



TW@N

THIS WEEK @ NASA

1  
00:00:00,960 --> 00:00:03,200  
Perseverance sends more sounds from Mars ...

2  
00:00:03,200 --> 00:00:06,320  
The rocket boosters for the  
Artemis I are all stacked up ...

3  
00:00:06,320 --> 00:00:11,040  
And preview of a weekend spacewalk ... a few of the  
stories to tell you about – This Week at NASA!

4  
00:00:14,160 --> 00:00:17,120  
Our Mars Perseverance rover  
has beamed back more sounds

5  
00:00:17,120 --> 00:00:20,960  
it has collected since landing  
on the Red Planet on Feb. 18.

6  
00:00:20,960 --> 00:00:29,881  
In this latest batch of recordings made by the  
rover's SuperCam instrument, you can hear ...

7  
00:00:29,881 --> 00:00:30,640  
“(Laser impacting rock) Tick, Tick, Tick, Tick ...”

8  
00:00:30,640 --> 00:00:34,800  
The first acoustic recording of a  
rock on Mars being struck by a laser.

9  
00:00:34,800 --> 00:00:39,040  
The rock was given the name  
“Máaz,” the Navajo word for Mars.

10  
00:00:39,040 --> 00:00:43,840  
Some of the zapping sounds from the laser impacts  
are slightly louder than others. The variations in

11  
00:00:43,840 --> 00:00:48,800

the intensity of the sounds can give researchers  
clues about the physical structure of the target.

12  
00:00:55,520 --> 00:01:00,480  
The SuperCam also recorded sounds of Martian  
wind noise captured while the mast that holds

13  
00:01:00,480 --> 00:01:05,200  
the rover's microphone was still stowed.  
The muffled sounds are reminiscent of what

14  
00:01:05,200 --> 00:01:11,120  
one might hear listening into a seashell at the  
beach, or with a hand cupped over an ear. You can

15  
00:01:11,120 --> 00:01:17,040  
check out these sounds for yourself, along with  
other sounds of exploration at [nasa.gov/sounds](https://nasa.gov/sounds).

16  
00:01:18,080 --> 00:01:22,240  
Engineers at our Kennedy Space Center have  
completed stacking the Space Launch System,

17  
00:01:22,240 --> 00:01:27,760  
or SLS, solid rocket boosters for our uncrewed  
Artemis I mission around the Moon and back.

18  
00:01:27,760 --> 00:01:32,800  
The twin booster segments were stacked onto the  
mobile launcher over the course of several weeks.

19  
00:01:32,800 --> 00:01:36,160  
Following a successful hot-fire  
test at our Stennis Space Center,

20  
00:01:36,160 --> 00:01:41,040  
now targeted for March 18, the SLS's  
core stage will be shipped to Kennedy

21  
00:01:41,040 --> 00:01:45,920

and stacked with the boosters and our Orion spacecraft in preparation for Artemis I.

22

00:01:46,880 --> 00:01:52,320

The International Space Station's fifth spacewalk of the year is slated for March 13. During the

23

00:01:52,320 --> 00:01:57,680

outing, NASA's Michael Hopkins and Victor Glover are scheduled to service and relocate some jumper

24

00:01:57,680 --> 00:02:03,520

cables of the station's thermal control system, continue some work from a Jan. 27 spacewalk, and

25

00:02:03,520 --> 00:02:08,640

work on some other tasks. The outing is the fourth spacewalk for Glover and the fifth for Hopkins.

26

00:02:09,680 --> 00:02:15,680

NASA astronaut Mark Vande Hei has been assigned to the International Space Station's Expedition 64/65

27

00:02:15,680 --> 00:02:22,160

crew. He and cosmonauts Oleg Novitskiy and Pyotr Dubrov of the Russian space agency Roscosmos,

28

00:02:22,160 --> 00:02:26,320

are scheduled to launch April 9 from the Baikonur Cosmodrome in Kazakhstan.

29

00:02:27,280 --> 00:02:32,480

A collaboration between NASA, the U.S. Department of Agriculture, and George Mason University

30

00:02:32,480 --> 00:02:37,600

is making high-resolution NASA data on soil moisture available to agricultural

31

00:02:37,600 --> 00:02:43,520

and natural resources professionals, who use soil moisture and other data to plan crop planting,

32

00:02:43,520 --> 00:02:48,960

forecast yields, track droughts or floods, and improve weather forecasts. The Crop Condition

33

00:02:48,960 --> 00:02:54,480

and Soil Moisture Analytics tool makes data from our Soil Moisture Active Passive mission and the

34

00:02:54,480 --> 00:02:59,520

Moderate Resolution Imaging Spectroradiometer instrument available in a user-friendly format.

35

00:03:00,640 --> 00:03:05,760

We teamed with American Aerospace Technologies Inc. for a recent demonstration flight

36

00:03:05,760 --> 00:03:11,520

to simulate aerial inspections of gas and petroleum pipelines. NASA, the Federal Aviation

37

00:03:11,520 --> 00:03:16,560

Administration, and three industry partners are working together on demonstrations like this,

38

00:03:16,560 --> 00:03:21,440

to show potential commercial applications of different sized unmanned aircraft systems used

39

00:03:21,440 --> 00:03:26,960

in various locations and airspace classes. This research aims to accelerate the safe integration

40

00:03:26,960 --> 00:03:31,840

of these aerial vehicles for commercial applications into the national airspace system.