

Second private company rockets toward space station (Update)

September 18 2013, by Marcia Dunn



The Orbital Sciences Corp. Antares rocket lifts off the launchpad at the NASA Wallops Island test flight facility in Wallops Island, Va., Wednesday, Sept. 18, 2013. The unmanned Antares rocket will carry 1,300 pounds of food, clothes and other items as part of this test flight to the International Space Station. (AP Photo/Steve Helber)

A commercial cargo ship made its successful debut Wednesday,

rocketing toward the International Space Station and doubling the number of NASA's private suppliers for the high-flying lab.

Orbital Sciences Corp. launched its first-ever supply ship from Virginia's Eastern Shore, the departing point for a NASA moonshot less than two weeks ago.

"Look out ISS, here we come," the company said in a tweet.

The capsule named Cygnus—bearing 1,300 pounds (590 kilograms) of food, clothing and goodies for the astronauts—is due at the orbiting outpost on Sunday, following four days of testing.

The Virginia-based Orbital Sciences is only the second business to attempt a shipment like this. The California-based SpaceX company has been delivering station supplies for more than a year under a NASA contract.

"If you needed more tangible proof that this is a new era of exploration, it's right here, right now in Virginia," NASA associate administrator Robert Lightfoot said at a post-launch news conference.

Orbital Sciences' unmanned Antares rocket—named for the bright red star—blasted into a clear sky from NASA's Wallops Flight Facility. A test launch in April went well. So did this one, with a camera on the rocket providing dramatic views of the coastline. The entire commercial effort dates back five years.

It was Wallops' second high-profile launch this month. On Sept. 6, the company took part in a NASA moonshot that dazzled skywatchers along the East Coast. Wednesday's late-morning liftoff, while at a much more convenient hour, was not nearly as visible because of the daylight. The rocket exhaust plume, at least, was visible from Washington, D.C.



In this photo provided by NASA, the Orbital Sciences Corp. cargo ship Cygnus launches from NASA's Wallops Flight Facility on Wednesday, Sept. 18, 2013, in Wallops Island, Va. The unmanned Cygnus capsule contains 1,300 pounds of food, clothing and goodies for the astronauts. (AP Photo/NASA, Bill Ingalls)

The three space station residents, circling 260 miles (418 kilometers) high, watched the launch via a live link provided by Mission Control in Houston.

"Great launch! Excited for Cygnus arrival on Sunday!" space station astronaut Karen Nyberg said in a tweet. She's expecting a fresh stash of chocolate.

Nyberg and Italian astronaut Luca Parmitano will use the space station's robot arm to grab Cygnus from orbit and attach it to the space station. Also on board is a Russian. The crew will double in size next week when another American and two Russians lift off aboard a Russian rocket from Kazakhstan.

NASA is paying Orbital Sciences and Space Exploration Technologies Corp., or SpaceX, to keep the space station stocked after the retirement of the shuttles. The other countries involved in the station also make deliveries.

The bigger SpaceX Dragon capsule, which is launched from Cape Canaveral, Florida, has the advantage of returning items to Earth. It parachutes into the Pacific off the Southern California coast.



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Wallops Island test flight facility in Wallops Island, Va., Wednesday, Sept. 18, 2013. The unmanned Antares rocket will carry 1,300 pounds of food, clothes and other items as part of this test flight to the International Space Station. (AP Photo/Steve Helber)

The Cygnus will be filled with station trash and cut loose for a fiery destruction upon re-entry, following a monthlong visit. That's how the Russian, European and Japanese supply ships wind up, too—as incinerators.

"We categorize it as disposable cargo," said Orbital Sciences' executive vice president, Frank Culbertson. "Others may call it trash."

If all goes well, Orbital Sciences hopes to launch another Cygnus in December with about 2,800 pounds (1,270 kilograms) of supplies. That will be the first true operational mission under a \$1.9 billion contract.



The Orbital Sciences Corp. Antares rocket flies downrange after being launched from the NASA Wallops Island test flight facility in Wallops Island, Va., Wednesday, Sept. 18, 2013. The unmanned Antares rocket will carry 1,300 pounds of food, clothes and other items as part of this test flight to the International Space Station. (AP Photo/Steve Helber)

The SpaceX contract is worth \$1.6 billion.

SpaceX is working to modify its Dragon capsule for space station crews, so NASA doesn't have to keep paying tens of millions of dollars to the Russians per ticket. Orbital Sciences envisions strictly non-human payloads for the Cygnus—but not necessarily just in Earth's backyard.



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"We'd be happy to help a mission go to Mars," said Culbertson, a former astronaut who lived on the space station in 2001.

The capsule was named in honor of G. David Low, a former astronaut and Orbital Sciences executive who died in 2008. He flew on three shuttle missions but not to the space station. This was a way for Low to get there after all these years, Culbertson said after the launch.

More information: NASA:

www.nasa.gov/mission_pages/station/main/index.html

Orbital Sciences Corp.: www.orbital.com/

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