



SPEED
278
KM/H

ALTITUDE
0.7
KM

STAGE 2 TELEMETRY



T+ 00:00:20
SPACEX CREW DEMO-1

1

00:00:00,099 --> 00:00:03,419

An important step for the Commercial Crew Program ...

2

00:00:03,419 --> 00:00:05,870

More testing with our Space Launch System rocket engine ...

3

00:00:05,870 --> 00:00:13,830

And, a new show that explores how we do, what we do ... a few of the stories to tell you

4

00:00:13,830 --> 00:00:16,299

about – This Week at NASA!

5

00:00:16,299 --> 00:00:17,990

“Ignition.

6

00:00:17,990 --> 00:00:19,690

Liftoff ...”

7

00:00:19,690 --> 00:00:25,170

On March 2, the SpaceX Crew Dragon spacecraft launched aboard a Falcon 9 rocket from our

8

00:00:25,170 --> 00:00:27,360

Kennedy Space Center, on Demo-1.

9

00:00:27,360 --> 00:00:34,059

The SpaceX Demo-1 mission is the first uncrewed test flight of NASA’s Commercial Crew Program.

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00:00:34,059 --> 00:00:38,280

The round-trip to the International Space Station is designed to provide data on the

11

00:00:38,280 --> 00:00:43,450

performance of the company’s Falcon 9 rocket, Crew Dragon spacecraft, and other systems

12
00:00:43,450 --> 00:00:49,639
and operations that NASA will evaluate, as
part of the process to certify SpaceX to carry

13
00:00:49,639 --> 00:00:52,059
astronauts to and from the space station.

14
00:00:52,059 --> 00:00:59,299
“What today really represents is a new era
in spaceflight – an era where we are looking

15
00:00:59,299 --> 00:01:05,570
forward to being one customer as an agency
and as a country, in a robust commercial marketplace

16
00:01:05,570 --> 00:01:06,570
in low-Earth orbit.”

17
00:01:06,570 --> 00:01:11,469
“SpaceX would not be here without NASA – without
the incredible work that was done before SpaceX

18
00:01:11,469 --> 00:01:15,840
even started, and without the support after
SpaceX did start.

19
00:01:15,840 --> 00:01:16,899
So thank you.”

20
00:01:16,899 --> 00:01:21,950
SpaceX’s Demo-2 test flight, which will
fly NASA astronauts to the space station,

21
00:01:21,950 --> 00:01:24,300
is targeted to launch in July.

22
00:01:24,300 --> 00:01:29,760
Meanwhile, Boeing, our other partner developing

spacecraft to launch American astronauts from

23
00:01:29,760 --> 00:01:35,590
American soil, is targeting the launch of
its CST-100 Starliner spacecraft's uncrewed

24
00:01:35,590 --> 00:01:42,820
Orbital Flight Test, for no earlier than April.

25
00:01:42,820 --> 00:01:48,550
Our Stennis Space Center in Mississippi conducted
the latest in a series of tests with an RS-25

26
00:01:48,550 --> 00:01:53,759
engine controller for use on a future flight
of our new Space Launch System rocket, or

27
00:01:53,759 --> 00:01:54,759
SLS.

28
00:01:54,759 --> 00:01:59,609
The SLS will use four of the engines to launch
astronauts aboard our Orion spacecraft on

29
00:01:59,609 --> 00:02:03,170
missions to the Moon and beyond.

30
00:02:03,170 --> 00:02:08,009
"NASA Science Live" is our new monthly
show that gives a behind-the-scenes look at

31
00:02:08,009 --> 00:02:11,280
how the agency explores Earth and outer space.

32
00:02:11,280 --> 00:02:16,060
"To the Moon, and Beyond" – the first
episode – looks at how science conducted

33
00:02:16,060 --> 00:02:22,030

on the Moon in the past, informs current missions studying the Moon, as well as plans for future

34

00:02:22,030 --> 00:02:24,280

lunar exploration missions.

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00:02:24,280 --> 00:02:30,110

You can see the show on NASA Television, on the agency's website, and on social media.

36

00:02:30,110 --> 00:02:36,000

For more info, go to nasa.gov/nasasciencelive.

37

00:02:36,000 --> 00:02:41,720

A new experimental type of deep space communications technology is scheduled to be demonstrated

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00:02:41,720 --> 00:02:44,680

on the International Space Station this spring.

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00:02:44,680 --> 00:02:48,980

The demonstration involves X-ray communications, or XCOM.

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00:02:48,980 --> 00:02:54,430

In principle, XCOM can send more data, using less energy than the radio wave technology

41

00:02:54,430 --> 00:02:58,680

currently used to communicate between spacecraft and Earth.

42

00:02:58,680 --> 00:03:03,840

The experiment could lead to data rates in the gigabits-per-second range for deep space

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00:03:03,840 --> 00:03:06,040

missions.

44

00:03:06,040 --> 00:03:11,361

A new experiment planned for launch to the space station in August 2022 will, for the

45

00:03:11,361 --> 00:03:16,260

first time, gather global observations of an important driver of space weather in our

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00:03:16,260 --> 00:03:18,000

upper atmosphere.

47

00:03:18,000 --> 00:03:22,980

The experiment will help us understand and, ultimately, forecast space weather – which

48

00:03:22,980 --> 00:03:29,370

can adversely affect technology, astronauts in space, radio communications, and even overwhelm

49

00:03:29,370 --> 00:03:30,530

power grids.

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00:03:30,530 --> 00:03:34,100

That's what's up this week @NASA ...