[China's cargo spacecraft completes in-orbit refueling](#)

China's Tianzhou-1 cargo spacecraft and Tiangong-2 space lab completed their first in-orbit refueling at 7:07 p.m. Thursday, another success of the Tianzhou-1 mission.

Mastering the technique of refueling in space will help the country to build a permanent space station.

China is the third country, besides Russia and the United States, to master refueling in space.

The in-orbit refueling, under control of technicians on Earth, takes about five days, as the propellant is transmitted from the cargo spacecraft to the space lab.

A second refueling in space will be conducted after the cargo ship's second docking with the space lab in June, which aims to test the ability of the cargo ship to dock with the space station from different directions.

In the last docking, Tianzhou-1 will use fast-docking technology. Previously, it took China about two days to dock, while fast docking will take about six hours, according to Bai Mingsheng, chief designer of the cargo ship.

Tianzhou-1, China's first cargo spacecraft, was launched on April 20 from Wenchang Space Launch Center in south China's Hainan Province.

It completed its first automated docking with the orbiting Tiangong-2 space lab on April 22.

The Central Military Commission (CMC) sent a congratulatory letter to the staff of China's manned space program on the success of the Tianzhou-1 mission, speaking highly of the contributions they have made to the country's space industry.

"It means a lot in realizing our unremitting space dream, and will inspire us to break new ground," the CMC said in the letter.

In 1992, the central authority approved a three-step manned space program, with the final step marking the ability to operate a permanent manned space station, which is planned to be put into orbit around 2022.

As the International Space Station is set to retire in 2024, the Chinese space station will offer a promising alternative, and China will be the only country with a permanent space station.