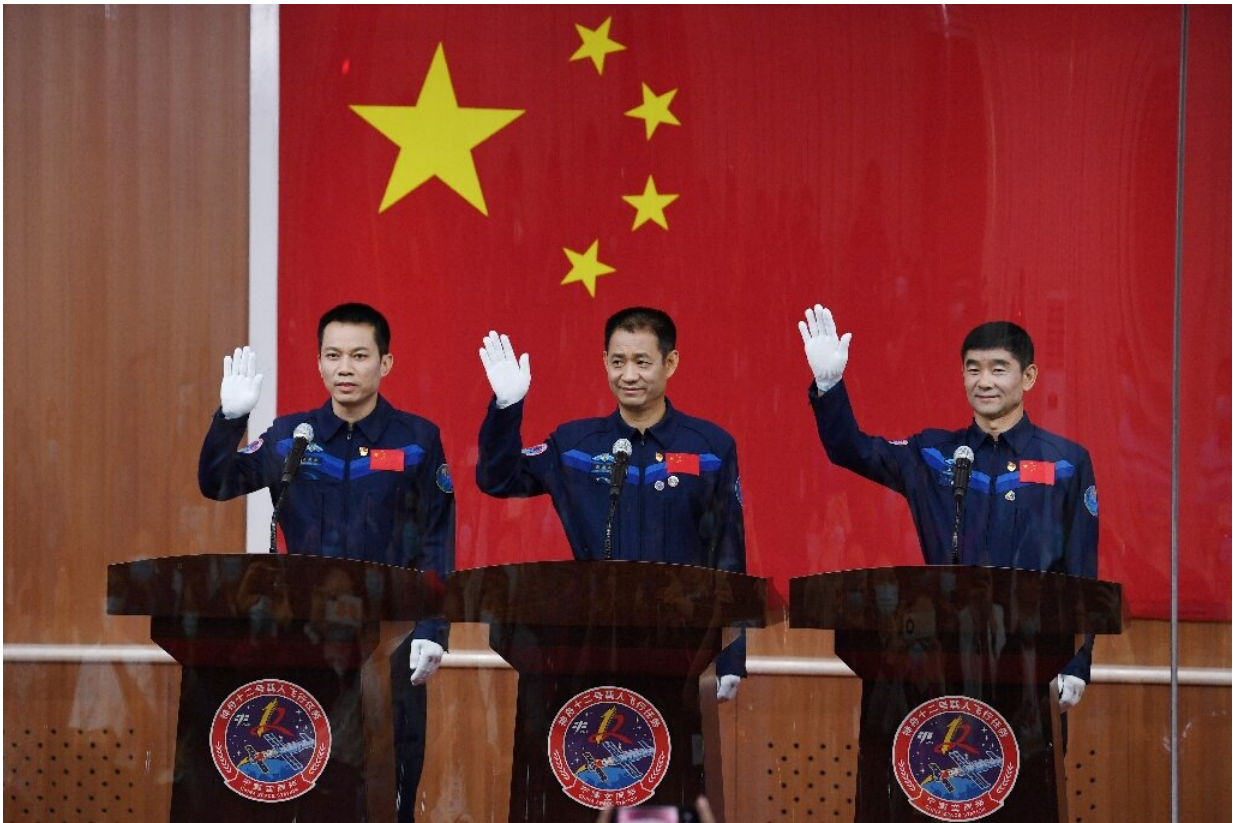


China to launch first crew to new space station on Thursday

June 16 2021, by Ludovic Ehret



Nie Haisheng (C), Liu Boming (R) and Tang Hongbo will be the first crew on China's new space station.

Astronauts blasting off on Thursday for China's first crewed mission to its new space station will have a choice of 120 different types of food

and "space treadmills" for exercise, China's space agency said.

The mission will be China's longest crewed space mission to date and the first in nearly five years, as Beijing pushes forward with its ambitious programme to establish itself as a space power.

The astronauts will spend three months on the Tiangong station, which has separate living modules for each of them as well as a shared bathroom, dining area, and a communication centre to send emails and allow video calls with ground control.

The trio will be able to work off their range of dinner options—which officials assured reporters were all nutritious and tasty—on the special treadmills or exercise bikes.

The Long March-2F rocket that will get them there will lift off at 9:22 am local time (0122 GMT) from the Jiuquan launch centre in northwest China's Gobi desert, the China Manned Space Agency (CMSA) said Wednesday.

"Over the past decades, we have written several glorious chapters in China's space history and this mission embodies the expectations of the people and the party itself," the mission's commander, Nie Haisheng, told reporters at a press conference.



Tiangong's first crew will blast off from a launch complex in the Gobi desert.

His team has undergone over 6,000 hours of training, including hundreds of underwater somersaults in full space gear, to get accustomed to their suits for spacewalks.

Nie was among the first batch of Chinese astronauts selected for training in 1998, and has already been on two space missions.

He is a decorated air force pilot, and the others in his team are also members of the Chinese military.

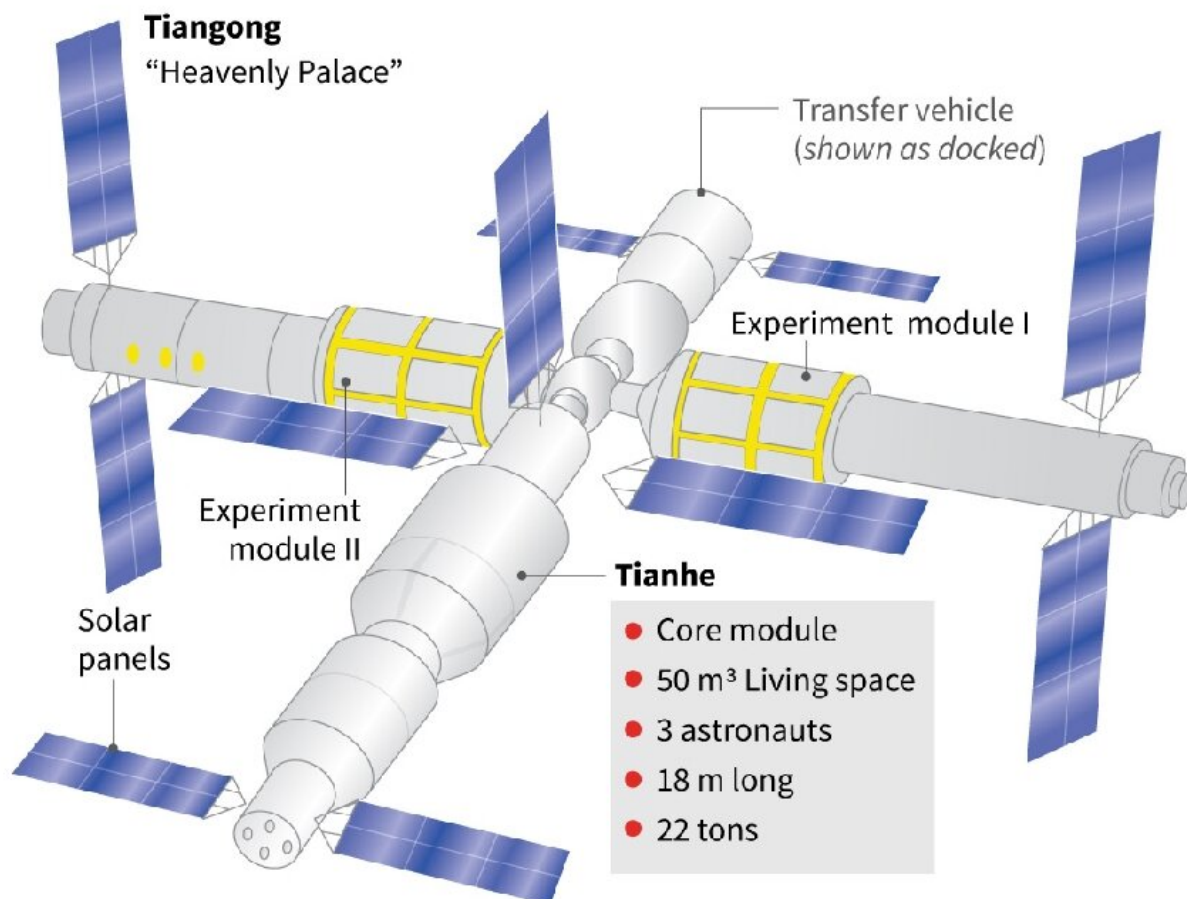
Asked what he would pack for the long trip, Nie—speaking to reporters

from behind a glass wall to keep the astronauts quarantined—said his bag was full of "things for entertainment and for hosting mini get-togethers".

Crew member Tang Hongbo said in a separate interview with state broadcaster CCTV that he had taken videos of everyday life with his son and wife to watch on the space station.

China's plan to build a space station

- ▶ 11 launches are scheduled to deliver all the planned modules
- ▶ First astronauts to board core module in orbit will visit in June 2021
- ▶ Space station expected to be *operational by 2022*



Weight

More than 90 tons
(About a quarter of the size of the International Space Station)

Lifespan

Around 15 years

Position

Low orbit at between 400 and 450 km above Earth

Source: China State Media/Space.com/spacenews.com



Factfile on China's planned space station, scheduled to be operational by 2022.

Construction in orbit

Their Shenzhou-12 spacecraft will dock with the main section of the Tiangong space station, named Tianhe, which was placed in orbit on April 29.

Another 11 missions are planned over the next year and a half to complete the construction of Tiangong in orbit, including the attachment of solar panels and two laboratory modules.

The astronauts will be kept busy testing and maintaining the systems onboard, conducting spacewalks and undertaking scientific experiments.

Footage from CCTV showed them preparing by working in a pool with spacesuits on to simulate making repairs to the station during a spacewalk.

The mission is a matter of prestige for the Chinese government as it prepares to mark the 100th birthday of the ruling Communist Party on July 1.

"Over the past decades, we have been struggling every minute to realise our space dreams," said Liu Boming, the third member of the Shenzhou-12 crew.



China's astronauts have undergone over 6,000 hours of training for the first crewed mission to the Tiangong space station.

"(I) have dedicated myself to the cause."

China's desire for a human outpost of its own in Earth orbit was fuelled by a US ban on its astronauts on the International Space Station (ISS).

"We are willing to carry out international cooperation with any country that is committed to the peaceful use of outer space," Ji Qiming of the CMSA told reporters on Wednesday.

The ISS—a collaboration between the US, Russia, Canada, Europe and Japan—is due for retirement after 2024, although NASA has said it could potentially remain functional beyond 2028.

Tiangong is expected to have a lifespan of at least 10 years.

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