

# Successful engine test enables SpaceX Falcon 9 soar to space station in Jan. 2015

December 24 2014, by Ken Kremer

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SpaceX Falcon 9 rocket completes successful static fire test on Dec. 19 ahead of planned CRS-5 mission for NASA in early January 2015. Credit: SpaceX

To ensure the highest possibility of success for the launch of a critical resupply mission to the International Space Station (ISS), SpaceX has announced the successful completion of a second static fire test of the first stage propulsion system of the firm's commercial Falcon 9 rocket on Dec. 19.

The successful engine test clears the path towards a liftoff now rescheduled to early January 2015.

The launch of the Falcon 9 had been slated for Dec. 19, but NASA and SpaceX decided just 1 day before liftoff on Dec. 18 to postpone the launch of the CRS-5 resupply mission into the new year, when the first static fire test failed to run for its full duration of approximately three seconds.

"SpaceX completed a successful static fire test of the Falcon 9 rocket [on Dec. 19] in advance of the CRS-5 mission for NASA," said SpaceX in a statement.

The second test was done because the first test of the Merlin 1D engines did not run for its full duration of about three seconds.

"While the Dec. 17 static fire test accomplished nearly all of our goals, the test did not run the full duration," SpaceX spokesman John Taylor confirmed to Universe Today.

"The data suggests we could push forward without a second attempt, but out of an abundance of caution, we are opting to execute a second static fire test prior to launch."

Both tests were conducted at Space Launch Complex 40 at Cape Canaveral Air Force Station in Florida.

"We opted to execute a second test," noted SpaceX.

The SpaceX Falcon 9 rocket carrying the Dragon cargo freighter had been slated to liftoff on Dec. 19 on its next unmanned cargo run dubbed CRS-5 to the ISS under NASA's Commercial Resupply Services (CRS) contract.



New countdown clock at NASA's Kennedy Space Center displays SpaceX Falcon 9 CRS-5 mission and recent Orion ocean recovery at the Press Site viewing area on Dec. 18, 2014. Credit: Ken Kremer – kenkremer.com

Following the catastrophic failure of the Orbital Sciences Antares rocket and Cygnus cargo freighter on Oct 28 from NASA's Wallops Flight Facility in Virginia, officials are being prudently cautious to ensure that all measures are being carefully rechecked to maximize the possibilities of a launch success.

The new launch date for CRS-5 is now set for no earlier than Jan. 6, 2015

"Given the extra time needed for data review and testing, coupled with the limited launch date availability due to the holidays and other restrictions, our earliest [launch](#) opportunity is now January 6 with

January 7 as a backup," said SpaceX.

The unmanned cargo freighter is loaded with more than 3,700 pounds of scientific experiments, technology demonstrations, crew supplies, spare parts, food, water, clothing and assorted research gear.



SpaceX Falcon 9 first stage rocket will attempt precision landing on this autonomous spaceport drone ship soon after launch set for Dec. 19, 2014, from Cape Canaveral, Florida. Credit: SpaceX

The Dragon research experiments will support over 256 science and research investigations for the six person space station crews on Expeditions 42 and 43.

CRS-5 marks the company's fifth resupply mission to the ISS under a \$1.6 Billion contract with NASA to deliver 20,000 kg (44,000 pounds) of cargo to the ISS during a dozen Dragon cargo spacecraft flights through 2016.

Among the other mission goals, SpaceX is planning a daring and bold attempt to propulsively land and recover the first stage on an ocean going platform called the "autonomous spaceport drone ship."

Source: [Universe Today](#)

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