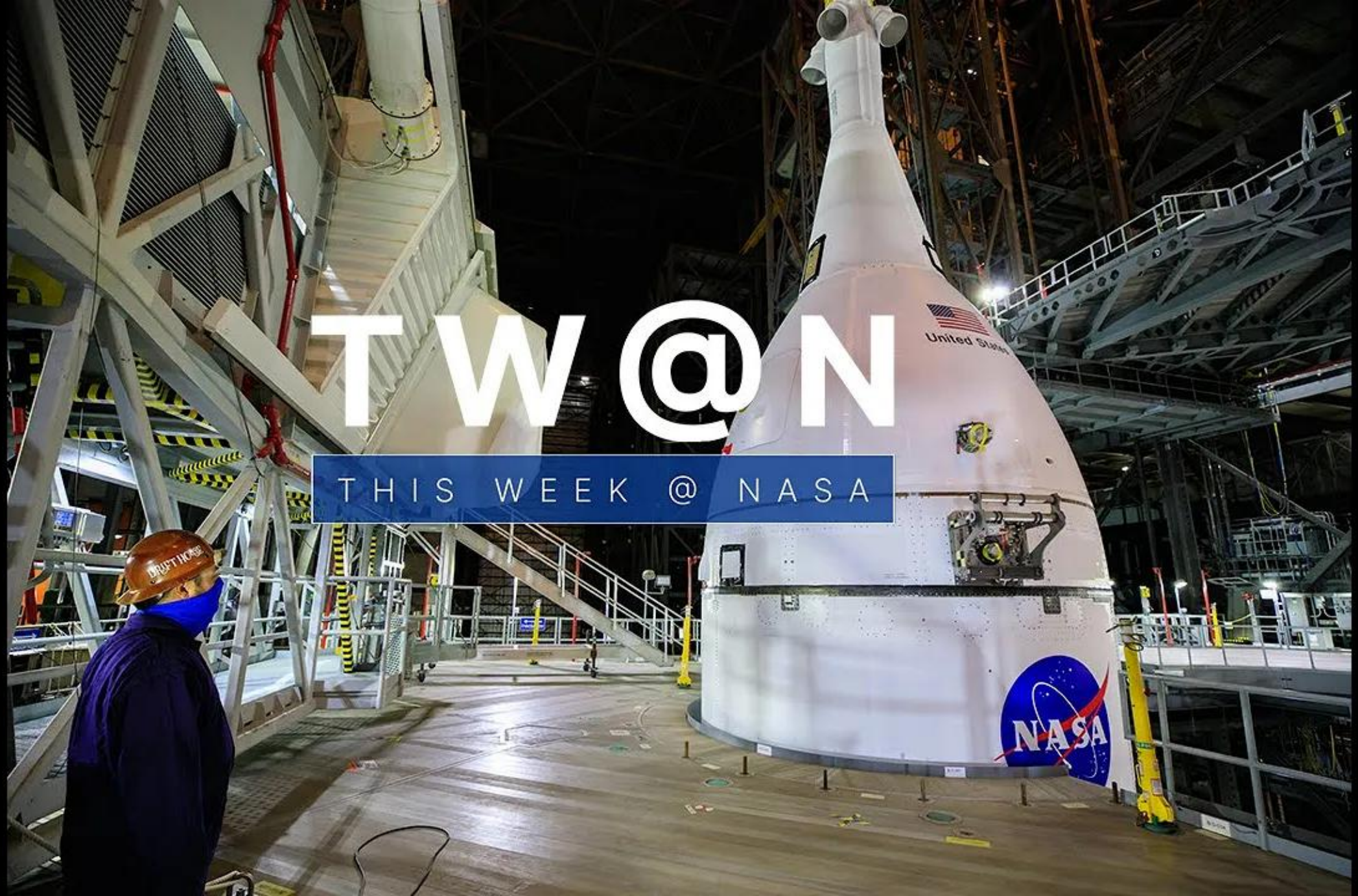
TW@N
THIS WEEK @ NASA
NASA

1
00:00:00,100 --> 00:00:03,269
The Orion spacecraft for Artemis
I is on the move ...

2
00:00:03,303 --> 00:00:05,939
Critical hardware for Artemis
II is delivered ...

3
00:00:05,939 --> 00:00:08,842
And a new telescope
to study our Milky Way ...

4
00:00:09,109 --> 00:00:12,178
A few of the stories
to tell you about - this week at NASA!

5
00:00:12,879 --> 00:00:14,447
Engineers at NASA’s Kennedy

6
00:00:14,447 --> 00:00:18,385
Space Center in Florida
moved the Orion spacecraft for our Artemis

7
00:00:18,385 --> 00:00:22,622
I mission from the Launch Abort System
Facility to the Vehicle Assembly Building.

8
00:00:23,023 --> 00:00:27,427
Then Orion was placed on top of the Space
Launch System or SLS rocket

9
00:00:27,660 --> 00:00:29,662
and joined the other flight hardware

10
00:00:29,662 --> 00:00:32,999
already stacked and ready
for the upcoming Artemis I mission.

11
00:00:33,566 --> 00:00:37,570

Artemis I will be an uncrewed
flight test of Orion and the SLS

12
00:00:37,771 --> 00:00:41,174
as an integrated system
ahead of crewed flights to the Moon.

13
00:00:41,641 --> 00:00:44,444
Under Artemis, NASA
aims to land the first woman

14
00:00:44,444 --> 00:00:48,815
and first person of color on the Moon
and establish sustainable lunar

15
00:00:48,815 --> 00:00:53,053
exploration, in preparation
for eventual human missions to Mars.

16
00:00:54,320 --> 00:00:55,688
Teams in Germany that helped

17
00:00:55,688 --> 00:01:00,360
build the Orion spacecraft's European
Service Module or ESM for our Artemis

18
00:01:00,360 --> 00:01:04,431
II mission recently prepared it for travel
to our Kennedy Space Center.

19
00:01:04,964 --> 00:01:08,435
The ESM stores Orion's
propulsion, thermal control,

20
00:01:08,435 --> 00:01:11,171
electrical power, and critical life
support systems.

21
00:01:11,438 --> 00:01:13,173
[sound of plane engine noise]

22
00:01:13,306 --> 00:01:17,644
Orion arrived safely at Kennedy
and was transferred to the Neil A.

23
00:01:17,644 --> 00:01:18,711
Armstrong Operations

24
00:01:18,711 --> 00:01:22,782
and Checkout Facility to be integrated
with other Artemis II hardware.

25
00:01:23,283 --> 00:01:25,952
Artemis II will be Orion's
first spaceflight

26
00:01:25,952 --> 00:01:28,054
around the Moon and back with astronauts.

27
00:01:29,389 --> 00:01:32,058
NASA has selected a proposal
for a new gamma-ray

28
00:01:32,058 --> 00:01:36,096
space telescope, called the Compton
Spectrometer and Imager or COSI,

29
00:01:36,362 --> 00:01:39,399
that will study the recent history
of star birth, star

30
00:01:39,399 --> 00:01:42,669
death, and the formation
of chemical elements in the Milky Way.

31
00:01:43,236 --> 00:01:47,507
Out of 18 telescope proposals
that our Astrophysics Explorers program

32

00:01:47,507 --> 00:01:52,846
received in 2019, COSI is the only one
selected to continue into development.

33
00:01:53,213 --> 00:01:55,748
It is expected to launch in 2025.

34
00:01:56,883 --> 00:01:59,285
[Announcer: "Undocking confirmed."]

35
00:01:59,285 --> 00:02:03,857
[Announcer: "Soyuz MS 18 is now
free of the International Space Station."]

36
00:02:04,023 --> 00:02:08,461
On Oct. 17, a Russian Soyuz spacecraft
carrying cosmonaut Oleg

37
00:02:08,461 --> 00:02:12,999
Novitskiy of Roscosmos and Russian actress
Yulia Peresild and producer-director

38
00:02:12,999 --> 00:02:16,269
Klim Shipenko landed
safely in Kazakhstan –

39
00:02:16,269 --> 00:02:19,339
just hours after leaving
the International Space Station.

40
00:02:19,806 --> 00:02:22,442
The seven people remaining onboard
the station include

41
00:02:22,442 --> 00:02:26,012
NASA’s Shane Kimbrough, Megan McArthur,
and Mark Vande Hei.

42
00:02:26,279 --> 00:02:27,413
The station is scheduled

43
00:02:27,413 --> 00:02:31,484
to get four more occupants later
this month, with the arrival of our SpaceX

44
00:02:31,484 --> 00:02:35,522
Crew-3 mission –
currently targeted for launch on Oct. 31.

45
00:02:36,823 --> 00:02:41,161
On Oct. 22, a Russian Progress
supply spacecraft that had undocked

46
00:02:41,161 --> 00:02:45,765
from the space station's Poisk module
two days earlier, redocked – this time

47
00:02:45,765 --> 00:02:49,903
to the station's recently installed
Nauka Multipurpose Laboratory Module.

48
00:02:50,403 --> 00:02:53,873
The maneuver provided an opportunity
to test and check out systems

49
00:02:53,873 --> 00:02:57,844
in the new module that are used
for orientation control of the station.

50
00:02:59,279 --> 00:03:01,514
NASA is sharing OpenET,

51
00:03:01,514 --> 00:03:05,652
a powerful, new, web-based platform
that uses publicly available data,

52
00:03:05,885 --> 00:03:10,423
to help those who rely on water resources
across the drought-stricken western U.S.

53
00:03:10,957 --> 00:03:14,961
OpenET measures evapotranspiration –
the combined process

54
00:03:15,061 --> 00:03:18,765
by which water is transferred
to the atmosphere through evaporation

55
00:03:18,765 --> 00:03:23,102
of surface water on land
and transpiration of moisture from plants.

56
00:03:23,536 --> 00:03:27,307
The tool puts NASA data
into the hands of farmers, water managers,

57
00:03:27,307 --> 00:03:30,810
conservation groups,
and others to accelerate improvements

58
00:03:30,810 --> 00:03:32,912
and innovations in water management.

59
00:03:34,747 --> 00:03:38,818
On Oct. 19, we held a ceremony
at Ellington Field, near our Johnson Space

60
00:03:38,818 --> 00:03:42,622
Center in Houston, to name
the hangar there that houses the agency's

61
00:03:42,622 --> 00:03:46,926
T-38 astronaut training jets
after late astronaut John Young.

62
00:03:47,093 --> 00:03:50,730
Young was a member of NASA's
second astronaut class, known

63

00:03:50,730 --> 00:03:54,534
as the "New Nine."
He walked on the Moon during Apollo 16,

64
00:03:54,667 --> 00:03:58,771
commanded the first space shuttle mission,
and became the first person to launch

65
00:03:58,771 --> 00:04:03,543
into space seven times – six from Earth,
and once from the surface of the Moon.

66
00:04:04,177 --> 00:04:07,180
That’s what’s up this week
@NASA … For more on these