

Rocket that will carry cargo ship test launched (Update)

April 21 2013, by Brock Vergakis



Orbital Sciences Corp.'s Antares rocket lifts off from the NASA facility on Wallops Island, Va., Sunday, April 21, 2013. The rocket will eventually deliver supplies to the International Space Station. (AP Photo/Steve Helber)

A company contracted by NASA to deliver supplies to the International Space Station successfully launched a rocket on Sunday in a test of its ability to send a cargo ship aloft.

About 10 minutes after the launch from Wallops Island on Virginia's

Eastern Shore, Orbital Sciences Corp. of Dulles declared the test a success after observing a practice payload reach orbit and safely separate from the rocket.

The Sunday launch comes after two previous attempts were scrubbed. A data cord that was connected to the rocket's second stage came loose just minutes before the rocket was set to lift off Friday, and company officials said they were easily able to fix the problem. A second attempt Saturday was scrubbed because of wind.

The company from the Washington suburb of Dulles was one of two, along with California-based competitor SpaceX, chosen to supply the space station after NASA ended its three-decade-old shuttle program in 2011. The space agency turned to private companies for the job, saying it would focus on getting manned flights to asteroids and to Mars.

SpaceX was awarded a \$1.6 billion contract by NASA in 2006 to make a dozen missions to restock the space station. Orbital got into the mix in 2008 when it was awarded a \$1.9 billion contract for eight deliveries.

"We've been playing catch up, but we're about caught up," Frank Culbertson, executive vice president and general manager of Orbital's Advanced Programs Group, said Tuesday. "By the end of next year we should have an additional four or five cargo missions under our belt, so we're going to be moving fast."

SpaceX has connected with the space station three times.



Orbital Sciences Corp.'s Antares rocket lifts off from the NASA facility on Wallops Island, Va., Sunday, April 21, 2013. The rocket will eventually deliver supplies to the International Space Station. (AP Photo/Steve Helber)

This summer, Orbital plans to launch a rocket carrying its Cygnus cargo ship to see whether it can safely dock with the space station. During the scheduled demonstration flight, the cargo ship would carry about 1,600 pounds (725 kilograms) of supplies.

Those supplies aren't part of the company's contract. But the company agreed to ferry supplies since it was already going there much like SpaceX did on its first demonstration flight in May 2012, when it dropped off 1,000 pounds (450 kilograms) of food, clothes, batteries and other provisions.

Orbital is under contract to deliver about 44,000 pounds (20,000 kilograms) of supplies to the space station and plans to make about two

deliveries per year. Its cargo ship will carry about 4,400 pounds (2,000 kilograms) worth of supplies on each of its first three missions and 5,600 pounds (2,540 kilograms) on its last five.

Unlike the SpaceX's Dragon capsule, the Orbital cargo ship is not designed to return with experiments or other items from the space station. Instead, plans call for filling the Cygnus ship with garbage that would be incinerated with the vessel upon reentry into Earth's atmosphere. That's also what Russian, European and Japanese cargo ships do.

Orbital had hoped to begin its rocket launches under the commercial resupply program in 2011, but faced a series of delays. That included a delay in the completion of its launch pad at NASA's Wallops Flight Facility on the Virginia coast. That pad was built specifically for Orbital and is owned by the Virginia Commercial Space Flight Authority. The pad wasn't delivered to the company until October.



Orbital Sciences Corp.'s Antares rocket lifts off from the launchpad at the NASA facility on Wallops Island Va., Sunday April 21, 2013. The rocket will eventually deliver supplies to the International Space Station. (AP Photo/Steve Helber)

The National Aeronautics and Space Administration, meanwhile, is looking to private companies to start sending astronauts to the space station in coming years. Orbital is not in the running for that work though SpaceX, based in Hawthorne, California, is working to modify its Dragon capsules to transport astronauts. A handful of U.S. companies

are competing for that assignment. Until then, U.S. astronauts are hitching rides to the International Space Station on Russian Soyuz rockets.

Sunday's launch drew scores of onlookers to Wallops Island's visitor center on the mainland several miles (kilometers) away, where people set up blankets and camp chairs near marshland to view the launch. Road signs also directed rocket launch fans to nearby Assateague Island, where the rocket launch could be seen from the beach.

For Mike Horocofsky of Rock Hall, Maryland, it was his third time making the drive down to the Virginia facility in hopes of seeing Antares lift off.

"I'd rather be doing this than anything else. It's just something I've enjoyed since I was a boy," Horocofsky said several hours before the launch, while setting up chairs for himself and his wife.

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