

# SpaceX poised to launch cargo from historic NASA pad

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Space X's Falcon 9 rocket is prepared for launch to the International Space Station at the Kennedy Space Center, on a renovated Space Shuttle launch pads

An unmanned SpaceX spaceship carrying food and equipment to the astronauts living at the International Space Station is poised to blast off from a historic NASA launch pad on Saturday.

The Falcon 9 rocket launch of the Dragon cargo ship is scheduled for

10:01 am (1501 GMT) from Cape Canaveral's launchpad 39A, which was built and used for the US space agency's pioneering missions to the moon in the 1960s and 1970s.

It was also the blastoff point for sending American space shuttles into orbit, until the shuttle program came to an end in 2011.

SpaceX, headed by billionaire internet entrepreneur Elon Musk, negotiated a lease with NASA for the launchpad in 2013, beating out its competitor Blue Origin, which is headed by Amazon founder Jeff Bezos.

By the time the launch pad is completely outfitted for sending astronauts to space in 2018, the company will have spent over \$100 million to adapt it for modern day spaceflights, said SpaceX chief operating officer Gwynne Shotwell.

"I wouldn't say we saved a bunch of money here," she told reporters, but added that the launchpad's singular place in American space lore made the price tag worthwhile.

"My heart is pounding to come out here today," she told an outdoor press conference near the launchpad on Friday, recalling how she watched the Apollo 11 mission's July 1969 lunar landing on television with her father as a child.

"I can tell you it is an extra special launch tomorrow, for sure. Maybe extra nerve-wracking," she added.

## **Helium leak**

SpaceX has endured two costly disasters in the past two years—a launchpad blast that destroyed a rocket and its satellite payload in September, and a June 2015 explosion after liftoff that obliterated a

Dragon cargo ship packed with goods bound for the space station.

The Hawthorne, California-based company has already made one successful return to flight in January of this year, from Vandenberg Air Force base in California.

On Friday, SpaceX discovered what Shotwell described as a "very small" helium leak in the second stage of the Falcon 9 rocket.

After engineers spent the day narrowing down the cause of the issue, Musk said on Twitter that the countdown to launch would proceed.

"Looks like we are go for launch," he wrote late Friday, adding that the launch could be aborted within a minute of liftoff if signs indicated a problem with the helium in the upper stage of the rocket.

Saturday's launch is meant to carry more than 5,000 pounds (2,267 kilograms) of gear into orbit.

If delayed, another opportunity opens up Sunday morning.

The weather forecast for both Saturday and Sunday was 70 percent favorable for liftoff, officials said Friday.

## **Landing attempt**

Following the launch, SpaceX plans to try landing the booster on solid ground at a different part of Cape Canaveral.

If successful, the upright touchdown of the Falcon 9's first stage would mark the third time SpaceX has managed to stick a landing on solid ground.

Other such landings have taken place on floating ocean platforms, as the company perfects its techniques of powering costly rocket parts back to land instead of jettisoning them in the ocean after a single use.

The Dragon will spend two days in orbit before arriving at the space station early Monday.

The cargo resupply mission, known as CRS-10, is the 10th of up to 20 planned trips to the space station as part of a contract between SpaceX and NASA.

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