

'Good chance' for SpaceX April 30 launch to ISS: NASA

April 16 2012, by Kerry Sheridan



SpaceX CEO Elon Musk, pictured in February 2012. NASA said Monday said there is a good chance SpaceX will soon become the first private company to attempt to launch its spacecraft to the International Space Station on an unmanned cargo mission.

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"Everything looks good as we head toward the April 30 launch date," said Bill Gerstenmaier, [NASA](#) associate administrator for [Human Exploration](#) and Operations, but cautioned more work remains before the launch can be finalized.

"There is a good chance to make the 30th," said Gerstenmaier, adding

that a final decision is expected by April 23.

The main goals of SpaceX's flight include a fly-by of the ISS and a berthing operation in which the company's reusable space craft, the Dragon, will approach the ISS and the crew aboard the orbiting outpost will use the ISS [robotic arm](#) to help it latch on.

The gumdrop-shaped Dragon capsule will carry 521 kilograms (1,148 pounds) of cargo for the space lab and will also aim to return a 660 kg (1,455 lb) load to Earth, said Michael Suffredini, [International Space Station](#) program manager.

Suffredini added that the remaining work includes some verification procedures and coordination of hardware and software, in what he described as "the last little bit of testing."

"We will review those and assuming everything is fine... we will go ahead for the launch," he said.

[SpaceX](#) -- owned by [Internet entrepreneur](#) and PayPal co-founder Elon Musk -- made history with its Dragon launch in December 2010, becoming the first commercial outfit to send a spacecraft into orbit and back.

The Dragon capsule will have to go through the same [maneuvers](#) that Japanese and European [cargo ships](#) have had to demonstrate in the past, such as orchestrating a fly-by of the space station no closer than than 2.5 km (1.5 miles).

Then there is the complicated matter of latching on to the space station, which Musk described as moving faster than a speeding bullet.

"I think it is important to appreciate that this is pretty tricky," Musk told

reporters.

"The public out there, they may not realize that the space station is zooming around the Earth every 90 minutes, and it is going 17,000 miles (27,000 kilometers) an hour," he added.

"So you have got to [launch](#) up there and you've got to rendezvous and be backing into the space station within inches really, and this is something that is going 12 times faster than the bullet from an assault rifle. So it's hard."

Musk voiced cautious optimism that the attempt would work, noting that the company has launched the Falcon 9 rocket twice before and successfully sent its Dragon capsule into orbit and back once.

"I think we have a got a pretty good shot but it is worth emphasizing that there is a lot that can go wrong on a mission like this," Musk said.

If this attempt does not work out, SpaceX will try again, he said.

SpaceX and several other companies are competing to be the first to operate a private capsule that could tote astronauts and cargo to the ISS, after NASA retired its shuttle program last year leaving Russia as the world's sole space taxi for astronauts.

Other companies in the private space race include aerospace giant Boeing, the Nevada-based Sierra Nevada Corporation, and Washington state-based BlueOrigin LLC.

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