1
00:00:00,269 --> 00:00:03,600
Major hurricane Florence, seen from space
…

2
00:00:03,600 --> 00:00:07,270
Our mission to size up land and sea ice on
Earth …

3
00:00:07,270 --> 00:00:12,719
And “catching big air” … another successful
test for our Orion spacecraft … a few of

4
00:00:12,719 --> 00:00:16,350
the stories to tell you about – This Week
at NASA!

5
00:00:16,350 --> 00:00:22,170
A high definition camera outside the International
Space Station captured a view of massive Hurricane

6
00:00:22,170 --> 00:00:27,539
Florence on the move in the Atlantic Ocean,
on the morning of Sept. 12.

7
00:00:27,539 --> 00:00:32,860
The footage was taken as Florence – then
a category 4 storm, with winds near 130 miles

8
00:00:32,860 --> 00:00:37,230
per hour – was closing in on the U.S. East
Coast.

9
00:00:37,230 --> 00:00:39,730
Satellites in space also saw the storm.

10
00:00:39,730 --> 00:00:44,870
This view from NOAA’s GOES-East satellite
shows Florence approaching the Carolinas and

11

00:00:44,870 --> 00:00:49,700
gives an idea of just how big the storm is.

12
00:00:49,700 --> 00:00:55,420
Launched Sept 15 from Vandenberg Air Force
Base in California, our ICESat-2 mission is

13
00:00:55,420 --> 00:01:01,560
designed to collect a terabyte of data a day
to monitor the height of Earth's surface.

14
00:01:01,560 --> 00:01:07,130
The mission uses an extremely advanced laser
instrument that sends 10,000 pulses a second

15
00:01:07,130 --> 00:01:09,200
to Earth's surface.

16
00:01:09,200 --> 00:01:15,609
It then measures the height of ice sheets,
glaciers, sea ice and vegetation by calculating

17
00:01:15,609 --> 00:01:19,429
the time it takes the pulses to return to
the spacecraft.

18
00:01:19,429 --> 00:01:25,509
ICESat-2 will enable researchers to track
changes in land and sea ice with unparalleled

19
00:01:25,509 --> 00:01:28,200
detail.

20
00:01:28,200 --> 00:01:34,069
Our Orion spacecraft's parachute system
had its final test on Sept. 12 at the U.S.

21
00:01:34,069 --> 00:01:39,020
Army's Proving Ground in Yuma, Arizona,
in preparation for missions with astronauts

22
00:01:39,020 --> 00:01:41,299
to the Moon and beyond.

23
00:01:41,299 --> 00:01:46,499
The Orion test capsule was dropped from an
altitude of more than six miles to verify

24
00:01:46,499 --> 00:01:49,899
the spacecraft's system of 11 parachutes.

25
00:01:49,899 --> 00:01:55,209
In addition to the chutes, the test verified
the operation of the forward bay covers and

26
00:01:55,209 --> 00:02:00,829
other devices that work in sequence to slow
the capsule's descent to ensure astronauts

27
00:02:00,829 --> 00:02:05,439
can return safely from deep space missions.

28
00:02:05,439 --> 00:02:10,390
Our administrator Jim Bridenstine has named
Jody Singer director of the agency's Marshall

29
00:02:10,390 --> 00:02:12,500
Space Flight Center in Huntsville, Alabama.

30
00:02:12,500 --> 00:02:17,610
Singer, who is the first woman appointed to
the position, has been the center's deputy

31
00:02:17,610 --> 00:02:23,780
director since February 2016, and has served
as acting director since the retirement of

32
00:02:23,780 --> 00:02:26,040
Todd May as center director in July.

33
00:02:26,040 --> 00:02:29,390
“We’re going back to the Moon – and
this time when we go to the Moon, we’re

34
00:02:29,390 --> 00:02:30,560
going to stay.

35
00:02:30,560 --> 00:02:32,860
Jody is up for the job there at Marshall.

36
00:02:32,860 --> 00:02:37,150
Marshall is critically important to accomplishing
this objective, and we’re very excited about

37
00:02:37,150 --> 00:02:38,440
it.”

38
00:02:38,440 --> 00:02:45,800
A test of a deployable spacecraft heat shield
technology, known as ADEPT took place Sept. 12.

39
00:02:48,000 --> 00:02:53,550
ADEPT was launched on an UP Aerospace suborbital
rocket at Spaceport America’s Vertical Launch

40
00:02:53,550 --> 00:02:59,820
Area in New Mexico, to a high enough altitude
for the umbrella-like heat shield to be deployed

41
00:02:59,820 --> 00:03:02,430
and tested on its way back to Earth.

42
00:03:02,430 --> 00:03:08,560
This concept could be used to safely deploy
scientific payloads or enable long-term human

43
00:03:08,560 --> 00:03:13,330
exploration of Mars with the associated cargo

needs of such a mission.