



1  
00:00:00,610 --> 00:00:03,570

A mighty powerful spacewalk outside the space station ...

2  
00:00:03,570 --> 00:00:07,380

A look at the space station's next crew ...

3  
00:00:07,380 --> 00:00:12,480

And updates on our Artemis program ... a few of the stories to tell you about – This

4  
00:00:12,480 --> 00:00:15,519

Week at NASA!

5  
00:00:15,519 --> 00:00:20,870

On July 1, our Chris Cassidy and Bob Behnken were outside the International Space Station

6  
00:00:20,870 --> 00:00:23,740

for their second spacewalk in less than a week.

7  
00:00:23,740 --> 00:00:24,961

"You have control of the battery."

8  
00:00:24,961 --> 00:00:25,961

"I do.

9  
00:00:25,961 --> 00:00:26,961

I'm in a good spot."

10  
00:00:26,961 --> 00:00:32,730

The pair continued upgrading power systems on the station ... replacing aging nickel-hydrogen

11  
00:00:32,730 --> 00:00:34,430

(NiH<sub>2</sub>) batteries with new lithium-ion (Li-Ion) batteries.

12  
00:00:34,430 --> 00:00:40,680  
The battery upgrades are expected to continue on future spacewalks, with target dates and

13  
00:00:40,680 --> 00:00:45,810  
times to be announced once mission planners assess the scope of the remaining work to

14  
00:00:45,810 --> 00:00:47,050  
be done.

15  
00:00:47,050 --> 00:00:53,680  
“You really feel it when you arrive at the space station and see this hardware, and see

16  
00:00:53,680 --> 00:00:56,800  
these modules put together and flying in space.

17  
00:00:56,800 --> 00:01:02,900  
It’s one of the most incredible engineering achievements, I think that humanity has done.”

18  
00:01:02,900 --> 00:01:07,490  
NASA astronaut Kate Rubins discussed her upcoming second mission to the space station, during

19  
00:01:07,490 --> 00:01:11,860  
a July 1 press conference at our Johnson Space Center in Houston.

20  
00:01:11,860 --> 00:01:17,280  
She was joined by Sergey Ryzhikov and Sergey Kud-Sverchkov of the Russian space agency

21  
00:01:17,280 --> 00:01:18,280  
Roscosmos.

22  
00:01:18,280 --> 00:01:25,950

The trio is targeted to launch to the station  
Oct. 14 from the Baikonur Cosmodrome in Kazakhstan.

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00:01:25,950 --> 00:01:30,500

NASA is working with contractor Northrop Grumman  
on building Space Launch System (SLS) solid

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00:01:30,500 --> 00:01:37,140

rocket boosters to support as many as six  
additional flights, for a total of up to nine.

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00:01:37,140 --> 00:01:41,380

Northrop Grumman is the current lead contractor  
for the boosters that will launch the first

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00:01:41,380 --> 00:01:46,509

three Artemis missions, including the one  
that will land the first woman and next man

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00:01:46,509 --> 00:01:49,550

on the Moon in 2024.

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00:01:49,550 --> 00:01:55,640

“Three, Two, One ... (explosive sound)”

29

00:01:55,640 --> 00:02:01,950

We’ve wrapped up testing on the Orion Structural  
Test Article – a twin copy of the spacecraft

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00:02:01,950 --> 00:02:06,170

- needed to verify Orion is ready for Artemis  
I.

31

00:02:06,170 --> 00:02:12,200

The testing, which began in early 2017, was  
designed to thoroughly evaluate Orion’s

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00:02:12,200 --> 00:02:17,940

ability to withstand the stresses of launch,  
climb to orbit, harsh conditions of deep space

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00:02:17,940 --> 00:02:21,670

transit, and return to Earth.

34

00:02:21,670 --> 00:02:25,610

Engineers completed the Space Launch System (SLS) rocket's structural testing campaign

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00:02:25,610 --> 00:02:30,780

for Artemis missions by applying millions of pounds of force to the rocket's liquid

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00:02:30,780 --> 00:02:33,370

oxygen structural test tank.

37

00:02:33,370 --> 00:02:38,840

The tank failed within the parameters expected, proving flight readiness and providing critical

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00:02:38,840 --> 00:02:39,840

data.

39

00:02:39,840 --> 00:02:46,060

The SLS rocket, Orion spacecraft, Gateway and Human Landing System are part of NASA's

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00:02:46,060 --> 00:02:50,129

backbone for Artemis – our next step in human space exploration.

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00:02:50,129 --> 00:02:53,200

That's what's up this week @NASA ...