



SpaceX
CRS-20

1

00:00:01,069 --> 00:00:04,870

NASA Host Tammy Long: We are looking live at a Falcon 9 rocket on the launch pad at

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00:00:04,870 --> 00:00:08,340

the Cape Canaveral Air Force Station in Florida.

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00:00:08,340 --> 00:00:14,910

At 11:50 tonight, the aerospace company SpaceX will launch a Dragon cargo spacecraft on a

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00:00:14,910 --> 00:00:19,980

NASA mission to resupply the International Space Station.

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00:00:19,980 --> 00:00:25,650

Happy Friday evening, everyone, and welcome to NASA's John F. Kennedy Space Center for

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00:00:25,650 --> 00:00:31,390

live launch coverage of SpaceX's Commercial Resupply Mission 20 for the International

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00:00:31,390 --> 00:00:32,550

Space Station.

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00:00:32,550 --> 00:00:36,809

What a fantastic way to start the weekend, with smoke and fire!

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00:00:36,809 --> 00:00:43,370

I'm your host, Tammy Long, and we are but 19 minutes away from the planned liftoff of

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00:00:43,370 --> 00:00:47,809

the Falcon 9 rocket from the beautiful coast of Florida.

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00:00:47,809 --> 00:00:53,949

The CRS-20 mission will fly much-needed astronaut supplies and research experiments up to the

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00:00:53,949 --> 00:01:01,710

International Space Station, which at launch time will be orbiting 259 statute miles above

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00:01:01,710 --> 00:01:03,269

our Earth.

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00:01:03,269 --> 00:01:09,300

Back here on Earth, our team of correspondents are reporting from across the country to cover

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00:01:09,300 --> 00:01:10,880

this thrilling launch.

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00:01:10,880 --> 00:01:16,049

We'll head to the Mission Director's Center here on the Space Coast for updates on the

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00:01:16,049 --> 00:01:17,800

weather and the countdown.

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00:01:17,800 --> 00:01:23,220

Then we'll head west to SpaceX Headquarters in Hawthorne, California, and of course, we'll

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00:01:23,220 --> 00:01:27,130

check in with Mission Control, Houston, at Johnson Space Center.

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00:01:27,130 --> 00:01:33,520

So let's get fired up by reviewing some quick facts about tonight's CRS-20 mission

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00:01:33,520 --> 00:01:35,149

launch.

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00:01:35,149 --> 00:01:42,180

CRS-20 is the third flight of this Dragon spacecraft, and the last commercial resupply

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00:01:42,180 --> 00:01:45,409

mission to utilize the Dragon 1 vehicle.

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00:01:45,409 --> 00:01:52,590

The spacecraft includes more than 4,500 pounds of astronaut supplies and payloads for science

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00:01:52,590 --> 00:01:53,590

research.

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00:01:53,590 --> 00:01:59,829

Tonight's launch window is instantaneous, meaning that SpaceX must launch at the exact

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00:01:59,829 --> 00:02:04,409

second of the planned liftoff, or try again on another day.

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00:02:04,409 --> 00:02:10,470

As planned, the Dragon spacecraft stays docked to the International Space Station for about

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00:02:10,470 --> 00:02:13,930

a month before returning to terra firma.

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00:02:13,930 --> 00:02:20,870

Not only will CRS-20 resupply the ISS, it's also delivering important science experiments,

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00:02:20,870 --> 00:02:25,400

some of which will impact directly humanity's quality of life.

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00:02:25,400 --> 00:02:29,330

So let's take a deeper dive into the payload.

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00:02:29,330 --> 00:02:35,680
Bartolomeo is an external payload platform operating up to 12 active payload sites on

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00:02:35,680 --> 00:02:37,080
the station.

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00:02:37,080 --> 00:02:43,160
The Airbus platform hosts commercial and institutional payloads, offers unlimited opportunities for

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00:02:43,160 --> 00:02:49,270
new space missions, and enables the growth of the commercial space marketplace.

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00:02:49,270 --> 00:02:53,720
And next is a payload that seeks out-of-this-world performance.

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00:02:53,720 --> 00:02:55,900
That is, Adidas Boost.

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00:02:55,900 --> 00:03:01,730
The shoe and apparel giant is using space to test its tiny foam sphere technology to

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00:03:01,730 --> 00:03:04,860
improve foot performance and comfort.

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00:03:04,860 --> 00:03:08,450
CRS-20 also carries a droplet formation study.

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00:03:08,450 --> 00:03:14,090
Delta Faucet is sending up an experiment that could help reduce water without sacrificing

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00:03:14,090 --> 00:03:16,170
the performance of shower heads.

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00:03:16,170 --> 00:03:21,690

And the MVP Cell-03 investigation is looking at helping the heart.

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00:03:21,690 --> 00:03:27,500

It will look at stem cells that could treat cardiovascular disease or heart abnormalities

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00:03:27,500 --> 00:03:29,490

caused by spaceflight.