China manned docking a key step for space station

Gabriel Wildau and Samuel Shen, Reuters

(Reuters) - China re-affirmed its goal of building a full-fledged space station by 2020 on Sunday, following a successful manual docking between a manned spacecraft and an experimental orbiting lab module.

"Mastery of rendezvous and docking technology is a decisive step towards realizing the goals of the second stage in the development of China's manned space flight program. It also lays a firm foundation for the further construction of a space station," said Wu Ping, the spokesman for China's manned space program at a press conference following the docking exercise.

The Shenzhou 9 and its three-person crew, including the country's first woman in space, Liu Yang, separated about 400 meters from the Tiangong (Heavenly Palace) 1 module for about two minutes before re-connecting under the manual control of the astronauts, with state television covering the event live.

"It means China has completely grasped space rendezvous and docking technologies and the country is fully capable of transporting humans and cargo to an orbiter in space, which is essential for building a space station in 2020," the official Xinhua news agency said on its website.

Wu said the next step for the program would be further manned docking exercises using the Shenzhou 10, but she said the program had not yet settled on a timeline for the next launch.

The Shenzhou 9 had already conducted an automated docking with Tiangong 1, on June 18, a day after it blasted off from the Jiuquan Satellite Launch Center in northwest China's Inner Mongolia Autonomous Region.

"The automated docking and manual docking are both essential and they serve as a backup for each other," Xinhua reported Zhou Jianping, designer-in-chief of China's manned space program, as saying.

Compared with an automated docking, manual docking is more challenging in terms of orbit control, Xie Jianfeng, a space scientist with the Beijing Aerospace Control Center, told Xinhua on Saturday.

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