

TOP NEWS

Emergency space mission accomplished

Shenzhou XXII vessel docks with Tiangong station, delivering crew provisions, payloads

By ZHAO LEI
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The unmanned Shenzhou XXII spacecraft arrived at the Tiangong space station on Tuesday afternoon, delivering crew provisions and mission payloads to the orbiting outpost. This marked the first emergency-response flight mission in the history of the nation's manned space program.

A Long March 2F rocket, carrying the spacecraft, lifted off at 12:11 pm from the Jiuquan Satellite Launch Center in northwestern China, according to the China Manned Space Agency.

About 10 minutes after the launch, the spaceship separated from the rocket and entered its designated orbit. After flying for about three-and-a-half hours on an elaborately designed trajectory, the vessel docked with the front port of the Tianhe core module of the space station.

The Shenzhou XXII spacecraft was originally scheduled to transport the mission's crew to Tiangong in April 2026. However, China's space authorities had to rearrange plans following an unexpected situation.

The Shenzhou XX vessel, which was meant to bring that mission's astronauts back to Earth on Nov 5,

was deemed unfit to fly after tiny cracks were discovered on the viewport window of its return capsule — damage suspected to be caused by the impact of space debris.

As the Shenzhou XX crew used the Shenzhou XXI vessel for their return journey on Nov 14, Tiangong was left without a flight-worthy crew ship for 11 days, a safety risk that the arrival of the Shenzhou XXII vessel removed.

Shenzhou XXII carries a full cargo load, including packaged premade meals, fresh fruits and vegetables, medicines, equipment needed for Tiangong's operations and tools to fix the damage on the Shenzhou XX vessel, the agency said. Shenzhou XX will continue to remain docked at the space station and serve as a platform for tests and experiments, it added.

The three Shenzhou XX astronauts, who returned safely to Earth nine days later than their planned landing, represented China's 15th manned spaceflight and the ninth group of residents aboard Tiangong. The crew spent 204 days in orbit, setting a record for the longest in-orbit stay by Chinese astronauts.

Orbiting Earth at an altitude of about 400 kilometers, Tiangong is currently the only operational space station independently run by a single nation.

Painted in silver



Tourists admire the snowy landscapes of Cangshan Mountain in Dali, Yunnan province, on Monday. Hit by a cold front, the area witnessed its first snowfall of this winter. LUO ZHU / XINHUA

Hong Kong, Macao to get more support

By STACY SHI in Hong Kong
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The central government will provide more substantial and broader support to the Hong Kong and Macao special administrative regions, so that the regions can proactively align their development with the country's strategies and the 15th Five-Year Plan (2026-30), members of a high-level central government delegation said on Tuesday.

Speaking at a seminar organized to share the essence of the fourth plenary session of the 20th Communist Party of China Central Committee, Zhu Weidong, deputy director of both the Office of the Central Financial and Economic Affairs Commission and the Office of the Central Rural Work Leading Group, pointed out the extraordinary progress made during the 14th Five-Year Plan (2021-25) period — an average annual growth rate of 5.5 percent, and technological breakthroughs such as producing over 60 percent of the world's new energy vehicles and making significant progress in semiconductors and quantum technology.

The seminar on Tuesday morning was attended by representatives from a wide section of society, including Hong Kong deputies to the National People's Congress, senior SAR officials and leaders of community associations.

Addressing the event, Hou Jianguo, president of the Chinese Academy of Sciences, outlined Hong Kong's strategic role in the 15th Five-Year Plan, including dedicated provisions for its long-term prosperity and stability.

He called for enhanced infrastructure “hard connectivity” and institutional “soft connectivity” and highlighted Hong Kong's pivotal position as an international center.

By strengthening Hong Kong's role as a “super-connector” and “super value-adder” for two-way opening-up, the city is poised to become a major channel for inbound global resources and a crucial platform for China's “going global” strategy, allowing the SAR to play a greater role in supporting the nation's high-standard opening-up, he said.

Hong Kong Chief Executive John Lee Ka-chiu and Zhou Ji, director of the Liaison Office of the Central People's Government in Hong Kong, also spoke at the event.

Lee said the central government delegation's visit “fully embodies the great importance” that the central government places on Hong Kong's development and its care for Hong Kong compatriots.

He said the nation has achieved “world-renowned remarkable accomplishments” during the 14th Five-Year Plan period with significant advancements in economic, technological and comprehensive national strength.

He called the 15th Five-Year Plan a strategic blueprint and clear guidance for the SAR's development, helping to chart a better future for the city.

Zhou said that Hong Kong has entered its “best period” for focusing on economic development, attributing the city's successes to the comprehensive and accurate implementation of “one country, two systems” and the strong backing of the central government.

Gordon Lam Chi-wing, a Hong Kong deputy to the NPC who attended the seminar, told China Daily that the high-level event was a powerful injection of confidence, which signaled that the central government is not just supporting, but actively promoting Hong Kong's prosperity and stability as an integral part of the national

blueprint.

He suggested businesses thoroughly study the policies, drive technology upgrades and cross-boundary collaboration, and optimize talent strategies, while individuals should upskill themselves in emerging fields and expand their professional networks across the Guangdong-Hong Kong-Macao Greater Bay Area.

Wong Yuk-shan, vice-chairman of the Hong Kong Basic Law Committee, emphasized leveraging Hong Kong's unique position of “being backed by the motherland while connected to the world” to enhance global engagement.

Sunny Chai Ngai-chiu, chairman of the Hong Kong Science and Technology Parks Corporation, stressed that Hong Kong must master core technologies through deeper collaboration with global institutions and stronger mainland connections.

Judith Yu, a member of the Chinese People's Political Consultative Conference National Committee, called for prioritizing emerging tech and pharmaceutical sectors while strengthening ties with key regional economies like the Yangtze River Delta.

A closed-door session on Tuesday afternoon, attended by officials from central government offices in Hong Kong, the People's Liberation Army Hong Kong Garrison, and mainland enterprises based in the city, discussed the significance of the plenary session and interpreted its guiding principles and main objectives for the 15th Five-Year Plan period, including the session's call to “promote the long-term prosperity and stability of Hong Kong and Macao”.

Similar seminars were held in Macao over the weekend, and the first session in Hong Kong took place on Monday.

‘Bricks’ for lunar base clear tough first test

By LI MENGHAN and LIU KUN

China has taken a concrete step toward realizing its ambition of building a permanent outpost on the moon by successfully exposing a batch of experimental “lunar bricks” to the harsh conditions in space for about a year and bringing them back almost intact.

The 34 sample bricks, weighing about 100 grams in total and made from materials that mimic lunar soil composition, were returned to Earth recently aboard the Shenzhou XXI spacecraft. Their survival outside the Tiangong space station for such a long duration marks a critical milestone in engineering and advances China's plan to build the International Lunar Research Station by 2035.

“At first glance, the bricks seem to be in good condition,” said Zhou Yan, a scientist at Huazhong University of Science and Technology, the institute responsible for making the “lunar bricks”, which are said to be more than three times stronger than standard bricks.

While the “lunar bricks” show no signs of cracks or pits, typically caused by the impact of space debris and meteoroids, they have become slightly pale in color, a change scientists are now investigating, Zhou added.

Scientists will then analyze how the space environment has altered the internal structure of these bricks, providing the data needed to ensure lunar bases are able to stand the test of time.

The experiment aims to address the biggest hurdle in lunar construction: the exorbitant cost of transporting building materials from Earth. Scientists are in the process of perfecting a technology to build on the moon using local resources.

“Due to the high costs of interplanetary transportation, we need to use lunar soil, solar energy and minerals to produce the bricks for construction,” said Zhou Cheng, a professor at the National Center of Technology Innovation for Digital Construction.

The experimental bricks were made using volcanic ash from the Changbai Mountains in Northeast China, which has a chemical makeup very similar to lunar soil. To make the bricks, researchers used a process called hot-press sintering, which is essentially baking and pressing soil under high heat until it fuses into a solid.

The project was led by Ding Lieyun, an academician of the Chinese Academy of Engineering and chief scientist at the National Center of Technology Innovation for Digital Construction.

In November 2024, the Tianzhou 8 cargo ship transported these bricks to the Tiangong space station, which were then mounted outside the orbital outpost to weather space conditions that are difficult to simulate in a lab on Earth. The conditions included an environment of vacuum, punishing cosmic radiations, and extreme temperature changes ranging from -190 C to 180 C.

According to the researchers, the whole experiment is designed to last three years. While the first batch of “lunar bricks” has returned, other samples remain in space and will be retrieved annually to test how the material holds up over longer periods.

“After three years, we might be able to reveal patterns in the performance of these bricks and speculate on their service life trends over five, 10 or 20 years,” Zhou Yan said.

Ding, from the Chinese Academy of Engineering, emphasized that understanding how these materials age is vital for future construction, because lunar buildings cannot be temporary structures. “When constructing a building, we don't expect it to last just a few years. This principle holds even greater significance when building on the moon,” he said.

The brick experiment is part of a broader timeline laid out by Wu Weiren, chief designer of China's lunar exploration program.

China aims to land astronauts on the moon by 2030 and build a basic version of the International Lunar Research Station on the lunar south pole by 2035. An expanded version is planned by 2045, potentially serving as a launchpad for crewed missions to Mars.

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Chinese volleyball legend Lang Ping (left) poses with Sergii Bubka, chair of the IOC Athletes' Entourage Commission, after receiving the IOC Coaches Lifetime Achievement Award on Monday at the Olympic House in Lausanne, Switzerland. LIAN YI / XINHUA

Lang Ping honored with IOC lifetime achievement award

By SUN XIAOCHEN
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From the arena to the cinema, and now at the Olympic House, Chinese volleyball legend Lang Ping's career is being celebrated once again, with the International Olympic Committee Coaches Lifetime Achievement Award being bestowed on her.

The International Olympic Committee announced on Monday that Lang, a former Chinese women's national team player and coach, had jointly won the 2025 edition of the prestigious award with Cuban wrestling coach Raul de Jesus Trujillo Diaz, becoming the first sportsperson from China to receive the honor.

IOC President Kirsty Coventry and Sergii Bubka, chair of the IOC Athletes' Entourage Commission, handed the awards to Lang and Trujillo Diaz during a ceremony at the Olympic House, the IOC headquarters, in Lausanne, Switzerland.

“This award is a great honor,” said the 64-year-old Lang, who earned the nickname “Iron Hammer” after leading the Chinese women's squad to a gold medal at the 1984 Los Angeles Olympics as an ace spiker.

Thirty-two years after the feat, Lang proudly finished on the Olympic podium again, this time as head coach, after guiding Team China to victory at the Rio 2016 Olympic tournament, becoming the first person in history to win Olympic gold as both player and coach.

“I am deeply grateful to the IOC and the FIVB (International Volleyball Federation) for recognizing my

coaching work,” said Lang, who guided the United States women's team to a silver medal at the Beijing 2008 Games and has coached at club levels in Italy and Türkiye as well.

“There are so many people to thank, from the brilliant teams and players I have coached in China, Italy and the US, to the coaches and mentors who shaped me as a player and as a person from my earliest days in the sport. This recognition belongs to all of them.”

After helping Team China claim four consecutive world titles, including the 1981 world championships and 1984 Olympic gold, Lang retired as a player in 1985. She returned to the national program as a coach in 1995 and led the squad to finish with a silver at the 1996 Atlanta Olympics during her first stint with her home national team.

Her influence on the global stage, a product of successful coaching roles in the US and Europe, earned her a place in the Volleyball Hall of Fame in 2002.

Her journey with Team China's 2016 Rio Olympics campaign inspired one of China's bestselling sports-themed films, *Leap*, which premiered in September 2020 with renowned actress Gong Li portraying Lang on the big screen.

“Thank you for your commitment to your sports, to your athletes and their well-being for generations to come, because I know that, if I look at my coach, I will hopefully instill a lot of the lessons that she's taught me in my children,” Coventry said while congratulating Lang and Trujillo Diaz.