



1

00:00:00,170 --> 00:00:03,950

A pair of power plays aboard the space station

...

2

00:00:03,950 --> 00:00:07,130

Checking out progress of our Commercial Crew Program ...

3

00:00:07,130 --> 00:00:12,920

And studying the frontier of space ... a few of the stories to tell you about – This

4

00:00:12,920 --> 00:00:15,290

Week at NASA!

5

00:00:15,290 --> 00:00:19,770

Outside the International Space Station, our Christina Koch and Andrew Morgan conducted

6

00:00:19,770 --> 00:00:24,990

the first two spacewalks of what Koch refers to as, “the great @Space\_Station battery

7

00:00:24,990 --> 00:00:30,810

swap” – a series of five expected spacewalks this month to upgrade the station’s power

8

00:00:30,810 --> 00:00:36,600

system, by replacing nickel-hydrogen batteries with new, more powerful lithium-ion batteries.

9

00:00:36,600 --> 00:00:42,359

The pair kicked off the series with a seven-hour and one minute spacewalk on Oct. 6, followed

10

00:00:42,359 --> 00:00:45,260

by the second outing five days later.

11

00:00:45,260 --> 00:00:50,179

The third spacewalk in the great space station battery swap series is scheduled for Oct.

12

00:00:50,179 --> 00:00:52,859

16.

13

00:00:52,859 --> 00:00:57,629

On Oct. 10, our Administrator Jim Bridenstine, visited the Hawthorne, California headquarters

14

00:00:57,629 --> 00:01:00,249

of our commercial partner, SpaceX.

15

00:01:00,249 --> 00:01:04,339

While there, they saw progress the company is making to fly astronauts to and from the

16

00:01:04,339 --> 00:01:08,969

space station aboard its Crew Dragon spacecraft, as part of the agency's Commercial Crew

17

00:01:08,969 --> 00:01:10,200

Program.

18

00:01:10,200 --> 00:01:15,119

This will help return the ability to fly American astronauts on American spacecraft from American

19

00:01:15,119 --> 00:01:19,720

soil – an important step toward sending the first woman and the next man to the Moon

20

00:01:19,720 --> 00:01:23,420

by 2024, as part of our Artemis program.

21

00:01:23,420 --> 00:01:28,939

Meanwhile, Bridenstine, Deputy Administrator Jim Morhard, Associate Administrator for Science

22

00:01:28,939 --> 00:01:35,060

Thomas Zurbuchen and James Webb Space Telescope  
Program Director Greg Robinson visited Northrop

23

00:01:35,060 --> 00:01:40,460

Grumman Aerospace Systems in California, where  
the fully assembled Webb Telescope is undergoing

24

00:01:40,460 --> 00:01:45,450

testing, prior to its eventual mission to  
seek out the first galaxies that formed in

25

00:01:45,450 --> 00:01:47,249

the early universe.

26

00:01:47,249 --> 00:01:49,670

“Pegasus away.”

27

00:01:49,670 --> 00:01:55,619

On Oct. 10 – in the skies over the Atlantic  
Ocean, we air-launched the Ionospheric Connection

28

00:01:55,619 --> 00:02:00,880

Explorer, or ICON mission aboard a Northrop  
Grumman Pegasus XL rocket.

29

00:02:00,880 --> 00:02:05,920

ICON will study the dynamic region of our  
upper atmosphere, where terrestrial and space

30

00:02:05,920 --> 00:02:08,920

weather meet, known as the ionosphere.

31

00:02:08,920 --> 00:02:13,620

The mission could help us better understand  
the physical processes at play in the ionosphere

32

00:02:13,620 --> 00:02:18,349

that are potentially detrimental to radio  
communications, satellites and the physical

33

00:02:18,349 --> 00:02:21,740

health of astronauts.

34

00:02:21,740 --> 00:02:27,500

The first all-electric configuration of our X-57 Maxwell aircraft has been delivered to

35

00:02:27,500 --> 00:02:33,050

our Armstrong Flight Research Center in Edwards, California, for engineers to begin ground,

36

00:02:33,050 --> 00:02:35,870

taxi and eventually, flight tests.

37

00:02:35,870 --> 00:02:41,720

The X-57 is our first all-electric experimental aircraft, or X-plane, and the first crewed

38

00:02:41,720 --> 00:02:43,670

X-plane in two decades.

39

00:02:43,670 --> 00:02:50,849

A goal of the X-57 project is to further advance the design and airworthiness process for using

40

00:02:50,849 --> 00:02:56,010

distributed electric propulsion technology in general aviation aircraft – which has

41

00:02:56,010 --> 00:03:02,599

the potential to increase efficiency while decreasing emissions, and noise.

42

00:03:02,599 --> 00:03:09,750

Registration is open for our 2020 Human Exploration Rover Challenge, set for April 17-18, near

43

00:03:09,750 --> 00:03:13,070

our Marshall Space Flight Center in Huntsville,  
Alabama.

44

00:03:13,070 --> 00:03:18,049

The annual event is open to student teams  
from high schools, colleges and universities

45

00:03:18,049 --> 00:03:24,160

around the world to design, engineer and test  
a human-powered rover, on a course simulating

46

00:03:24,160 --> 00:03:28,760

terrain found on our Moon, Mars, and other  
planetary bodies.

47

00:03:28,760 --> 00:03:33,959

It is one of several challenges we use to  
encourage students to pursue degrees and careers

48

00:03:33,959 --> 00:03:38,560

in science, technology, engineering, and math  
related fields.

49

00:03:38,560 --> 00:03:40,810

For more details go to [nasa.gov/roverchallenge](https://nasa.gov/roverchallenge).

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00:03:40,810 --> 00:03:46,580

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