

SpaceX Dragon capsule splash lands in Pacific

May 31 2012, by Kerry Sheridan



The Dragon capsule nears the International Space Station (ISS) on May 25. US company SpaceX's Dragon cargo capsule was successfully detached from the ISS early Thursday at the start of its fiery return to Earth after a landmark mission, NASA said.

US company SpaceX's cargo vessel Thursday splash landed in the Pacific Ocean, capping a successful mission to the International Space Station that blazed a new path for private spaceflight.

"This really couldn't have gone better," said SpaceX chief executive Elon Musk after the unmanned capsule landed in the waters off the Mexican coast at 11:42 am Eastern time (1542 GMT).

The safe return of the vessel followed a near flawless nine-day trip to deliver cargo to the \$100 billion orbiting outpost, marking the first time

a commercial outfit has sent its own capsule there and back.

NASA and US leaders have applauded the mission as a pioneering first step in the future of spaceflight, opening the path for private companies to take cargo and someday astronauts to the ISS.

The end of the three-decade US space shuttle program in 2011 left the United States without a means to reach space on its own, and has forced the world's astronauts to rely on Russia for rides to the ISS and back to Earth.

"Congratulations to the teams at SpaceX and NASA who worked hard to make this first commercial mission to the International Space Station an overwhelming success," NASA administrator Charles Bolden said in a statement.

"American innovation and inspiration have once again shown their great strength in the design and operation of a new generation of vehicles to carry cargo to our laboratory in space."

Alan Lindenmoyer, manager of NASA's Commercial Crew and Cargo Program, called it a "super great day for spaceflight."

And Eric Anderson, chair of the Commercial Spaceflight Federation, said the return "ends a historic mission for SpaceX, but opens a new chapter of 21st century access to space."

California-based SpaceX, owned by billionaire Internet entrepreneur Musk who co-founded PayPal, says it aims to begin taking people to the space station by 2015.

SpaceX and its competitor Orbital Sciences Corporation, both of which have received funding from NASA, will likely become the chief cargo

servicers of the space station, which is set to remain operational until 2020, NASA has said.

SpaceX has a \$1.6 billion contract with NASA to supply the station over the coming years, and Orbital Sciences has a \$1.9 billion contract to do the same. Orbital's first test flight is scheduled for later this year.

The cargo ship launched from Cape Canaveral in Florida on May 22 with 521 kilograms (1,148 pounds) of gear for the space lab, including food, supplies, computers, utilities and science experiments and is returning a 660-kilogram load to Earth.

It berthed with the space station on May 25 and ISS crew spent several days unloading and restocking the spacecraft with gear to bring back to Earth.

After its ocean recovery, the Dragon will be transported to Texas so that its cargo can be given back to NASA.

Musk said the capsule itself will go on display as a historic artifact while other Dragon capsules are built for future flights.

"We look forward to doing lots more missions in the future and continuing to upgrade the technology," he said.

Japan and Europe also have cargo ships that can reach the space lab but cannot return cargo intact. SpaceX's cargo ship is larger than Russia's Soyuz capsules and is capable of bringing back more gear.

The white Dragon capsule stands 4.4 meters (14.4 feet) high and is 3.66 meters in diameter. It could carry as much as 3,310 kilograms, split between pressurized cargo in the capsule and unpressurized cargo in the trunk.

Some of the next challenges for SpaceX include developing propulsive landing capability for the Dragon so that it could land almost like a helicopter, and continuing work to outfit the capsule for crew capability, Musk said.

SpaceX's first professional cargo resupply mission to the ISS is planned for later this year.

The US space agency has given SpaceX about \$390 million so far of the total \$680 million that the company has spent on cargo development, according to SpaceX president Gwynne Shotwell.

SpaceX also gets funding from NASA on a separate effort to develop a commercial crew vehicle for carrying astronauts to space, along with competitors Blue Origin, Boeing and Sierra Nevada.

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