

Tianzhou-1 completes automated fast-docking with space lab

China's first cargo spacecraft, Tianzhou-1, completed an automated fast-docking with Tiangong-2 space lab at 11:58 p.m. Tuesday.

Controlled from Earth, Tianzhou-1 began to approach Tiangong-2 at 5:24 p.m. Tuesday and it took six and a half hours to complete the fast-docking with the space lab.

It was the third docking between the two spacecraft using fast-docking technology. Previously, it took about two days to dock.

The experiment tested the cargo spacecraft's capability of fast-docking, laying a foundation for future space station building.

Tianzhou-1 was launched on April 20 from south China's Hainan Province, and it completed the first and second docking with the orbiting Tiangong-2 space lab on April 22 and June 19, respectively.

The cargo spacecraft will conduct the third refueling of the space lab before returning to Earth.

The two spacecraft completed their first in-orbit refueling on April 27 and their second in-orbit refueling on June 15.

China is the third country, after Russia and the United States, to master refueling techniques in space, which is crucial in the building of a permanent space station.

Tiangong-2, which was sent into space on Sept. 15, 2016, is China's first space lab "in the strict sense" and a key step in building a permanent space station.

Cargo ships play a crucial role maintaining a space station and carrying supplies and fuel into orbit.