

SpaceX Draco Thruster Successfully Completes Qualification Testing

Precision rocket engine to control Dragon spacecraft on approach to International Space Station

McGregor, Texas (April 23, 2009) – Space Exploration Technologies ([SpaceX](#)) successfully completed a rigorous qualification of its new Draco spacecraft thruster and Draco propulsion tank at the SpaceX Test Facility in McGregor, Texas.

The Draco thruster test series included 42 firings with over 4,600 pulses of varying lengths and was performed in a vacuum test chamber to simulate the space environment. The series resulted in a total firing time of over 50 minutes on a single thruster.

SpaceX's [Dragon](#) spacecraft, recently selected by NASA as part of their Commercial Resupply Services (CRS) contract to carry cargo to the International Space Station (ISS) and return cargo to Earth, utilizes 18 Draco thrusters to provide precision control in orbit and while approaching the ISS.

"The Draco thrusters allow Dragon to maneuver in close proximity to the ISS in preparation for berthing or docking," said Tom Mueller VP Propulsion, SpaceX. "Maximum control during these procedures is critical for the safety of the station and its inhabitants."

Draco thrusters generate approximately 90 pounds of thrust using storable propellants with long on-orbit lifetimes. The use of these propellants provides the option for a crew-carrying Dragon spacecraft to remain berthed at the ISS for up to a year.

SpaceX's Dragon spacecraft is scheduled to make its first flight in 2009 as part of NASA's Commercial Orbital Transportation Services (COTS) program. Under COTS, SpaceX will demonstrate the [Falcon 9](#) / Dragon system's ability to approach, berth, and transport cargo to and from the ISS. Following the demonstration of these capabilities, SpaceX will fly twelve cargo flights to the ISS for NASA's CRS contract.

Falcon 9, SpaceX's medium lift rocket, is scheduled for its inaugural flight later this year from SpaceX's launch site in Cape Canaveral, Florida.

About SpaceX

SpaceX is developing a family of launch vehicles and spacecraft intended to increase the reliability and reduce the cost of both manned and unmanned space transportation, ultimately by a factor of ten. With the Falcon 1 and Falcon 9 vehicles, SpaceX offers

highly reliable/cost-efficient launch capabilities for spacecraft insertion into any orbital altitude and inclination. Starting in 2010, SpaceX's Dragon spacecraft will provide Earth-to-LEO transport of pressurized and unpressurized cargo, including resupply to the International Space Station (ISS).

Founded in 2002, the SpaceX team now numbers over 650, with corporate headquarters in Hawthorne, California.

A video tour of SpaceX's Texas Test Site conducted by Tom Mueller, VP Propulsion, can be viewed [here](#).