HOLIDAYREAD

SANDER RUDE LAUNCHES **ADD APPEA O TROPICAI** AINAN

Customers willing to pay much higher prices than usual can enjoy front row seats to liftoffs from hotels, Ma Zhiping reports.

Coconut grove at eastern tip of Wenchang, Hainan province. PROVIDED TO CHINA DAILY

he record-setting launch of 22 commercial satellites using a single Chinese rocket at Wenchang Space Launch Center in late February has ignited passion among space fans and added new appeal to Hainan, an island province popular for its tropical features - year-round sunshine, sprawling beaches, rainforests and enthralling boat tours.

"Space launches have promoted tourism in Wenchang as many tourists make space launch watching an attraction that should not be missed on their island travel schedule. Nearly all hotel rooms are reserved one month ahead of every launch here and visitors - space launch amateurs, researchers, photographers and families - usually occupy 90 percent of our hotel rooms five days ahead of each launch," said Wang Keyan, a manager of an international brand hotel in Qishui Bay, which is surrounded by graceful coconut trees three kilometers from the launch site.

Customers willing to pay much higher prices than usual can enjoy front row seats to launches in some of the hotel rooms that charmingly combine the natural beauty of tropical island landscapes with a show of modern aerospace technology.

Outside and bathed in sea breezes on beautiful beaches like those at Qishui Bay and Moon Bay, people can enjoy spectacular views of every breathtaking launch from the country's fourth launch site, also its first coastal space launch center, which is only 800 meters away from the waters of the vast South China Sea.

"Aerospace fans began to call us or send WeChat messages immediately after the launch in February, reserving rooms for the next launch, though the exact launch time has not been revealed to the public yet," said Zhu Ying, who runs a seaside homestay with her husband in Longlou town, home of Wenchang Space Launch Center

The couple used to work in Shenzhen, Guangdong province, but arrived in Wenchang to rent a farmer's home to serve as a homestay five years ago, when they keenly anticipated the growing needs of space launch fans.

The number of car rental reservations in Wenchang and nearby cities such as Haikou, Qionghai and Wanning jumped by more than 10 times year-on-year during the February launch period, according to a report from a local transportation services platform.

Seated in northeastern Hainan island, about 19 degrees north of the equator, the Wenchang space center has been designed for launching geosynchronous satellites, heavy-lift carrier rockets, large space station components and lunar and interplanetary missions.

It is the only launch facility in China capable of launching Long March 5 series rockets, the biggest and most powerful in the country's rocket fleet. The facility thus enjoys a significant role in the country's deep-space exploration endeavors.

Low latitude is the biggest advantage of the Wenchang facility. It enables rockets to save considerable fuel and to carry heavier payloads, and thus ensures a higher launch efficiency, said experts. The center has become a symbol of Chi-

na's aerospace industry advances, with remarkable and comprehensive benefits gained from 16 national launch missions including the launch of Tiangong space station's core module, cargo spacecraft Tianzhou, the Chang'e 5 lunar probe and Tianwen 1 Mars explorer.

Construction work started in September 2009 and was completed in October 2014. The maiden launch at the facility took place in June 2016 with the debut of the Long March 7 rocket, witnessed by 150,000 visitors on site, according to local reports

The local government has opened eight

27,000

Permanent population of Longlou is 27,000, and received more than 500.000 tourists in 2021. Annual disposable income of rural residents in Longlou more than tripled from 5.559 yuan (\$871) in 2009 to 19,171 yuan in 2021

seaside areas to ensure visitors are provided with an immersive feeling when viewing spectacular launches.

On-site viewing of the tremendous roar and powerful thrust of the rockets is a stunning and moving experience that is totally different from a TV broadcast. It is a precious opportunity for live viewings of the courage and wisdom to explore space by Chinese scientists," said Wang Hong from neighboring Guangdong province, a mother who, together with her son, watched the liftoff of a modified Long March 8 carrier rocket

China currently has four space launch bases, namely, Jiuquan Satellite Launch Center in the deserts of Northwest China's Gansu province, the nation's only manned spacecraft launch center; Taiyuan Satellite Launch Center in North China's Shanxi province, capable of launching sat-ellites into both medium and low orbits; Xichang Satellite Launch Center, mainly to launch powerful-thrust rockets and geostationary satellites in Southwest China's Sichuan province, and the Wenchang Space Launch Center in Hainan, the country's youngest and southernmost launch site.

The seaside Wenchang center covers more than 12 square kilometers, the equivalent of 1,700 soccer fields. Its location offers good security and easy transportation. It is the nation's first pollutionfree, green and environmentally friendly site that has fully adopted new propellants such as liquid hydrogen, liquid oxygen and aviation kerosene, according to the launch center administration.

Unlike the first three launch centers which are all landlocked in western or northern plateaus and mountainous regions where inconvenient transportation has hindered commercial development, the Wenchang site, one of the few low-altitude launch sites in the world, has been designed and built with an open concept, which integrates aerospace development with sightseeing tourism, related businesses and upgrading of the local economy, according to city government officials.

Many of the locals in Longlou, once a struggling town where most residents made a living by fishing, have begun operating stores, restaurants and small hotels. There was only one small hotel when construction of the space center was commenced in 2009. The town now has 32 hotels and around 900 stores, restaurants and homestays, providing jobs to more than 5,000 people.

For most people, watching a live rocket launch is just a dream. In Wenchang, however, it has become part of everyday life.

Data from the township administration showed that Longlou, with a permanent population of 27,000, received more than 500,000 tourists in 2021. The annual disposable income of rural residents in Longlou more than tripled from 5,559 yuan (\$871) in 2009 to 19,171 yuan in 2021.

Xie Xiangxiang, an associate professor of tourism at Hainan University, said that there is great potential for space launch tourism in Hainan, as promotion of the aerospace industry is a top priority in the master plan released in 2020 by the central government for the construction of Hainan Free Trade Port. The plan aims to build the whole of Hainan island, which is about 32 times the size of Hong Kong, into a globally influential high-level free trade port by the middle of the century.

During the 14th Five-Year Plan (2021-25) period, Hainan will promote the construction of Wenchang International Space City, where a key national laboratory for space and earth observation and three aerospace science and technology innovation platforms for satellite research and development, advanced manufacturing, launch and aerospace information applications, will be built, said Li Haixuan, an official with the Hainan Department of Science and Technology.

Li said a space tourism industry covering space science popularization, education, tourism and comprehensive services is also high on the agenda.

Full efforts are being made to introduce more innovative resources to boost hightech aerospace industries so as to turn Wenchang into a major scientific and technological aerospace innovation base and a strategic highland that gathers core technologies for the development of rockets, satellites and relevant big data sector in China, according to the local plan.

On March 16, the Wenchang city government reached an agreement with Xichang Satellite Launch Center to jointly harness the advantages and commercial potential of the aerospace industry to cultivate a world-class launch site as well as build a world-class international aerospace city that highlights aerospace culture and tourism.

"Space launch-related tourism is set to become a new form of intellectual property for Hainan, alongside the construction of key aerospace projects, an aerospace theme park and the introduction of international partners, backed by rich natural and historical resources and the strong development of the aerospace industry in Hainan," said Xie with Hainan University.

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Tropical city to fly high soon for space fans

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By MA ZHIPING in Wenchang

Though possessing rich historical and

ang are popular among tourists to the island. Hainan produces 99.8 percent of Chi-

cultural resources, Wenchang, Hainar province, managed to keep a low profile for decades - that is until a series of spacecraft launches made this coastal city a hit among tourists over the past five years.

Wenchang will soon be in the spotlight again after the schedule for a new mission was officially released, surely exciting news for space fans one and all.

Tasked with carrying the Tianzhou 4 cargo spacecraft, the launch of the Long March 7 carrier rocket will take place soon from Wenchang Space Launch Center, according to the China Manned Space Agency.

The upcoming launch is one of six planned space missions in 2022 to complete in-orbit construction of China's space station. Facilities at the launch site are in good condition and preparations for all systems involved in the mission are proceeding smoothly, said the agency.

Below are some tips for space fans eager to tour the Wenchang region.

Transportation

Visitors from outside Hainan can arrive at Haikou Meilan International Airport in Haikou, the provincial capital, or at Sanya Phoenix International Air-



Space fans at seaside launch viewing points LI TIANPING/FOR CHINA DAILY

port at the southern tip of Hainan island, and then transfer to Wenchang via a high-speed loop railway, the only one that circles a tropical island in the world.

It takes bullet trains leaving Meilan. Haikou only 17 minutes to reach Wenchang station while a bullet train from Sanya Phoenix takes just over one hour.

Local travel agencies operate tourism routes that take visitors to officially designated viewing points and other natural and cultural attractions.

Visitors also have the option to turn to app platforms to rent vehicles to drive to the space launch site and other tourist

destinations on the tropical island.

Accommodations

hotels and homestays are very limited. and check in one day ahead as there will be traffic restrictions hours before each mission.

Best launch views

There are numerous sites and means to watch space launches in Wenchang on its beautiful sprawling beaches, in paddy fields, on roofs of homestays or just inside rooms of seaside hotels. How-

ever, frequent visitors say that sites around Qishui Bay, which is three kilo-meters from the launch center, are known for offering the most impressive views.

Other local attractions

Tourists observe the launch of a Long March rocket in

Wenchang, Hainan province on December 23, 2021.

The launch complex itself should not be missed, apart from launch day itself. for a number of reasons including the 101-meter-high stainless steel gate - the highest in Asia. The exhibition center which presents a panorama of China's aerospace development is a must see. Old traditional residences in Wenchna's coconuts while Wenchang is known for growing about half of them. A huge workshop complex has been opened to display the history of coconut tree growing in Hainan and whole processing chains turn out tons of delicious coconut biscuits, candies and cookies popular with tourists and as gifts.

A mangrove site known as "Marine Forest Park" is a popular tourist destination

Attractions beyond Wenchang

Further south, the coastal resort city of Sanva offers grand sea views, world-class hotels, cozy homestay experiences and thrilling boat tours, including diving and adventures into the underwater "rainforest" that unfold breathtaking coral beauty, colorful fish and vibrant ecosystems.

Westward into the inland areas, the country's only tropical rainforest national park provides adventurers all the amazing elements of an ecological kingdom, including the critically endangered Hainan gibbon, which has only a tiny population of 36.

Before leaving Hainan, visitors can enjoy themselves shopping in Sanya or Haikou for a countless array of duty-free gifts for friends and family back home.

YUAN CHEN /FOR CHINA DAILY

Reserve rooms well in advance as