03,440
our Jet Propulsion Laboratory in Southern\h
California, where the mission’s assembly,\h\h

14
00:01:03,440 --> 00:01:09,440
test, and launch operations phase is underway.\h
The SEP Chassis, built by Maxar Technologies,\h\h

15
00:01:09,440 --> 00:01:14,880
is the main body of the spacecraft that includes\h
the six-and-a-half-foot-wide high-gain antenna,\h\h

16
00:01:14,880 --> 00:01:20,880
and the frame that will hold the mission’s science\h
instruments. Targeted for launch in August 2022,\h\h

17
00:01:20,880 --> 00:01:25,040
the Psyche mission will explore a\h
metal-rich asteroid of the same name,\h\h

18
00:01:25,040 --> 00:01:29,840
located in the main asteroid belt between\h
Mars and Jupiter. Studying the asteroid,\h\h

19
00:01:29,840 --> 00:01:35,040
which may be the core of an early planet, could\h
provide valuable insight into how Earth and\h\h

20
00:01:35,040 --> 00:01:39,840
other planets formed. More information about\h
the mission is available at: nasa.gov/psyche.

21

00:01:42,080 --> 00:01:47,200
NASA has named Robyn Gatens as director of the\h
International Space Station for the agency.\h\h

22
00:01:47,200 --> 00:01:52,080
She was appointed to the position after serving as\h
the acting space station director for about seven\h\h

23
00:01:52,080 --> 00:01:58,320
months. Gatens has 35 years of experience\h
at NASA in both the space station program\h\h

24
00:01:58,320 --> 00:02:02,880
and in development and management of the life\h
support systems for human spaceflight missions.\h\h

25
00:02:03,440 --> 00:02:07,120
As space station director, she\h
will continue to lead strategy,\h\h

26
00:02:07,120 --> 00:02:12,800
policy, integration, and stakeholder engagement\h
for the space station program at the agency level,\h\h

27
00:02:12,800 --> 00:02:16,640
while working closely with officials\h
at our Johnson Space Center in Houston.

28
00:02:17,600 --> 00:02:23,280
According to NASA-supported research, the 2021\h
Arctic wintertime sea ice extent reached on March\h\h

29
00:02:23,280 --> 00:02:29,760
21 tied 2007 as the seventh-smallest extent\h
of winter sea ice in the satellite record.\h\h

30
00:02:30,320 --> 00:02:34,320
This year’s maximum extent is\h
340,000 square miles below the\h\h

31

00:02:34,320 --> 00:02:38,480
1981 to 2010 average maximum. For perspective,\h\h

32
00:02:38,480 --> 00:02:44,080
that is equivalent to a missing area of ice larger\h
than the states of Texas and Florida combined.