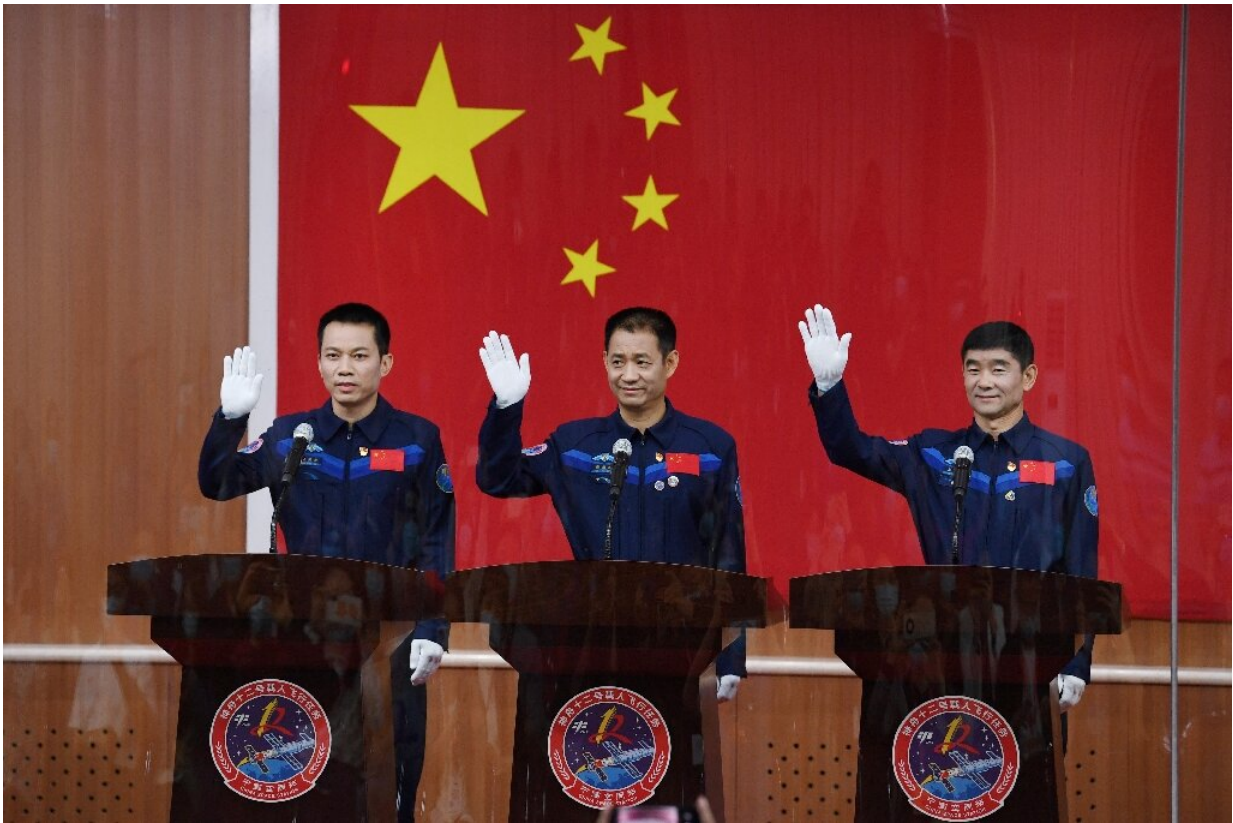


# Rocket blasts off carrying first Chinese crew to new space station

June 17 2021, by Ludovic Ehret

---



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

The first astronauts for China's new space station blasted off Thursday for the country's longest crewed mission to date, a landmark step in

establishing Beijing as a major space power.

The trio launched on a Long March-2F rocket for the Tiangong station, where they will spend three months, in a much-anticipated blast-off broadcast live on state TV.

Lift-off happened at 9:22 am (0122 GMT) from the Jiuquan launch centre in northwest China's Gobi desert, with the rocket rising in clouds of smoke against a blue sky.

After about 10 minutes it reached orbit and the [space](#) craft separated from the rocket, to loud applause in the control room among rows of blue-suited engineers.

State broadcaster CCTV showed a [live feed](#) from inside the spacecraft, with the three astronauts lifting their helmet visors and one smiling and waving at the camera.

Another floated a pen just off his lap in zero-gravity as he browsed the flight manual.

Cameras outside the craft broadcast live images of the Earth below.

"According to reports from the Beijing aerospace control centre, the Long March-2F rocket has sent the Shenzhou-12 manned spacecraft to the preset orbit," said Zhang Zhifen, director of the Jiuquan satellite launch centre.



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

"The [solar panels](#) unfolded successfully and now we declare the Shenzhou-12 launch a complete success."

At a ceremony before blastoff, the three astronauts, already wearing their [space suits](#), greeted a crowd of supporters and space workers, who sang the patriotic song "Without the Chinese Communist Party, there would be no new China".

The mission's commander is Nie Haisheng, a decorated air force pilot in the People's Liberation Army who has already participated in two [space missions](#).

The two other members are also members of the military.

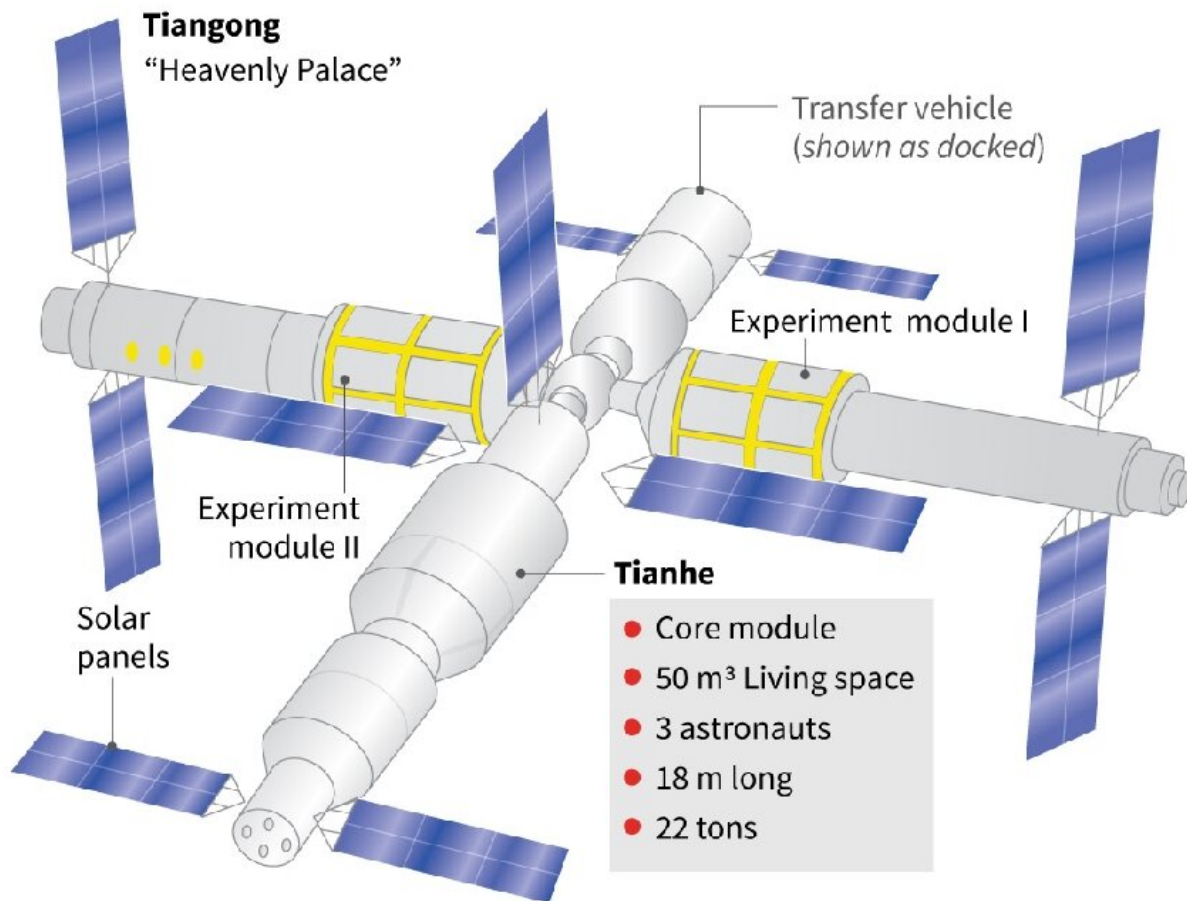
## **Space life**

Their Shenzhou-12 spacecraft will dock with the Tianhe main section of the space station, which was placed in orbit on April 29, possibly as soon as six hours after liftoff.

The module has separate living spaces for each of them, a "space treadmill" and bike for exercise, and a communication centre for emails and video calls with ground control.

# 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.

It is China's first crewed mission in nearly five years.

Huang Weifen of the China Manned Space Program said the astronauts will perform two spacewalks during the mission, both lasting around six or seven hours.

She also said the trio will wear newly-developed spacewalk spacesuits.

The launch represents a matter of huge prestige in China, as Beijing prepares to mark the 100th anniversary of the ruling Communist Party on July 1 with a massive propaganda campaign.

To prepare for the mission, the crew has undergone more than 6,000 hours of training, including hundreds of underwater somersaults in full space gear.

The Chinese space agency is planning a total of 11 launches through to the end of next year, including three more manned missions which will deliver two lab modules to expand the 70-tonne station, and supplies and crew members.

China's space ambitions have been fuelled in part by a US ban on its astronauts on the International Space Station, a collaboration between the United States, Russia, Canada, Europe and Japan.



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

It is due for retirement after 2024, even though NASA said it could potentially remain functional beyond 2028.

Tiangong will be much smaller than the ISS, and is expected to have a lifespan of at least 10 years.

China has said it would be open to international collaboration on its space station although it has yet to give specific details

Zhou Jianping, chief designer at the space programme, said "foreign astronauts are certainly going to enter the Chinese space station one day."

"There are a number of countries that have expressed a desire to do that and we will be open to that in future," he said.

Beijing said in March it was also planning to build a separate lunar space [station](#) with Russia, and this week the two countries issued a "roadmap" for potential collaboration opportunities.

© 2021 AFP

Citation: Rocket blasts off carrying first Chinese crew to new space station (2021, June 17)  
retrieved 4 June 2024 from <https://phys.org/news/2021-06-rocket-blasts-chinese-crew-space.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private



study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.