

Orbital's cargo ship aims to dock at space station

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Orbital Sciences Corporation's unmanned Cygnus spaceship is on track to berth with the International Space Station early Sunday, marking its second trip to the research outpost, the company said.

Once Cygnus approaches 30 feet (nine meters) from the orbiting lab, the space station's <u>robotic arm</u> will reach out and grab the incoming cargo carrier.

The rendezvous is scheduled for 6:02 am (1102 GMT), Orbital and NASA said on their websites Saturday.

Japanese astronaut Koichi Wakata and his US colleague Mike Hopkins will be operating the space lab's 57-foot Canadian-made mechanical arm, known as the Canadarm.

"The crew then will use the robotic arm to guide Cygnus to its berthing port on the Earth-facing side of the Harmony node for installation beginning around 7:20 am (1220 GMT)," NASA said.

The mission is the first official resupply trip for Orbital's cargo ship, coming on the heels of the company's successful demonstration flight and berthing at the ISS in September.

Cygnus is delivering 2,780 pounds (1,260 kilograms) of supplies to the space station, including hardware, food and science experiments.



The spacecraft will be unloaded soon after arrival, then packed with disposable items. It will remain at the station until mid-February.

After Cygnus detaches, it will burn up on re-entry to Earth's atmosphere and will disintegrate over the Pacific Ocean.

SpaceX is due to send its Dragon capsule to the ISS shortly afterward, for yet another cargo mission.

Both Orbital and SpaceX have contracts with NASA worth more than a billion dollars each to supply the space station over multiple trips, restoring US access to the ISS after the retirement of the <u>space shuttle</u> <u>program</u> in 2011.

California-based SpaceX, owned by Internet entrepreneur Elon Musk, became the first private company to reach the space station with its Dragon capsule in 2012.

Cygnus's berthing at the ISS on Sunday marks the fifth mooring of a private vessel at the <u>space station</u> in two years.

NASA has announced that the life of the \$100 billion International Space Station would be extended by an additional four years, or until 2024.

The space lab serves a global science collaborative and was launched in 1998. It had been expected to stay in operation until 2020.

Partnering agencies are NASA, the Russian federal <u>space agency</u> Roscosmos, the Canadian Space Agency, the European Space Agency and the Japan Aerospace Exploration Agency.

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