



1

00:00:00,269 --> 00:00:03,879

The first graduating class of Artemis astronauts

...

2

00:00:03,879 --> 00:00:07,339

Getting ready to Green Run our SLS rocket

...

3

00:00:07,339 --> 00:00:12,460

And intriguing discoveries in our solar system
– and beyond ... a few of the stories to

4

00:00:12,460 --> 00:00:15,570

tell you about – This Week at NASA!

5

00:00:15,570 --> 00:00:21,020

We held a ceremony on Jan. 10 to honor the
first class of astronaut candidates to graduate

6

00:00:21,020 --> 00:00:23,200

under our Artemis program.

7

00:00:23,200 --> 00:00:28,130

After completing more than two years of basic
training, the graduating class – which includes

8

00:00:28,130 --> 00:00:33,290

eleven NASA astronauts and two Canadian Space
Agency astronauts – will become eligible

9

00:00:33,290 --> 00:00:38,620

for spaceflights – including to the International
Space Station, Artemis missions to the Moon,

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00:00:38,620 --> 00:00:42,690

and ultimately missions to Mars.

11

00:00:42,690 --> 00:00:48,350

On Jan. 8, teams at our Michoud Assembly Facility

in New Orleans loaded the first Space Launch

12
00:00:48,350 --> 00:00:55,329
System or SLS rocket core stage for our Artemis program onto the agency's Pegasus barge.

13
00:00:55,329 --> 00:01:00,101
The core stage is headed to our Stennis Space Center, near Bay St. Louis, Mississippi, for

14
00:01:00,101 --> 00:01:06,399
its Green Run test campaign – a comprehensive evaluation targeted to start later this year

15
00:01:06,399 --> 00:01:11,109
that will verify it is ready for launch ahead of our uncrewed Artemis 1 mission around the

16
00:01:11,109 --> 00:01:13,340
Moon and back.

17
00:01:13,340 --> 00:01:19,229
News highlighted in conjunction with the 235th meeting of the American Astronomical Society

18
00:01:19,229 --> 00:01:22,929
includes several mentions about our TESS satellite.

19
00:01:22,929 --> 00:01:28,779
The observatory discovered its first Earth-size planet in a star's habitable zone in a system

20
00:01:28,779 --> 00:01:31,829
just over 100 light-years away from us.

21
00:01:31,829 --> 00:01:37,240
TESS also discovered its first circumbinary planet – a planet that orbits two stars.

22

00:01:37,240 --> 00:01:40,609

That planet is about 1,300 light-years from Earth.

23

00:01:40,609 --> 00:01:46,130

Meanwhile, our Hubble Space Telescope has surveyed a spiral galaxy that is two-and-a-half

24

00:01:46,130 --> 00:01:51,170

times wider than our Milky Way and has 10 times as many stars.

25

00:01:51,170 --> 00:01:55,119

It may be the largest known galaxy in the local universe.

26

00:01:55,119 --> 00:02:00,969

And the SOFIA flying observatory captured a very detailed infrared panoramic image of

27

00:02:00,969 --> 00:02:06,259

the center of our Milky Way that could help inform future research on the formation of

28

00:02:06,259 --> 00:02:10,590

massive stars and supermassive black holes.

29

00:02:10,590 --> 00:02:17,170

A SpaceX Dragon cargo spacecraft that left the International Space Station on Jan. 7

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00:02:17,170 --> 00:02:22,780

is back on Earth with almost 3,600 pounds of science experiments and cargo.

31

00:02:22,780 --> 00:02:28,170

The returned items include the faulty battery charge-discharge unit replaced during a spacewalk

32

00:02:28,170 --> 00:02:34,200

in October, a microgravity study on tiny aquatic animals that are highly resistant to radiation

33
00:02:34,200 --> 00:02:40,200
on Earth, and research on rodents that could help develop therapies to treat bone and muscle

34
00:02:40,200 --> 00:02:41,590
loss on Earth.

35
00:02:41,590 --> 00:02:46,480
Conducting science aboard the orbiting laboratory is helping us learn how to keep astronauts

36
00:02:46,480 --> 00:02:52,400
healthy during long-duration spaceflights to the Moon and eventually to Mars.

37
00:02:52,400 --> 00:02:57,361
During a Jan. 7 event at our Armstrong Flight Research Center in Southern California, we

38
00:02:57,361 --> 00:03:02,750
highlighted some of the aircraft, scientific equipment, and personnel involved in five

39
00:03:02,750 --> 00:03:07,830
new NASA airborne campaigns that we will deploy this year across the U.S.

40
00:03:07,830 --> 00:03:12,680
The campaigns will look at a variety of Earth processes that affect human lives and the

41
00:03:12,680 --> 00:03:13,680
environment.

42
00:03:13,680 --> 00:03:16,640
That's what's up this week @NASA ...

