

SpaceX's capsule nears ISS for rendezvous on Sunday (Update)

March 2 2013



NASA photo obtained on February 19, 2013 shows the SpaceX, Dragon spacecraft inside a hangar at Cape Canaveral Air Force Station in Florida. Dragon neared the International Space Station early Sunday, preparing to dock to deliver food, scientific materials and other crucial equipment.

A privately-owned unmanned US space capsule neared the International Space Station early Sunday, preparing to dock to deliver food, scientific materials and other crucial equipment.

"Dragon is scheduled to be captured Sunday at 6:31 am EST (1131 GMT) by NASA Expedition 34 Commander Kevin Ford and NASA Flight Engineer Tom Marshburn," the US space agency NASA said in a statement.

NASA said SpaceX's Dragon would be installed onto the Earth-facing port of the ISS's Harmony module by ground experts at mission control in Houston and bolted into place via commands by the ISS crew.

The original plan was for Dragon to attach to the space station on Saturday and return to Earth on March 25, splashing down in the Pacific Ocean off the coast of Mexico's Baja California peninsula.

But the capsule ran into troubles with its thrusters shortly after launching Friday from Cape Canaveral, Florida, triggering the delay.

SpaceX engineers found that only one of the spacecraft's four thruster pods, which help maneuver the capsule in orbit, was working. The problems were later fixed.

"SpaceX said it has high confidence there will be no repeat of the thruster problem during rendezvous, including its capability to perform an abort, should that be required," NASA said.

The delay, however, will not affect the capsule's splashdown, which remains planned for March 25, the US space agency said.

Dragon is carrying 1,200 pounds (544 kilograms) of supplies on SpaceX's second resupply mission to the ISS.

This is the third commercial mission by SpaceX—Space Exploration Technologies—to the orbiting space station under contract with NASA.

In May 2012, SpaceX made history when Dragon became the first commercial spacecraft in history to successfully attach to the International Space Station.

Previously only four governments—the United States, Russia, Japan and the European Space Agency—had achieved this challenging technical feat.

SpaceX has now begun regular missions to the Space Station, completing its first official resupply mission in October 2012.

NASA is relying on SpaceX and other commercial ventures to take over for its retired fleet of space shuttles, which last flew in July 2011.

Before SpaceX's successful mission in October, NASA had been relying on Russian spacecraft—but the Soyuz craft does not have room for cargo on the return flight.

SpaceX says it has 50 launches planned—both NASA missions and commercial flights—totaling about \$4 billion in contracts.

So far, SpaceX has only sent unmanned flights into orbit, but the company aims to send a manned flight within the next three or four years. It is under a separate contract with NASA to refine the capsule so that it can carry a crew.

NASA also has a \$1.9 billion resupply contract for the station with Orbital Sciences Corporation, which will launch the first test flight of its Antares rocket from a base in Virginia in the coming weeks.

The cargo for the 25-day mission includes equipment for 160 experiments to be conducted by the space station crew, which currently consists of two Americans, three Russians and a Canadian.

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Citation: SpaceX's capsule nears ISS for rendezvous on Sunday (Update) (2013, March 2)
retrieved 25 September 2023 from

<https://phys.org/news/2013-03-spacex-iss-rendezvous-sunday.html>

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