

# Space weather forces Orbital to postpone cargo launch (Update)

January 8 2014

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An Orbital Sciences Corporation Antares rocket is rolled out to a launchpad at NASA's Wallops Flight Facility on January 5, 2014

Turbulent space weather forced Orbital Sciences on Wednesday to postpone the launch of its unmanned Cygnus spacecraft on its first regular contract flight to supply the International Space Station.

The Cygnus spacecraft had been set to take off at midday atop an

Antares rocket carrying 2,780 pounds (1,260 kilograms) of gear including science experiments, supplies and hardware.

However, a potent solar flare caused increased levels of space radiation that might have damaged the spacecraft's electronics.

"Early this morning the Antares launch team decided to scrub today's launch attempt due to an unusually high level of space radiation," Orbital said in a statement.

The levels were caused by solar eruptions late Tuesday that "exceeded by a considerable margin the constraints imposed on the mission to ensure the rocket's electronic systems are not impacted by a harsh radiation environment."

Orbital said it would consult with NASA and space weather experts and "continue to monitor the levels of space radiation with a goal of setting a new launch date as soon as possible."

If Thursday is approved for a launch attempt, the liftoff time from Wallops Island, Virginia would be 1:10 pm (1810 GMT), allowing the cargo ship to reach the ISS by January 12.



An Orbital Sciences Corporation Antares rocket on the launchpad at NASA's Wallops Flight Facility on January 6, 2014

The attempt was previously delayed in December due to a cooling system breakdown at the ISS, which required American astronauts to make two spacewalks in order to replace an ammonia cooling pump.

When the launch goes ahead, it will mark the company's second trip to the orbiting outpost, coming on the heels of a successful demonstration launch in September.

That mission proved "that the company can reliably carry out regularly

scheduled operational missions to the ISS for NASA," said David Thompson, Orbital's chairman and chief executive officer.

Orbital has a contract with NASA worth 1.9 billion dollars for eight cargo resupply missions to the global space lab.

Orbital and SpaceX are two private companies that have stepped in to ensure the United States' ability to reach the orbiting outpost, after the retirement of the 30-year space shuttle program in 2011.

SpaceX, owned by Internet entrepreneur Elon Musk, became the first commercial entity to reach the space station with its Dragon cargo ship in 2012, and has a \$1.6 billion contract with NASA.

Unlike SpaceX's Dragon capsule, Cygnus cannot return to Earth intact but will burn up on re-entry into Earth's atmosphere, disposing of any unwanted cargo.

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