

NASA and SpaceX targeting Dec. 19 for next space station launch

December 16 2014, by Ken Kremer



A SpaceX Falcon 9 at Cape Canaveral launch pad 40 is slated to launch on Dec. 19, 2014 on the CRS-5 mission. Credit: Ken Kremer – kenkremer.com

NASA and SpaceX are now targeting Dec. 19 as the launch date for the



next unmanned cargo run to the International Space Station (ISS) under NASA's Commercial Resupply Services contract.

The fifth SpaceX <u>cargo</u> mission was postponed from Dec. 16 to Dec. 19 to "allow SpaceX to take extra time to ensure they do everything possible on the ground to prepare for a successful launch," according to a statement from NASA.

The Dragon spacecraft will launch atop a SpaceX Falcon 9 rocket from Space Launch Complex 40 at Cape Canaveral Air Force Station in Florida.

Both the Falcon 9 rocket and its Dragon spacecraft are in good health, according to NASA.

The mission dubbed SpaceX CRS-5 is slated for liftoff at 1:20 p.m.

An on time liftoff will result in a rendezvous with the ISS on Sunday. The crew would grapple the Dragon with the stations 57 foot long robotic arm at about 6 a.m.

US astronaut and station commander Barry Wilmore will operate the Canadarm2 to capture the SpaceX Dragon when it arrives Sunday morning. ESA astronaut Samantha Cristoforetti will assist Wilmore working at a robotics workstation inside the domed Cupola module during the commercial craft's approach and rendezvous.

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.

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



Expeditions 42 and 43.



The SpaceX Dragon capsule is snared by the International Space Station's Canadarm 2. Credit: NASA

Among the payloads is the Cloud-Aerosol Transport System (CATS), a remote-sensing laser instrument to measure clouds and the location and distribution of pollution, dust, smoke, and other particulates and aerosols in the atmosphere.

A secondary objective of SpaceX is to attempt to recover the Falcon 9 first stage on an off shore barge.

The SpaceX CRS-4 mission to the ISS concluded with a successful splashdown on Oct 25 after a month long stay.



The SpaceX CRS-5 launch is the first cargo launch to the ISS since the doomed Orbital Sciences Antares/Cygnus launch ended in catastrophe on Oct. 28.

With Antares launches on indefinite hold, the US supply train to the ISS is now wholly dependent on SpaceX.

Orbital Sciences has now contracted United Launch Alliance (ULA) to launch the firms Cygnus cargo freighter to the ISS by late 2015 on an Atlas V rocket.

Source: <u>Universe Today</u>

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