

# Orbital cargo ship nears arrival at space station

July 16 2014

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This picture provided by NASA shows the Orbital Sciences Corporation Antares rocket, with the Cygnus spacecraft onboard, at sunrise on July 12, 2014 on launch Pad-0A at NASA's Wallops Flight Facility in Virginia

An unmanned cargo ship that was rocketed into space this weekend by Orbital Sciences Corporation is nearing the International Space Station where it plans to dock on Wednesday.

Loaded with meals for astronauts, equipment and [science experiments](#),

the Cygnus cargo carrier is scheduled to be grabbed with the space station's robotic arm at 6:39 am (1039 GMT).

American astronaut Steve Swanson will be operating the orbiting lab's [robotic arm](#) to pull the cargo ship closer, in preparation for berthing about two hours later, NASA said.

Coverage begins on the US [space agency](#)'s television and online broadcast at 5:15 am (0915 GMT).

The spacecraft is packed with 3,653 pounds (1,657 kilograms) of gear for the space station, including a new flock of satellites, experiments for growing arugula in space, and a pump for the Japanese module to replace one that failed.

The mission, known as Orb-2, is the second of eight that Orbital has contracted with NASA, and is the third journey by a Cygnus to the International Space Station after a successful demonstration trip last year.

Orbital Sciences and SpaceX are the two private US companies that have won major contracts with NASA for multiple missions to carry supplies to the International Space Station.

Orbital's deal is worth \$1.9 billion and SpaceX's contract is \$1.6 billion.

Orbital's cargo ships burn up on reentry into Earth's atmosphere, unlike SpaceX's Dragon spacecraft, which makes an intact splash landing in the ocean.

NASA lost its capacity to reach the [space station](#) after the 30-year space shuttle program ended in 2011.

SpaceX and Orbital now make regular resupply journeys with their unmanned cargo ships. Europe and Russia also have their own spaceships that can tote equipment and provisions to the research outpost.

In order for astronauts to get there, nations must buy seats aboard Russia's Soyuz spacecraft, at a cost of \$70.7 million each. The spaceship carries three people at a time.

Several American companies are competing to be the first to complete a crew vehicle that will restore US access to the station in the next few years.

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