



1

00:00:00,190 --> 00:00:02,520

International partnerships for Moon and Mars

...

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00:00:02,520 --> 00:00:06,750

An update on that historic all-woman spacewalk

...

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00:00:06,750 --> 00:00:12,409

And a milestone for the James Webb Space Telescope

... a few of the stories to tell you about

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00:00:12,409 --> 00:00:16,190

— This Week at NASA – International Edition!

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00:00:16,190 --> 00:00:21,320

For the first time in almost two decades,
the International Astronautical Congress – or

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00:00:21,320 --> 00:00:27,370

IAC -- met in the United States, and kicked
it off with remarks from Vice President Mike

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00:00:27,370 --> 00:00:30,840

Pence about the future of human space exploration.

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00:00:30,840 --> 00:00:36,969

“With Apollo in the history books, the Artemis
mission has begun, and we are well on our

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00:00:36,969 --> 00:00:42,609

way to making NASA’s Moon to Mars mission
a reality.”

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00:00:42,609 --> 00:00:47,019

During the conference, NASA showcased plans
for the Artemis program, which will send the

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00:00:47,019 --> 00:00:53,000

first woman and next man the Moon by 2024,
using innovative commercial and international

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00:00:53,000 --> 00:00:55,579

partnerships, technologies and systems.

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00:00:55,579 --> 00:00:57,940

“We need international partners.

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00:00:57,940 --> 00:01:03,339

We can all do more when we work together than
any one of us can do if we go alone.”

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00:01:03,339 --> 00:01:08,790

In addition to highlighting our growing partnerships
with international space agencies, Administrator

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00:01:08,790 --> 00:01:15,820

Bridenstine also showcased our new lunar mobile
robot known as VIPER – the Volatiles Investigating

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00:01:15,820 --> 00:01:18,020

Polar Exploration Rover.

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00:01:18,020 --> 00:01:23,230

VIPER will sample water ice and collect about
100 days of data that will inform the first

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00:01:23,230 --> 00:01:26,040

global water resource maps of the Moon.

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00:01:26,040 --> 00:01:32,130

“VIPER is going to rove on the south pole
of the Moon, and VIPER is going to assess

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00:01:32,130 --> 00:01:33,700

where the water ice is.

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00:01:33,700 --> 00:01:40,750

We're going to be able to characterize the water ice, and ultimately drill and find out

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00:01:40,750 --> 00:01:45,380

just how is the water ice embedded in the regolith on the Moon.”

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00:01:45,380 --> 00:01:51,560

The IAC also held a ceremony honoring humanity's first lunar explorers -- the Apollo 11 crew

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00:01:51,560 --> 00:01:54,450

-- with the 2019 World Space Award.

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00:01:54,450 --> 00:02:00,480

Buzz Aldrin, Neil Armstrong's son Mark, and Michael Collins's grandson Luke accepted

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00:02:00,480 --> 00:02:02,810

the award.

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00:02:02,810 --> 00:02:07,460

Mission Control in Houston reports the new battery charge/discharge unit installed during

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00:02:07,460 --> 00:02:14,060

the historic Oct. 18 spacewalk by Christina Koch and Jessica Meir is activated and operating

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00:02:14,060 --> 00:02:15,060

properly.

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00:02:15,060 --> 00:02:20,310

The faulty unit is due to return to Earth on the next SpaceX Dragon resupply ship for

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00:02:20,310 --> 00:02:26,200

inspection, and station managers will reschedule the remaining three battery replacement spacewalks

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00:02:26,200 --> 00:02:27,810

at a future date.

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00:02:27,810 --> 00:02:32,050

In the meantime, the International Space Station crew will prepare for five planned

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00:02:32,050 --> 00:02:39,310

spacewalks to repair a cosmic particle detector, the Alpha Magnetic Spectrometer, in November

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00:02:39,310 --> 00:02:41,640

and December.

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00:02:41,640 --> 00:02:47,680

The sunshield for NASA's James Webb Space Telescope has passed a critical test in preparation

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00:02:47,680 --> 00:02:50,560

for its 2021 launch.

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00:02:50,560 --> 00:02:56,400

Technicians and engineers fully deployed each of the sunshield's five layers, successfully

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00:02:56,400 --> 00:03:01,860

putting the sunshield into the same position it will be a million miles from Earth.

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00:03:01,860 --> 00:03:06,480

Webb will observe distant parts of the universe humans have never seen before.

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00:03:06,480 --> 00:03:11,750

Because it's optimized for infrared light, Webb's optics and sensors must remain extremely

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00:03:11,750 --> 00:03:17,830

cold, and its sunshield is key for regulating

temperature.

44
00:03:17,830 --> 00:03:23,030
The NASA International Space Apps Challenge was held Oct. 18-20.

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00:03:23,030 --> 00:03:29,160
This global 48-hour hackathon brought together participants of all ages and backgrounds at

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00:03:29,160 --> 00:03:35,840
more than 200 events in more than 80 countries to solve real-world problems with collaborative

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00:03:35,840 --> 00:03:36,870
solutions.

48
00:03:36,870 --> 00:03:41,630
The teams work with NASA's open source data and products and design innovative solutions

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00:03:41,630 --> 00:03:45,660
to scientific challenges faced on Earth and in space.

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00:03:45,660 --> 00:03:48,870
That's what's up this week @NASA ...