

A photograph of a Space Shuttle on the Mobile Launcher Platform (MLP) being moved by a crawler-transporter. The MLP is red and features the NASA logo. The crawler-transporter is a massive white metal structure with multiple sets of wheels. The scene is set outdoors with a large body of water in the foreground and a cloudy sky in the background. The text 'T W @ N' is overlaid in large white letters across the center of the image.

T W @ N

THIS WEEK @ NASA

1  
00:00:02,370 --> 00:00:04,670  
Firing up the rocket for the Artemis Moon  
missions ...

2  
00:00:04,670 --> 00:00:07,470  
A nomination for NASA's next administrator  
...

3  
00:00:07,470 --> 00:00:11,730  
And making room for the space station's  
next crew ... a few of the stories to tell

4  
00:00:11,730 --> 00:00:14,120  
you about – This Week at NASA!

5  
00:00:14,120 --> 00:00:18,509  
On March 18, we conducted the second Green  
Run series hot fire test with the core stage

6  
00:00:18,509 --> 00:00:25,370  
for our Space Launch System or SLS rocket  
at our Stennis Space Center near Bay St. Louis,

7  
00:00:25,370 --> 00:00:26,400  
Mississippi.

8  
00:00:26,400 --> 00:00:31,219  
All four of the rocket's RS-25 engines were  
fired at the same time during the test, to

9  
00:00:31,219 --> 00:00:35,380  
simulate the core stage's operation for  
a launch – during which it will generate

10  
00:00:35,380 --> 00:00:37,510  
about 1.6 million pounds of thrust.

11  
00:00:37,510 --> 00:00:43,239  
"This is a major milestone, advancing our

goals and objectives for Artemis, and I just

12  
00:00:43,239 --> 00:00:48,390  
could not be more proud of the team, of their  
talent, dedication, getting to this point,

13  
00:00:48,390 --> 00:00:51,180  
and pulling off a, just very successful test.”

14  
00:00:51,180 --> 00:00:55,539  
The hot fire is the final test of the Green  
Run series to ensure the rocket’s core stage

15  
00:00:55,539 --> 00:01:00,809  
is ready to launch Artemis missions, beginning  
with Artemis I, the first uncrewed mission

16  
00:01:00,809 --> 00:01:05,180  
of SLS and our Orion spacecraft around the  
Moon and back.

17  
00:01:05,180 --> 00:01:09,750  
On March 19, Acting NASA Administrator Steve  
Jurczyk released a statement in response to

18  
00:01:09,750 --> 00:01:14,970  
President Joe Biden’s nomination of Bill  
Nelson to serve as the 14th NASA administrator.

19  
00:01:14,970 --> 00:01:20,330  
The statement noted Nelson’s proven history  
of supporting our wide-ranging work here at

20  
00:01:20,330 --> 00:01:21,330  
NASA.

21  
00:01:21,330 --> 00:01:25,250  
Jurczyk went on to say that, while the nomination  
must still be confirmed, he looks forward

22  
00:01:25,250 --> 00:01:30,290  
to continued work with Nelson and the Biden-Harris  
administration to carry out NASA's many

23  
00:01:30,290 --> 00:01:31,520  
critical missions in the future.

24  
00:01:31,520 --> 00:01:37,640  
In 1986, while the chair of the House space  
subcommittee, Nelson flew aboard the space

25  
00:01:37,640 --> 00:01:43,220  
shuttle Columbia as a payload specialist on  
the STS-61C mission.

26  
00:01:43,220 --> 00:01:48,350  
On March 19, three members of the International  
Space Station's Expedition 64 crew, including

27  
00:01:48,350 --> 00:01:54,360  
our Kate Rubins, undocked and moved a Soyuz  
spacecraft from the station's Rassvet module

28  
00:01:54,360 --> 00:01:56,200  
to a different docking port.

29  
00:01:56,200 --> 00:02:01,390  
The relocation will allow the next Soyuz crew,  
which includes our Mark Vande Hei, to dock

30  
00:02:01,390 --> 00:02:04,970  
to Rassvet when they arrive on April 9.

31  
00:02:04,970 --> 00:02:08,629  
Each March many of us look forward to following  
our tournament brackets.

32  
00:02:08,629 --> 00:02:13,599  
And it's that time of year again to make

your winning picks for Tournament Earth.

33  
00:02:13,599 --> 00:02:18,060  
From now through April 13, you can cast votes  
for the most unforgettable photographs of

34  
00:02:18,060 --> 00:02:23,510  
Earth taken by astronauts from the International  
Space Station for more than 20 years.

35  
00:02:23,510 --> 00:02:31,610  
For more details, to download your bracket,  
and to vote go to: [earthobservatory.nasa.gov/te](http://earthobservatory.nasa.gov/te).

36  
00:02:31,610 --> 00:02:36,030  
Twenty-seven asteroids have been named in  
honor of African American, Hispanic, and Native

37  
00:02:36,030 --> 00:02:41,400  
American astronauts, and one cosmonaut, for  
their contributions to space exploration and

38  
00:02:41,400 --> 00:02:44,450  
for inspiring the next generation of explorers.

39  
00:02:44,450 --> 00:02:49,360  
The people who inspired the newly named asteroids  
include NASA's Stephanie Wilson, who is

40  
00:02:49,360 --> 00:02:53,430  
on our Artemis Team of astronauts – one  
of whom will be the first woman to set foot

41  
00:02:53,430 --> 00:02:58,829  
on the Moon, and former NASA astronauts José  
Hernández, who worked as part of a migrant

42  
00:02:58,829 --> 00:03:04,819  
farming family in his youth, and John Herrington,  
a member of the Chickasaw Nation.

43  
00:03:04,819 --> 00:03:10,430  
Near-Earth asteroid, 2001 FO32 is expected to make its closest approach to us on March

44  
00:03:10,430 --> 00:03:11,430  
21.

45  
00:03:11,430 --> 00:03:16,349  
The asteroid is the largest predicted to pass by Earth this year, and is expected to safely

46  
00:03:16,349 --> 00:03:22,569  
pass no closer than 1.25 million miles from Earth, which is about 5 1/4 times the distance

47  
00:03:22,569 --> 00:03:24,269  
from Earth to the Moon.

48  
00:03:24,269 --> 00:03:28,511  
The close approach will give astronomers a valuable scientific opportunity to study the

49  
00:03:28,511 --> 00:03:30,120  
asteroid.

50  
00:03:30,120 --> 00:03:34,349  
New results from our Juno mission have, for the first time, revealed that Jupiter's

51  
00:03:34,349 --> 00:03:39,689  
dawn storms are born on the planet's night side, which Juno can see because it orbits

52  
00:03:39,689 --> 00:03:41,819  
over the planet's poles.

53  
00:03:41,819 --> 00:03:47,519  
Dawn storms are intense, early morning brightening

of aurorae that occurs at both Jovian poles.

54  
00:03:47,519 --> 00:03:52,150  
These are specific to Jupiter, but researchers say they are very similar to a type of terrestrial

55  
00:03:52,150 --> 00:03:53,720  
aurora called substorms.

56  
00:03:53,720 --> 00:03:58,489  
The findings could provide a better understanding about how these planetary phenomena occur

57  
00:03:58,489 --> 00:04:01,750  
on worlds both within and beyond our solar system.