



Driving innovation
EVs win consumers' hearts with advanced assistance systems
BUSINESS, PAGE 13

US-led Gaza 'peace board' draws criticism
WORLD, PAGE 11

Eyeing new glory
Gu claims her 20th World Cup title, warms up for Olympics SPORTS, PAGE 19



CHINADAILY

香港版
HONG KONG

MONDAY, January 19, 2026

中國日報

www.chinadailyhk.com HK \$12

Failed flights: Firms probe launch errors

Long March's five-year success streak ends; Ceres 2 fumbles first space trip

By ZHAO LEI
zhaolei@chinadaily.com.cn

The Chinese space community suffered a rare setback on Saturday as a result of two failed rocket launches, developments observers said underscore the high risks associated with spaceflight.

At 12:55 am, a Long March 3B carrier rocket lifted off from the Xichang Satellite Launch Center in Sichuan province, carrying the Shijian 32 multirocket booster. However, its third-stage booster malfunctioned during flight, preventing the satellite from reaching its intended orbit, China Aerospace Science and Technology Corp said.

An investigation is underway to determine the cause of the failure, the company said without providing further details.

Developed by the China Academy of Launch Vehicle Technology, the Long March 3B is one of China's most widely used rocket models, having conducted 115 missions since its maiden flight in February 1996. The rocket is primarily used to place satellites into geostationary transfer orbit and can deliver payloads of up to 5.5 metric tons. It is also capable of launching spacecraft into medium-Earth orbit and lunar transfer orbit.

The failed mission ended a streak of 296 consecutive successful Long March launches spanning five years and nine months. The last failure involving the Long March family occurred in April 2020, when a Long March 3B also suffered a third-stage booster malfunction.

Hours later, at 12:08 pm, the first flight of the Ceres 2, a new solid-propellant rocket developed by Beijing-based private company Galactic Energy, lifted off from the Jiuquan Satellite Launch Center in the Inner Mongolia autonomous region. The rocket was attempting to deploy six commercial satellites.

Its flight became abnormal shortly after liftoff and ended in a crash on the ground, according to video footage taken by spectators. Galactic Energy said engineers are investigating the cause of the failure.

According to the company, the Ceres 2 has three solid-propellant core stages and a liquid-fueled upper stage and weighs 100 tons. It is designed to carry up to 1.6 tons of payload to a low-Earth orbit at an altitude of 500 kilometers, or 1.3 tons to a 500-km sun-synchronous orbit. The rocket can be launched from both land- and sea-based platforms and is designed for high carrying efficiency, the company said.

Wang Yanan, chief editor of Aerospace Knowledge magazine, said the twin failures still hold value for the industry.

"Makers of mature rocket models should never be complacent about past success rates, because new challenges will always emerge," Wang said. "At the same time, commercial space ventures must recognize that space programs are defined by both high risks and exciting opportunities. The true competitive advantage lies in systems engineering capabilities that ensure efficiency and reliability under high-frequency operations."

Wu Peixin, a Beijing-based industry observer, said space exploration has never been a smooth process and that failures are often an unavoidable step toward progress, whether involving mature rockets or new models.

"Our space industry's sustainable growth depends on repeated trial and error," Wu said. "As technical data accumulates and the industrial chain matures, risks will continue to decline and efficiency will improve. This resilience in the face of challenges is the industry's core driving force and deserves continued support."

China targets 2027 milestone for its commercial space sector development

In Beijing on Nov 25, China unveiled an exciting landmark plan to establish itself as a global leader in commercial space by 2027. The proposal outlined sweeping and, given the tight timescale, urgent reforms. The idea is that these will unlock private innovation, facilitate the integration of relevant State resources, and expand international cooperation. The blueprint, released by the China National Space Administration (CNSA), signals an important strategic shift to commercialize the country's space capabilities while ensuring technological sovereignty and independence, and national security.

The "Action Plan for Promoting the High-Quality and Safe Development of Commercial Space (2025-27)" sets clear objectives and ambitious goals. These include aggressive promotion of a synergistic industrial ecosystem, an imperative for rapidly upscaled production capacity, encouragement of enhanced innovation, and — this is key — streamlined governance. "Commercial space has become a core pillar in building China into a space power," the CNSA stated, emphasizing the integration of rapidly evolving market dynamics with proactive and sensible government guidance.

The specific key policy initiatives include:

1. Opening national aerospace research-and-development projects to private entities, with a focus on reusable rockets, intelligent satellites, and integrated communication-navigation-remote sensing technologies.
2. Establishing a national commercial space development fund, encouraging "patient capital" through joint investment platforms involving local governments and financial institutions.
3. Mandating shared access to State-owned test facilities, including rocket engine test beds and satellite monitoring stations, to cut private companies' R&D costs.
4. Unifying technical standards for civil and commercial space activities, covering launch procedures, on-orbit collision avoidance, and data security.
5. Enacting legislation for a national space law at an accelerated pace including clarifying the status and role of commercial space within national space development with a key aim to safeguard the healthy and sustainable development of commercial space activities.

One of the key technological leaps needed to pursue these aims is the realization of China's own reusable



Ming Su and Quentin Parker
Ming Su is deputy director of the LSR at the University of Hong Kong, and founder of Origin Space Ltd. Quentin Parker is director of the Laboratory for Space Research (LSR) at the University of Hong Kong.

rocket technologies. These will be similar to those successfully implemented by SpaceX. At the International Astronautical Congress in Sydney, Australia, in October, one of us (Parker) saw such reusable rocket prototype models displayed by Chinese commercial companies.

This bold and exciting plan places heavy emphasis on breakthrough technologies, with such reusable launch vehicles (RLVs) identified as a strategic priority and obvious capacity need. This came as the Beijing-based LandSpace company prepared for the maiden flight of its Zhuque 3 rocket in early December. This was China's first operational RLV and the world's first stainless-steel methalox-fueled rocket. Modeled after SpaceX's Falcon IX in cost-efficiency, Zhuque 3 targeted a launch price of under 20,000 yuan (\$2,564) per kilogram, matching Falcon IX's approximately \$3,000/kg rate. This event truly marked China's entry into the reusable rocket era, a game-changer for low-cost access to space, especially for international payloads from developing countries.

Beyond launch vehicles, the plan supports emerging sectors including in-orbit services, space manufacturing, space tourism, and, eventually, lunar resource utilization. It also aims to accelerate deployment of low Earth orbit (LEO) satellite constellations for communication and remote sensing, competing with global players like Starlink and OneWeb but within a system ever more aware of the problems of space debris and the Kessler Syndrome as the recent Shenzhou XX/XXI saga has just demonstrated.

China's commercial space sector was valued at over \$15 billion in 2024, but is poised for exponential growth. This new plan encourages the emergence of a powerful, space-focused industrial ecosystem. It will involve regional specialization, with tech hubs in Beijing,

Shanghai, and Hainan focusing on rocket manufacturing, satellite applications, and coastal launch sites respectively. Government procurement policies will play a pivotal role, especially with State agencies required to source commercial launch services, satellites, and data products. "This creates a stable domestic market for private firms while pushing them to meet international standards," said Li Wei, director of the China Commercial Space Association.

International collaboration is also prioritized. The CNSA also plans to establish a global satellite data sharing platform and simplify export procedures for commercial space technologies, targeting partnerships with Southeast Asian, Middle Eastern, and European nations in particular.

Despite rapid progress, significant hurdles remain as China seeks to follow a path to both global cooperation and leadership. China's commercial space firms lag behind SpaceX in launch frequency and payload capacity, with Zhuque 3's 18-metric-ton LEO capacity still below Falcon IX's 22.8 tons. International regulatory barriers and competition for LEO orbital slots and frequency bandwidth also pose significant challenges. Technical risks persist, too. Reusable rocket technology requires rigorous testing, and China's private space sector has yet to achieve a successful vertical landing. LandSpace's Zhuque 3, which aimed for this milestone, experienced a failure during its first landing attempt in December. The 2027 target, though very ambitious, is achievable if past efforts are anything to go by, via sustained policy support and private-sector innovation underpinning it all.

As China ramps up investment, the global space industry is taking note. "China's commercial space push introduces a new competitive dynamic," said Lesley Jane Smith, a space policy expert at the International Institute for Strategic Studies. "Its focus on cost reduction and ecosystem integration could disrupt existing market structures."

With the Zhuque 3 launch and the 2025-27 plan, China is sending a clear message: It aims to be not just a space power, but a dominant player in the commercial space economy. For international partners and competitors alike, the next few years will be critical in defining the future balance of power beyond Earth's atmosphere.

The views do not necessarily reflect those of China Daily.

SAR to align with State plans for space economy

By JESSICA CHEN in Hong Kong
jessicachen@chinadailyhk.com

The emergence of the new space economy has opened new potential for the Hong Kong Special Administrative Region to align with the central government's 15th Five-Year Plan (2026-30), which is expected to include aims to accelerate the nation's push to become a global aerospace power, according to Hong Kong's Chief Executive's Policy Unit (CEPU).

Hong Kong, positioned as both a "superconnector" and a "super value adder", can harness its strengths in research, finance, and professional services to play a pivotal role in driving innovation and development in the space, said Wong Yuen-shan, head of CEPU, during a roundtable event featuring space sector heavyweights from the State, the SAR and international organizations.

The plan is expected to elevate

aerospace development to a national strategic priority and call for Chinese commercial space enterprises to expand globally, including across Belt and Road and ASEAN markets. "For Hong Kong, space development is not only a scientific or industrial challenge but a full chain opportunity covering basic research, professional services, intellectual property, finance, and data governance," he said.

As countries race to secure resources and technological advantages in orbit, the space economy is emerging as a key driver of global growth. The World Economic Forum's 2024 report estimates that the global space market will surge from about US\$630 billion in 2023 to US\$1.8 trillion by 2035, growing nearly 9 percent annually — far faster than world GDP.

Anthony Neoh, chairman of the Asian Academy of International

Law, emphasized Hong Kong's advantages in space finance, insurance, and legal arbitration under its common law system.

Ye Shalin, innovation and overseas business director at the mainland's LandSpace Technology, said he believes Hong Kong could play a role in the global supply chain in the commercialization of the space.

Academics from some of Hong Kong's prestigious universities highlighted local contributions to China's lunar, satellite, and robotics missions, underscoring the city's scientific foundation for future aerospace innovation.

The 2025 Policy Address has already earmarked more than HK\$100 million (\$13 million) for six research projects in materials, energy, robotics, and communications, including support for China's Chang'e 8 mission. Hong Kong Investment Corp will intensify its investments in aero-

space and space related ventures, further consolidating the city's role as an innovation and financing hub within the Guangdong-Hong Kong-Macao Greater Bay Area and beyond.

Wang said that CEPU will continue working with mainland agencies — including the China Academy of Space Technology and commercial enterprises — to identify new directions for collaboration and industrial growth.

The dialogue strengthened cross-sector understanding and provided valuable insights for Hong Kong's continued participation in the national and global space economy, said Quentin Parker, head of the Laboratory for Space Research at the University of Hong Kong.

China has the will, technical capacity and scale to tackle space issues for the global good, he added, with the HKSAR playing a vital role as a superconnector and outward-looking common law jurisdiction.