

# NASA approves space station supply launch

April 13 2014, by Marcia Dunn

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SpaceX's Falcon 9 rocket with the Dragon space craft are readied on October 7, 2012 for an evening launch from Cape Canaveral, to the International Space Station

NASA is pressing ahead with Monday's planned launch of a supply ship despite a critical computer outage at the International Space Station, determining the situation is safe.

Mission managers decided Sunday to proceed with the countdown for the SpaceX Dragon capsule, already a month late in delivering more than

2 tons of cargo.

"We're good to go," said NASA space station program manager Mike Suffredini.

Suffredini noted the many important supplies aboard the Dragon, including a new spacesuit and repair parts for the older spacesuits already in orbit. Much-needed food is also packed away.

"There's a certain amount of urgency to go ahead and get these vehicles" at the space station, he told reporters. These shipments have to fit around other space station operations, like crew comings and goings.

"Things start to bunch up," Suffredini said, "and so we're just trying to fly as soon as we safely can, which is what we believe we're doing."

This backup computer, located on the outside of the space station, mysteriously failed to work when activated Friday. The main computer kept operating perfectly, and the six-man crew was never in any danger. NASA debated whether to delay the SpaceX mission and, on Sunday, determined the station has sufficient redundancy to safely support the visiting vessel.

A spacewalk will be required, meanwhile, to replace the bad computer. Engineers don't know why it failed.

Suffredini said the spacewalk will be conducted by a pair of astronauts on April 22, using suits outfitted with new fan components to avoid the near-disaster that occurred last summer. An Italian astronaut almost drowned when his helmet flooded with water from the suit's cooling system.

An April 22 spacewalk will give SpaceX two chances to get its

unmanned Dragon capsule flying. Good weather is forecast for Monday's 4:58 p.m. (2058 GMT) launch. If that doesn't work, the next launch attempt for the California company's Falcon rocket would come Friday.

NASA rushed material for the computer replacement job to the Cape Canaveral launch site over the weekend, for packing into the Dragon. While not essential, the gasket-like item will make the task easier for the astronauts.

For the past few years, NASA has been paying SpaceX—Space Exploration Technologies Corp.—and Virginia-based Orbital Sciences Corp. to keep the station well stocked. The need arose after the space shuttles—NASA's workhorses for station shipments—were retired in 2011. Russia, Europe and Japan also make occasional deliveries.

As soon as the Dragon soars, the space station's solar panels will be moved into the proper position for its arrival, Suffredini said. That will guard against any complications resulting from additional computer breakdowns. Luckily, the sun's angle is favorable right now for thermal conditions at the outpost, he noted.

More than a dozen of these computers, called MDMs or multiplexer-demultiplexers, are located on the exterior of the space station. This was the first one to fail outside; it's been in place for more than a decade and was a backup for the thermal cooling system, solar-wing rotating joints, railcar for the robot arm, and other systems.

**More information:** NASA:

[www.nasa.gov/mission\\_pages/station/main/index.html](http://www.nasa.gov/mission_pages/station/main/index.html)

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