

Orbital to launch cargo to space station Tuesday

April 18 2017



The Cygnus resupply ship slowly approaches the International Space Station in October 2016

A rocket packed with food and supplies for the astronauts living at the International Space Station is scheduled to blast off Tuesday from a NASA launch pad.

The unmanned Cygnus cargo ship, nestled atop an Atlas V rocket, is poised for take off during a 30-minute launch window beginning at 11:11 am (1511 GMT) from Cape Canaveral, Florida.

The cargo ship is operated by Orbital ATK, and is the company's seventh mission to space as part of a \$1.9 billion contract with NASA to ferry supplies to the orbiting outpost.

The spacecraft is loaded with 7,626 pounds (3,459 kilograms) crew supplies, hardware and experiments on growing food and cancer therapies.

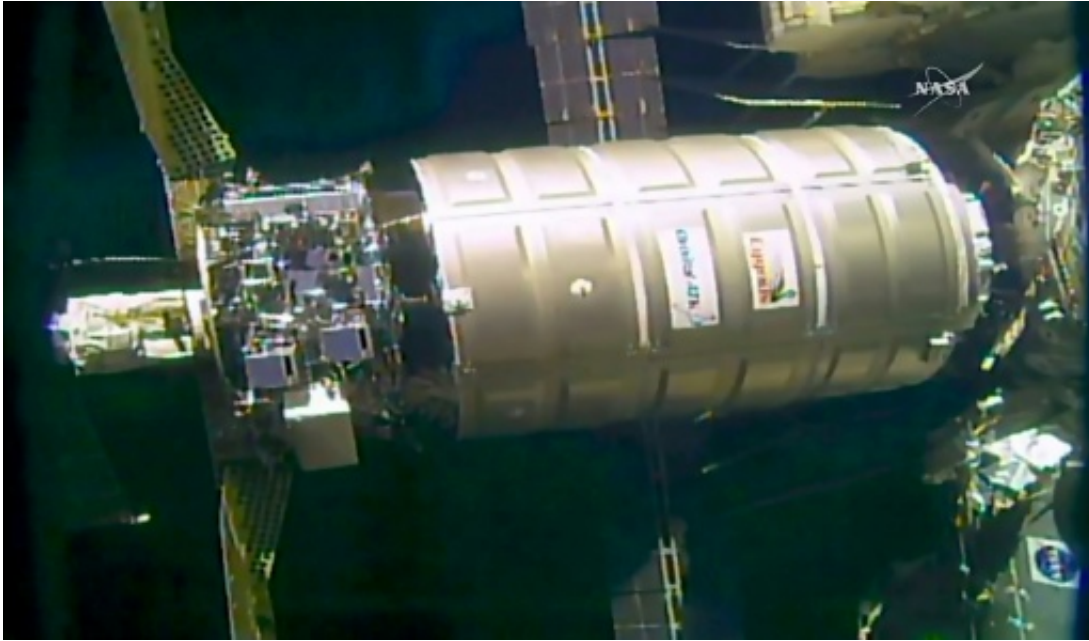
It should arrive at the station on April 22, after the scheduled docking Thursday of a Russian Soyuz spaceship carrying cosmonaut Fyodor Yurchikhin and American astronaut Jack Fischer.

After the astronauts unpack the Cygnus, they will reload it with trash that will burn up along with the spacecraft upon re-entry into Earth's atmosphere.

But before its mission comes to a fiery end, Cygnus will spend a couple of hours running an automated experiment to see how fire acts in microgravity.

Known as Saffire-III, the experiment is the third in a series aimed at igniting a large-scale fire in microgravity.

"While in space, after traveling a safe distance from the station, the fire is lit and data is collected before re-entering the Earth's atmosphere," said a statement from NASA.



The unmanned Cygnus resupply ship operated by the US company OrbitalATK is shown making a delivery to the International Space Station in October 2016

"The experiment lasts about two-and-a-half hours, of which 20 minutes is the actual burn of a fabric panel measuring 0.4 meters (yards) wide by one meter long."

The goal is to better understand how fire acts in space in order to safeguard [future space missions](#).

360 view

A 360-degree live stream of the launch is [to be broadcast](#).

The technology will "virtually place the public at the base of the rocket during launch," NASA said.

"Those who own [virtual reality headsets](#) will be able to look around and

experience the view as if they were actually standing on the launch pad."

The weather forecast for Tuesday's launch attempt was 90 percent favorable, with only a small chance of cumulus clouds interfering with takeoff.

The cargo ship is named after John Glenn, the famed astronaut who was the first American to orbit the Earth and who died last year at age 95.

"As we count down to launch, we are proud and humbled to name the OA-7 Cygnus spacecraft in honor of John Glenn," said Frank Culbertson, President of Orbital ATK's Space Systems Group.

"The S.S. John Glenn is dedicated to his legacy as a lifelong pioneer of human spaceflight who paved the way for America's [space](#) program."

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