
SpaceX
CRS-19

1
00:00:00,669 --> 00:00:02,790
Jennifer Wolfinger, NASA Communications: You are looking live at a Falcon 9 rocket on the

2
00:00:02,790 --> 00:00:05,970
launch pad at Cape Canaveral Air Force Station in Florida.

3
00:00:05,970 --> 00:00:10,940
At 12:51 this afternoon, the aerospace company SpaceX will launch a Dragon cargo spacecraft

4
00:00:10,940 --> 00:00:14,440
on a NASA mission to resupply the International Space Station.

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00:00:14,440 --> 00:00:18,160
Good afternoon everyone and welcome to NASA's Kennedy Space Center for our live coverage

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00:00:18,160 --> 00:00:21,050
of the 19th resupply mission for SpaceX.

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00:00:21,050 --> 00:00:23,380
I'm your host, Jennifer Wolfinger.

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00:00:23,380 --> 00:00:27,990
We are about 28 minutes away from the planned liftoff of a Falcon 9 rocket from the coast

9
00:00:27,990 --> 00:00:29,000
of Florida.

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00:00:29,000 --> 00:00:32,969
The mission: to fly much-needed astronaut supplies and research experiments up to the

11
00:00:32,969 --> 00:00:35,120
International Space Station.

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00:00:35,120 --> 00:00:38,699
And we have a team of correspondents across
the country helping us cover all the angles

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00:00:38,699 --> 00:00:39,699
of this launch.

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00:00:39,699 --> 00:00:43,239
We will head to the Mission Directorate Center
here on the Space Coast to get updates on

15
00:00:43,239 --> 00:00:47,690
the weather and the countdown, and we'll
head west to SpaceX headquarters in Hawthorne,

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00:00:47,690 --> 00:00:51,679
California, and check in at Mission Control
at Johnson Space Center.

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00:00:51,679 --> 00:00:55,530
But first, here are some quick facts about
today's launch.

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00:00:55,530 --> 00:01:00,249
:57, video: SpaceX transported the Falcon
9 rocket out to the launch pad and lifted

19
00:01:00,249 --> 00:01:04,430
it to the vertical launch position for the
19th resupply cargo mission to the International

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00:01:04,430 --> 00:01:06,270
Space Station.

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00:01:06,270 --> 00:01:10,130
This is the third flight for this Dragon spacecraft,
and the first time this Falcon booster has

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00:01:10,130 --> 00:01:11,770
been flown.

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00:01:11,770 --> 00:01:16,690
Dragon will deliver more than 5,700 pounds
of astronaut supplies and payloads for science

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00:01:16,690 --> 00:01:19,610
research to the orbiting laboratory.

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00:01:19,610 --> 00:01:24,110
The launch window today is instantaneous,
which SpaceX must launch at the exact second

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00:01:24,110 --> 00:01:27,619
to the planned liftoff or try again another
day.

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00:01:27,619 --> 00:01:31,240
The plan is to keep the Dragon spacecraft
docked to station for about a month before

28
00:01:31,240 --> 00:01:34,499
bringing it back to Earth.

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00:01:34,499 --> 00:01:38,140
The Dragon spacecraft will be filled with
critical materials to directly support science

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00:01:38,140 --> 00:01:42,369
and research that will take place on the International
Space Station.

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00:01:42,369 --> 00:01:46,240
Dragon will carry the combined combustion
investigation, which examines the behavior

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00:01:46,240 --> 00:01:51,630
of flame as it spreads in differently shaped
confined spaces in microgravity.

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00:01:51,630 --> 00:01:55,619
Understanding how fire spreads and behaves
in space is crucial for the safety of astronauts

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00:01:55,619 --> 00:01:59,939
and for understanding and controlling fire
here on Earth.

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00:01:59,939 --> 00:02:05,210
Another exciting payload is the Hyperspectral
Imager Suite, which is a next generation hyperspectral

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00:02:05,210 --> 00:02:08,539
Earth imaging system developed by the Japanese
government.

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00:02:08,539 --> 00:02:15,099
It provides space-based observations for tasks,
such as resource exploration, and applications

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00:02:15,099 --> 00:02:19,290
for agriculture, forestry and other environmental
areas.

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00:02:19,290 --> 00:02:24,040
The mighty mice in space or rodent research
19 investigation will research features that

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00:02:24,040 --> 00:02:29,340
influence muscle degradation to prevent skeletal
muscle and bone loss during spaceflight and

41
00:02:29,340 --> 00:02:32,459
enhance recovery following return to Earth.