
NASA
WSTF
ORION SPACECRAFT
EUROPEAN SERVICE MODULE

1
00:00:00,290 --> 00:00:04,290
A critical test of the "powerhouse" for
our Orion spacecraft ...

2
00:00:04,290 --> 00:00:09,000
Curiosity is still going strong after seven
Earth years on Mars ...

3
00:00:09,000 --> 00:00:13,580
And Hubble's new portrait of Jupiter ... a
few of the stories to tell you about - This

4
00:00:13,580 --> 00:00:15,880
Week at NASA!

5
00:00:15,880 --> 00:00:20,950
On Aug. 5, at our White Sands Test Facility in New Mexico, we conducted a ground-based

6
00:00:20,950 --> 00:00:26,040
firing test of the propulsion and pressurization
systems for our Orion spacecraft's service module.

7
00:00:27,160 --> 00:00:32,730
The test simulated an abort-to-orbit scenario
that requires the system to place Orion into

8
00:00:32,730 --> 00:00:37,820
a safe orbit if a problem occurs after the
abort system has been jettisoned.

9
00:00:37,820 --> 00:00:43,320
The service module will propel, power, and
cool Orion, and provide consumables for astronauts

10
00:00:43,320 --> 00:00:49,440
inside the spacecraft on future Artemis exploration
missions to deep space, including to the vicinity

11
00:00:49,440 --> 00:00:52,120

of the Moon.

12
00:00:52,120 --> 00:00:57,350
Our Curiosity Mars Rover recently captured
this 360-degree panorama of a location on

13
00:00:57,350 --> 00:01:02,329
Mars called "Teal Ridge". This location
is part of a larger region the rover has been

14
00:01:02,329 --> 00:01:08,390
exploring called the "clay-bearing unit"
on the side of Mount Sharp, inside Gale Crater.

15
00:01:08,390 --> 00:01:13,850
On Aug. 5 Curiosity wrapped up its seventh
Earth year on Mars with news it successfully

16
00:01:13,850 --> 00:01:17,810
completed its 22nd full-depth drill hole on
Mars.

17
00:01:17,810 --> 00:01:23,010
The rover will now use its suite of instruments
to analyze and make observations of the dime-size

18
00:01:23,010 --> 00:01:27,460
hole and the material extracted from it.

19
00:01:27,460 --> 00:01:32,450
This new Hubble Space Telescope view of Jupiter,
taken on June 27, shows the planet's Great

20
00:01:32,450 --> 00:01:37,870
Red Spot, and a more intense color palette
in the clouds swirling in Jupiter's atmosphere

21
00:01:37,870 --> 00:01:40,090
than seen in previous years.

22
00:01:40,090 --> 00:01:46,400
The colors, and their changes, provide important
clues to ongoing processes in Jupiter's atmosphere.

23
00:01:46,400 --> 00:01:51,470
Hubble provides views of the outer planets
as part of a yearly study to look for changes

24
00:01:51,470 --> 00:01:55,670
in storms, winds, and clouds on those planets.

25
00:01:55,670 --> 00:02:00,790
During a recent test, the team of technicians
and engineers for our James Webb Space Telescope

26
00:02:00,790 --> 00:02:05,619
successfully deployed the support structure
that holds the telescope's secondary mirror in place.

27
00:02:06,979 --> 00:02:11,950
At its full size, Webb will not fit into any
available rocket, so it has been designed

28
00:02:11,950 --> 00:02:17,090
to intricately fold in on itself to create
a smaller footprint for launch.

29
00:02:17,090 --> 00:02:21,180
Deployment of the support structure is a key
part of the highly-choreographed series of

30
00:02:21,180 --> 00:02:26,639
deployments, extensions, and movements required
to bring the observatory to life once it reaches

31
00:02:26,639 --> 00:02:32,700
orbit - so that it can begin its mission
of conducting groundbreaking science.

32

00:02:32,700 --> 00:02:37,599
On August 6, an unpiloted Northrop Grumman
Cygnus cargo spacecraft left the International

33
00:02:37,599 --> 00:02:43,489
Space Station three months after delivering
7,600 pounds of supplies and scientific experiments

34
00:02:43,489 --> 00:02:44,640
to the station.

35
00:02:44,640 --> 00:02:49,650
The spacecraft is scheduled to remain in orbit
until mid-December and, along with another

36
00:02:49,650 --> 00:02:54,959
Cygnus targeted for launch in October, demonstrate
the capability to fly two Cygnus vehicles

37
00:02:54,959 --> 00:03:00,309
simultaneously and support hosted payloads
for longer periods of time.