
T W @ N
THIS WEEK @ NASA

1
00:00:00,210 --> 00:00:02,470
A safe return to Earth from the space station
…

2
00:00:02,470 --> 00:00:05,370
Greeting the astronauts of the next Commercial
Crew flight …

3
00:00:05,370 --> 00:00:09,980
And an update on development of a human lunar
landing system … a few of the stories to

4
00:00:09,980 --> 00:00:14,090
tell you about – This Week at NASA!

5
00:00:14,090 --> 00:00:19,739
On April 16, the International Space Station's
Expedition 64 crew, including our Kate Rubins,

6
00:00:19,739 --> 00:00:22,320
closed out its time on the station.

7
00:00:22,320 --> 00:00:27,679
After saying farewell to those remaining onboard
the orbital outpost, Rubins, Sergey Ryzhikov

8
00:00:27,679 --> 00:00:33,160
and Sergey Kud-Sverchkov, both of the Russian
Space Agency Roscosmos, climbed aboard their

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00:00:33,160 --> 00:00:36,250
Soyuz spacecraft and headed back to Earth.

10
00:00:36,250 --> 00:00:41,550
The trio touched down safely in Kazakhstan,
on the morning of April 17, after spending

11
00:00:41,550 --> 00:00:47,609
185 days conducting research and maintenance

aboard the space station.

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00:00:47,609 --> 00:00:52,749
On April 16, the astronauts for NASA's SpaceX
Crew-2 mission to the space station arrived

13
00:00:52,749 --> 00:00:58,239
at our Kennedy Space Center for final prelaunch
activities, ahead of their flight to the station.

14
00:00:58,239 --> 00:01:04,259
Crew-2 is currently targeted for launch April
22 from Kennedy's Launch Complex 39A.

15
00:01:04,259 --> 00:01:10,409
"We come in on the plane over here and we
got to fly by the pad and see our rocket getting

16
00:01:10,409 --> 00:01:14,890
ready to go and that's just an amazing feeling;
I've gotten to do that before and really

17
00:01:14,890 --> 00:01:18,170
there's nothing like it when you look out
the window and see a spaceship getting prepared

18
00:01:18,170 --> 00:01:21,189
and realize that you're going to be riding
on it in a few days."

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00:01:21,189 --> 00:01:25,840
Crew-2 is the second crew rotation flight
of SpaceX's Crew Dragon spacecraft and the

20
00:01:25,840 --> 00:01:28,560
first with two international partners.

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00:01:28,560 --> 00:01:33,619
The flight follows certification by NASA for
regular flights to the space station as part

22
00:01:33,619 --> 00:01:35,950
of the agency’s Commercial Crew Program.

23
00:01:35,950 --> 00:01:41,579
Also, on April 16, NASA picked SpaceX to develop
its commercial human landing system for the

24
00:01:41,579 --> 00:01:43,289
Artemis program.

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00:01:43,289 --> 00:01:47,550
Their design was one of three competing for
a crewed demonstration mission to the lunar

26
00:01:47,550 --> 00:01:48,550
surface.

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00:01:48,550 --> 00:01:53,210
This system will help NASA complete the final
leg of its lunar journey and land the next

28
00:01:53,210 --> 00:01:55,899
two American astronauts on the Moon.

29
00:01:55,899 --> 00:02:00,880
Former NASA astronaut, Pam Melroy has been
nominated by President Biden to serve as the

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00:02:00,880 --> 00:02:03,149
agency’s deputy administrator.

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00:02:03,149 --> 00:02:05,939
The nomination must be confirmed by the Senate.

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00:02:05,939 --> 00:02:10,420
In a statement released in response to the
nomination, Acting NASA Administrator Steve

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00:02:10,420 --> 00:02:16,190
Jurczyk said Melroy is a proven leader with
a bold vision, who is driven by a desire to

34
00:02:16,190 --> 00:02:20,690
solve the biggest issues here on Earth, throughout
the solar system, and beyond.

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00:02:20,690 --> 00:02:25,670
A veteran of three spaceflights, and one of
only two women to command a space shuttle,

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00:02:25,670 --> 00:02:29,660
Melroy logged more than 38 days in space.

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00:02:29,660 --> 00:02:34,720
Our Nancy Grace Roman Space Telescope will
use gravitational microlensing to find thousands

38
00:02:34,720 --> 00:02:37,860
of new planets beyond our solar system.

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00:02:37,860 --> 00:02:42,640
This quirk of gravity makes it possible to
locate planets by observing how a planet's

40
00:02:42,640 --> 00:02:44,950
gravity distorts distant starlight.

41
00:02:44,950 --> 00:02:49,700
Turns out that because solitary small black
holes, known as stellar-mass black holes,

42
00:02:49,700 --> 00:02:55,260
produce the same effects, the mission will
also provide the best opportunity yet to definitively

43
00:02:55,260 --> 00:02:57,860
detect these black holes for the first time.

44
00:02:57,860 --> 00:03:03,860
The Nancy Grace Roman Space Telescope is currently
targeted for launch in the mid-2020s.

45
00:03:03,860 --> 00:03:09,660
April 12 marked the 40-year anniversary of
STS-1, the first spaceflight of the nation’s

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00:03:09,660 --> 00:03:11,200
Space Shuttle Program.

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00:03:11,200 --> 00:03:16,620
On that date in 1981, NASA astronauts John
Young and Bob Crippen launched aboard space

48
00:03:16,620 --> 00:03:21,680
shuttle Columbia on a two-day test mission
that began a new era of human spaceflight.

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00:03:21,680 --> 00:03:27,420
“It allowed us to fly a diverse group of
people into space to become astronauts.

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00:03:27,420 --> 00:03:30,960
We didn’t need just test pilots anymore.

51
00:03:30,960 --> 00:03:38,370
So, it opened up the field of the astronauts
in a much broader range than we’d ever had

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00:03:38,370 --> 00:03:39,370
before.”

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00:03:39,370 --> 00:03:43,820
STS-1 was NASA's first crewed mission since
the Apollo-Soyuz Test Project in 1975.

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00:03:43,820 --> 00:03:49,900

The launch also occurred 20 years to the day
after cosmonaut Yuri Gagarin became the first

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00:03:49,900 --> 00:03:53,360
human to orbit Earth on April 12, 1961.