1
00:00:00,370 --> 00:00:04,720
"It's back to work, back to NASA's mission
following the government shutdown...'

2
00:00:04,720 --> 00:00:08,460
"Another commercial partner completes a demonstration
flight to the space station ..."

3
00:00:08,460 --> 00:00:14,059
"And preparations continue for NASA's next
mission to Mars ...Those are some of the stories

4
00:00:14,059 --> 00:00:16,340
trending, This Week at NASA!"

5
00:00:16,340 --> 00:00:20,780
With the government shutdown over, Administrator
Charlie Bolden welcomed employees back to

6
00:00:20,780 --> 00:00:22,780
the work of NASA's mission.

7
00:00:22,780 --> 00:00:27,040
Bolden visited Goddard Space Flight Center
with Maryland Senator Barbara Mikulski for

8
00:00:27,040 --> 00:00:31,780
an update on several projects, including the
Global Precipitation Measurement mission,

9
00:00:31,780 --> 00:00:36,820
the Magnetospheric Multiscale spacecraft and
the James Webb Space Telescope.

10
00:00:36,820 --> 00:00:41,469
Bolden also visited Mississippi to thank employees
at Stennis Space Center for their critical

11
00:00:41,469 --> 00:00:46,190

engineering and testing work on the agency's next generation rocket engines and the staff

12
00:00:46,190 --> 00:00:51,359
of the NASA Shared Services Center for their support of the agency during the shutdown.

13
00:00:51,359 --> 00:00:56,059
A few notable accomplishments in space during the shutdown ... This October 9 shot of Earth

14
00:00:56,059 --> 00:01:00,640
is from the Jupiter-bound Juno spacecraft's closest approach to Earth since launching

15
00:01:00,640 --> 00:01:06,450
in 2011 ... LADEE, NASA's latest moon mission, dropped into lunar orbit on Oct. 6 to study

16
00:01:06,450 --> 00:01:10,800
the moon's atmosphere ... and the Lunar Laser Communication Demonstration system onboard

17
00:01:10,800 --> 00:01:16,750
LADEE recently used a pulsed laser beam to transmit data 239-thousand miles from the

18
00:01:16,750 --> 00:01:22,490
moon to Earth at a record-breaking download rate of 622 megabits per second.

19
00:01:22,490 --> 00:01:27,860
The October 22 unberthing and release of Orbital Sciences Corporation's Cygnus spacecraft from

20
00:01:27,860 --> 00:01:32,270
the International Space Station made Cygnus the second commercial spacecraft to complete

21
00:01:32,270 --> 00:01:37,290

a resupply demonstration flight to the Station
-- the SpaceX Dragon is the other.

22
00:01:37,290 --> 00:01:41,090
Cygnus delivered 13-hundred pounds of gear
to the ISS.

23
00:01:41,090 --> 00:01:45,640
Orbital can now make official resupply missions
to the station in the future.

24
00:01:45,640 --> 00:01:49,110
Pre-flight processing continues for NASA's
next mission to Mars.

25
00:01:49,110 --> 00:01:54,590
MAVEN, or Mars Atmosphere and Volatile EvolutioN,
is the first spacecraft designed to directly

26
00:01:54,590 --> 00:01:59,610
measure the Martian atmosphere for clues about
what existed there in the past.

27
00:01:59,610 --> 00:02:05,640
Liftoff is targeted for November 18 from Cape
Canaveral Air Force Station in Florida.

28
00:02:05,640 --> 00:02:10,170
Testing to fine tune the design of NASA's
Space Launch System continues.

29
00:02:10,170 --> 00:02:15,420
Specialized imaging techniques at Ames Research
Center's Unitary Wind Tunnel allow engineers

30
00:02:15,420 --> 00:02:19,599
to see air flow density around the base of
various models.

31
00:02:19,599 --> 00:02:25,180

The data gives an indication how the rocket
will perform on its way to space.

32
00:02:25,180 --> 00:02:29,370
Satellites show there was greater sea ice
coverage this summer in the Arctic than 2012's

33
00:02:29,370 --> 00:02:34,299
record-breaking minimum -- the smallest coverage
of Arctic sea ice in the 34 years the polar

34
00:02:34,299 --> 00:02:36,599
region's been monitored from space.

35
00:02:36,599 --> 00:02:40,840
In addition to the satellite data, NASA's
IceBridge Mission uses aircraft to measure

36
00:02:40,840 --> 00:02:42,840
the thickness of sea ice.

37
00:02:42,840 --> 00:02:44,959
And that's what's up ... This Week at NASA.