

## NASA counting on 1st US space station shipment in months (Update)

December 3 2015, by Marcia Dunn



An unmanned Atlas V rocket sits on the launch pad, Wednesday, Dec. 2, 2015, at Cape Canaveral, Fla. The rocket is due to lift off early Thursday evening with 7,400 pounds of supplies for the International Space Station. (AP Photo/John Raoux)

NASA is looking to get back on track with the first U.S. delivery to the International Space Station in nearly eight months.



An unmanned Atlas rocket was poised to blast off at 5:55 p.m. Thursday from Cape Canaveral, Florida, with 7,400 pounds of supplies. But clouds and rain threatened to push the launch into Friday, when even worse weather was expected.

Two of the last four commercial supply runs, contracted by NASA, have failed. The first launch accident occurred in Virginia in October 2014, the second at Cape Canaveral in June. Add in a lost Russian cargo ship in April, and the cupboards in orbit have suffered.

NASA's space station program manager, Kirk Shireman, said on the eve of launch that without another delivery, the six astronauts' food would run out in April. A Russian supply run planned for later this month, if successful, would buy more time. Even with the resumption of American shipments, it will take a year for the 250-mile-high pantry to be as full as it was before the string of accidents, he told reporters.

Orbital ATK is using another company's rocket to launch this shipment because its own rocket, the Antares, remains grounded. The last time Orbital launched, its rocket exploded seconds after liftoff from Wallops Island, Virginia, destroying the Cygnus cargo carrier and damaging the pad.

The other private company hired by NASA to deliver supplies, SpaceX, also is stuck on Earth, at least until next month. The company's Falcon rocket ended up in the Atlantic at the end of June, along with a new docking port and everything else destined for the space station. It was the company's first failure since making the first commercial space station shipment in 2012.





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The United Launch Alliance's Atlas V—a mighty successor of the rocket used to put John Glenn in orbit in 1962—has never been used before on a space station mission. A second Atlas will make a supply run for Orbital in March, before the Antares is back in business.



The Antares carried out three station shipments before trouble with the old Russian-built rocket engines doomed the fourth flight. SpaceX stumbled on its eighth trip.

Orbital's newest Cygnus capsule—named after the swan constellation—holds food, clothes, Christmas presents, spacewalking gear, high-pressure nitrogen and oxygen tanks for the air supply, and science experiments.



A United Launch Alliance Atlas V rocket stands ready for launch with cargo for delivery to the International Space Station on launch complex 41at the Cape Canaveral Air Force Station, Wednesday, Dec. 2, 2015, in Cape Canaveral, Fla. The last successful U.S. supply run was in April. Launch of the Atlas V is scheduled for Thursday evening. (AP Photo/John Raoux)



The station-bound research includes mini satellites to be released in the weeks ahead by the astronauts. One was designed, tested and built by students at St. Thomas More Cathedral School in Arlington, Virginia—the first such effort by elementary-age children.

The 4-inch cube houses a camera for Earth picture-taking, as well as a crucifix and religious medal blessed by Pope Francis.

Also accompanying the flight: "Lots of prayers," said Principal Eleanor McCormack.





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**More information:** Orbital ATK: <a href="www.orbitalatk.com/">www.orbitalatk.com/</a>

NASA: www.nasa.gov/mission\_pages/station/main/index.html

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