1
00:00:00,190 --> 00:00:03,550
Another power-packed spacewalk outside the
space station …

2
00:00:03,550 --> 00:00:05,990
Highlighting a pretty cool comet …

3
00:00:05,990 --> 00:00:11,400
And a key piece of Space Launch System hardware
is on the move … a few of the stories to

4
00:00:11,400 --> 00:00:15,959
tell you about – This Week at NASA!

5
00:00:15,959 --> 00:00:20,520
Our Chris Cassidy and Bob Behnken were back
outside the International Space Station on

6
00:00:20,520 --> 00:00:26,640
July 16 to outfit one of the station’s power
channels with new lithium-ion batteries and

7
00:00:26,640 --> 00:00:28,640
associated hardware.

8
00:00:28,640 --> 00:00:33,480
The spacewalk is one of the few remaining
in a three-and-a-half-year effort to upgrade

9
00:00:33,480 --> 00:00:35,960
the station’s power system.

10
00:00:35,960 --> 00:00:41,300
NASA photographer Bill Ingalls recently captured
images of Comet NEOWISE in the early morning

11
00:00:41,300 --> 00:00:42,819
skies over Washington, D.C.

12
00:00:42,819 --> 00:00:49,569
The comet, which was discovered by and nicknamed
after our NEOWISE spacecraft, has been visible

13
00:00:49,569 --> 00:00:55,120
at certain hours with the naked-eye – and
has been spotted by several NASA spacecraft,

14
00:00:55,120 --> 00:00:57,499
as well as astronauts aboard the space station.

15
00:00:57,499 --> 00:01:00,739
“The fact that we can see it is really what
makes it unique.

16
00:01:00,739 --> 00:01:05,100
It’s quite rare for a comet to be bright
enough that we can see it with the naked eye,

17
00:01:05,100 --> 00:01:06,470
or even with just binoculars.

18
00:01:06,470 --> 00:01:12,720
The last time we had a comet that was this
bright was Comet Hale-Bopp back in 1995 and

19
00:01:12,720 --> 00:01:13,720
1996.”

20
00:01:13,720 --> 00:01:19,070
Comet NEOWISE is expected to make its closest
approach to Earth on July 22.

21
00:01:19,070 --> 00:01:24,270
On July 17, teams at our Marshall Space Flight
Center in Huntsville, Alabama put the wheels

22
00:01:24,270 --> 00:01:29,560
in motion to transport the launch vehicle

stage adapter for our Space Launch System

23
00:01:29,560 --> 00:01:34,030
(SLS) rocket, to our Kennedy Space Center
in Florida – in preparation for the first

24
00:01:34,030 --> 00:01:37,460
uncrewed Artemis mission around the Moon and
back.

25
00:01:37,460 --> 00:01:42,210
The adapter, which connects the upper and
core stages of the rocket, is being transported

26
00:01:42,210 --> 00:01:44,990
aboard the agency's Pegasus barge.

27
00:01:44,990 --> 00:01:51,450
On July 16, the joint European Space Agency/NASA
Solar Orbiter mission released the mission's

28
00:01:51,450 --> 00:01:56,420
first data – captured during the spacecraft's
first close pass of the Sun.

29
00:01:56,420 --> 00:02:02,090
On that flyby last month, Solar Orbiter captured
the closest images ever taken of the Sun,

30
00:02:02,090 --> 00:02:06,730
and had all 10 of its instruments turned on
together for the first time, including an

31
00:02:06,730 --> 00:02:11,569
American-led instrument designed to pinpoint
coronal mass ejections.

32
00:02:11,569 --> 00:02:17,730
We are now targeting Oct. 31, 2021, for the
launch of our James Webb Space Telescope from

33
00:02:17,730 --> 00:02:23,590
French Guiana, due to impacts from the ongoing
coronavirus pandemic, as well as technical

34
00:02:23,590 --> 00:02:25,030
challenges.

35
00:02:25,030 --> 00:02:30,060
Engineers recently conducted the first full
systems evaluation on Webb since the telescope

36
00:02:30,060 --> 00:02:32,670
was assembled into its final form.

37
00:02:32,670 --> 00:02:38,330
It’s a critical software and electrical
analysis on the entire observatory as a single,

38
00:02:38,330 --> 00:02:40,210
fully connected vehicle.

39
00:02:40,210 --> 00:02:46,180
Webb is the largest and most technically complex
space science telescope NASA has ever built.

40
00:02:46,180 --> 00:02:52,150
The CALIPSO satellite, a joint venture between
NASA and the French space agency, CNES, helped

41
00:02:52,150 --> 00:02:57,490
provide a unique view of the massive Saharan
dust plume that crossed the North Atlantic

42
00:02:57,490 --> 00:03:00,880
Ocean in June – into parts of the U.S.

43
00:03:00,880 --> 00:03:05,800
The animation includes data and imagery from

CALIPSO, a space-based laser that measures

44
00:03:05,800 --> 00:03:12,020
clouds and small atmospheric particles, and
from National Oceanic and Atmospheric Administration

45
00:03:12,020 --> 00:03:13,020
satellites.

46
00:03:13,020 --> 00:03:15,459
That’s what’s up this week @NASA …