

# Orbital to fly first space cargo mission since 2014 explosion

December 2 2015, by Kerry Sheridan

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Orbital ATK's Cygnus spacecraft sits atop an Atlas V rocket from United Launch Alliance at Cape Canaveral on Wednesday, Dec. 2, 2015 ahead of a launch scheduled for Dec. 3 that would mark the return of Cygnus to spaceflight after a 2014 explosion

Orbital ATK on Wednesday counted down to its first space launch since a sudden explosion last year destroyed its Antares rocket and cargo craft bound for the International Space Station.

Thursday's planned liftoff of the unmanned Cygnus cargo ship uses a different rocket—an Atlas V made by United Launch Alliance—and is scheduled for 5:55 pm (2255 GMT).

The weather forecast for launch was 60 percent favorable, NASA's weather officer said.

Orbital executives denied any jitters on the eve of the launch, more than a year after the blastoff at Wallops Island, Virginia.

"We feel extremely confident or we wouldn't be sitting on top of that rocket right now," Frank Culbertson, president of the Space Systems Group at Orbital ATK, told reporters.

"We tend not to be melodramatic about those things," he added.

"Right now we are focused on the success of this mission and getting the cargo to the space station. Very optimistic."

In October 2014, an Orbital rocket packed with thousands of pounds of supplies exploded seconds after takeoff, marking the first catastrophic failure since private companies began resupplying the orbiting outpost in 2010.

It was followed eight months later by a SpaceX rocket explosion, and the consecutive accidents effectively shut off the flow of US supplies to astronauts in orbit.

A Russian Progress ship was also lost after launch in April, but International Space Station program managers said the astronauts were never in danger and still have several months of supplies in storage.



A NASA photo released November 6, 2015, shows an Orbital ATK Cygnus craft that will carry more than 7,000 pounds of cargo on anext resupply flight to the International Space Station, with launch scheduled for December 3

Orbital has a \$1.9 billion contract with NASA—and SpaceX has a contract worth \$1.6 billion—to send food and equipment to the research lab over a series of supply trips.

Thursday's launch is Orbital's fourth scheduled mission to the International Space Station.

Orbital arranged to use United Launch Alliance's Atlas V rocket while it upgrades its Antares rocket, which failed due to a problem with its reconditioned Ukrainian engine.

The company said after the accident that a control operator detected a suspected rocket engine failure, and the rocket was purposefully detonated to prevent harm to people in the area.

The blast cost Orbital at least \$200 million in lost equipment and supplies.

The cargo ship is packed with more supplies than a Cygnus has ever carried, amounting to some 7,300 pounds (3,300 kilograms), company officials said.

Sophisticated science experiments, ready-made food, a jet pack for spacewalking astronauts and even a satellite made by elementary school students are all on board.

If the launch goes ahead as planned Thursday, the spacecraft will arrive at the space station on December 6.

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