

Chinese spaceship with 3 aboard docks with space station

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In this photo released by Xinhua News Agency, an image captured off a screen at the Jiuquan Satellite Launch Center in northwest China shows the Shenzhou-15 and Shenzhou-14 crew taking a group picture with their thumbs up after a historic gathering in space on Wednesday, Nov. 30, 2022. Three Chinese astronauts docked early Wednesday with their country's space station, where they will overlap for several days with the three-member crew already onboard and expand the facility to its maximum size. Credit: Guo Zhongzheng/Xinhua via AP



Three Chinese astronauts docked early Wednesday with their country's space station, where they will overlap for several days with the three-member crew already onboard and expand the facility to its maximum size.

Docking with the Tiangong station came at 5:42 a.m. Wednesday, about 6 1/2 hours after the Shenzhou-15 spaceship blasted off atop a Long March-2F carrier rocket from the Jiuquan Satellite Launch Center.

The six-month mission, commanded by Fei Junlong and crewed by Deng Qingming and Zhang Lu, will be the last in the station's construction phase, according to the China Manned Space Agency. The station's third and final module docked earlier this month, one of the last steps in China's effort to maintain a constant crewed presence in orbit.

The crew of the Shenzhou-15 will spend several days working with the existing three-member crew of the Tiangong station, who will return to Earth after their six-month mission.

Fei, 57, is a veteran of the 2005 four-day Shenzhou-6 mission, the second time China sent a human into space. Deng and Zhang are making their first space flights.

The station has now expanded to its maximum size, with three modules and three spacecraft attached for a total mass of nearly 100 tons.

Tiangong can accommodate six astronauts at a time and the handover will take about a week. That marks the station's first in-orbit crew rotation.





In this photo released by Xinhua News Agency, an image captured off a screen at the Jiuquan Satellite Launch Center in northwest China shows the Shenzhou-15 and Shenzhou-14 crew chatting after a historic gathering in space on Wednesday, Nov. 30, 2022. Three Chinese astronauts docked early Wednesday with their country's space station, where they will overlap for several days with the three-member crew already onboard and expand the facility to its maximum size. Credit: Guo Zhongzheng/Xinhua via AP

China has not yet said what further work is needed to complete the station. Next year, it plans to launch the Xuntian space telescope, which, while not part of Tiangong, will orbit in sequence with the station and can dock occasionally with it for maintenance.

Without the attached spacecraft, the Chinese station weighs about 66



tons—a fraction of the International Space Station, which launched its first module in 1998 and weighs around 465 tons.

With a lifespan of 10 to 15 years, Tiangong could one day be the only space station still up and running if the International Space Station retires in the coming years as planned.

While China's crewed space program is officially three decades old this year, it truly got underway in 2003, when China became only the third country after the U.S. and Russia to put a human into space using its own resources.



This photo released by Xinhua News Agency shows an image captured off the screen at the Jiuquan Satellite Launch Center in northwest China showing the manned spaceship Shenzhou-15 conducting a fast automated rendezvous and



docking with the space station's Tianhe module on Nov. 30, 2022. Three Chinese astronauts docked early Wednesday with their country's space station, where they will overlap for several days with the three-member crew already onboard and expand the facility to its maximum size. Credit: Guo Zhongzheng/Xinhua via AP

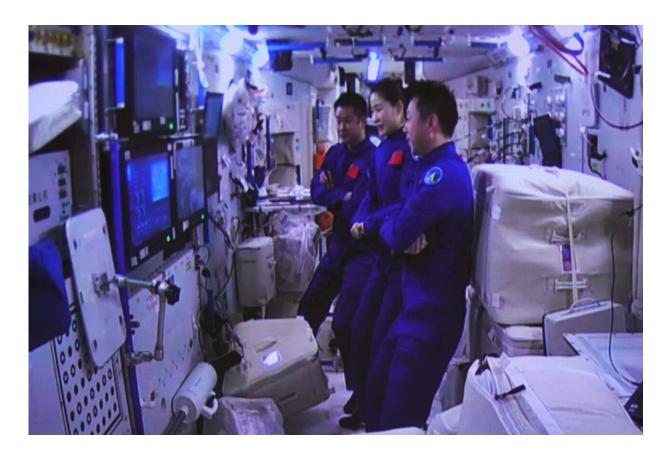
The program is run by the ruling Communist Party's military wing, the People's Liberation Army, and has proceeded almost entirely without outside support. The U.S. excluded China from the <u>International Space Station</u> because of its program's military ties, although China has engaged in limited cooperation with other nations' space agencies.

China has also chalked up uncrewed mission successes: Its Yutu 2 rover was the first to explore the little-known far side of the moon.

China's Chang'e 5 probe also returned lunar rocks to Earth in December 2020 for the first time since the 1970s, and another Chinese rover is searching for evidence of life on Mars.

Officials are reporting considering an eventual crewed mission to the moon, although no timeline has been offered, even as NASA presses ahead with its Artemis lunar exploration program that aims to send four astronauts around the moon in 2024 and land humans there as early as 2025.





This photo released by Xinhua News Agency shows an image captured off the screen at the Jiuquan Satellite Launch Center in northwest China showing the crew of China's Shenzhou-14 manned spaceship observing the Shenzhou-15 spaceship conducting a fast automated rendezvous and docking with the space station's Tianhe module on Nov. 30, 2022. Three Chinese astronauts docked early Wednesday with their country's space station, where they will overlap for several days with the three-member crew already onboard and expand the facility to its maximum size. Credit: Guo Zhongzheng/Xinhua via AP





In this photo released by Xinhua News Agency, the manned spaceship Shenzhou-15, atop the Long March-2F Y15 carrier rocket, blasts off from the Jiuquan Satellite Launch Center in northwestern China on Tuesday, Nov. 29, 2022. China launched the rocket Tuesday carrying three astronauts to complete construction of the country's permanent orbiting space station. Credit: Li Gang/Xinhua via AP





In this photo released by Xinhua News Agency, the light trail of the launched manned spaceship Shenzhou-15, atop the Long March-2F Y15 carrier rocket after it blasted off from the Jiuquan Satellite Launch Center in northwestern China on Tuesday, Nov. 29, 2022. China launched the rocket Tuesday carrying three astronauts to complete construction of the country's permanent orbiting space station. Credit: Ren Junchuan/Xinhua via AP





In this photo released by Xinhua News Agency, from right, Chinese astronauts Fei Junlong, Deng Qingming and Zhang Lu wave as they attend a send-off ceremony ahead of the Shenzhou-15 manned space mission at the Jiuquan Satellite Launch Center in northwest China on Tuesday, Nov. 29, 2022. China launched the rocket Tuesday carrying three astronauts to complete construction of the country's permanent orbiting space station. Credit: Liu Lei/Xinhua via AP

While proceeding smoothly for the most part, China's <u>space program</u> has also drawn controversy. Beijing brushed off complaints that it has allowed rocket stages to fall to Earth uncontrolled after NASA accused it of "failing to meet responsible standards regarding their <u>space debris</u>." In that case, parts of a Chinese rocket landed in the Indian Ocean.

China is also reportedly developing a highly secret space plane and its



increasing <u>space</u> capabilities feature in the latest Pentagon defense strategy, which said the program was a component of China's "holistic approach to joint warfare."

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