

CHINA

Changsha becomes fertile ground for startups

By HE CHUN in Changsha and CHEN MEILING

In the eyes of entrepreneur Zhang Jiayu, starting a business in Changsha, capital of Hunan province, is as natural as fishing by the river or taking a walk in the park — a completely normal and fitting endeavor.

He said stories of young entrepreneurs sometimes raise doubts and distrust, but in this city, it's generally considered a consensus that young people should pursue entrepreneurship.

"The atmosphere is strong. You can see promotional slogans for startups on the streets, reception desks for entrepreneurship services at airports and railway stations, and attend various entrepreneurship events," he said, adding that the city's efforts to support entrepreneurs are unrivalled.

Zhang, 23, a post-graduate from the Renmin University of China in Beijing, set up his company Aqing (Liuyang) Culture and Technology Co at the Smart Liuyang cultural creativity incubation base in Changsha in early December, producing and selling electric firecrackers.

Compared to traditional gunpowder firecrackers, the company's wall-mounted confetti firecracker bursting machines are considered safer and greener as they realize the bursting effect via aluminum foil balloons and motor-driven explosions. They can also be used indoors, such as during weddings and when customers buy new cars at 4S stores, according to Zhang.

As part of the local preferential policies to support entrepreneurship, Zhang doesn't need to pay rent for his operations in the first three years, and enjoys government subsidies from both the provincial and city levels. He said local officials enthusiastically welcomed him and took him to visit major local firecracker producers.

He said Changsha's economy has developed fast and has attracted many manufacturing companies, creating a complete industrial chain, crucial for a startup to expand its market. "First-tier cities have many opportunities, but they may not be suitable for everyone. What's more important is to find regions where our advantages can be fully exploited," he said.

Zhang's entrepreneurship project is one of the 80 newly settled in the province after a nearly two-month promotional event organized by the provincial human resources and social security



College graduates participate in a job fair held by Hunan province in Shanghai earlier this year, which is part of the province's program to attract young talent. FU CONG / FOR CHINA DAILY



Young entrepreneurs work at Changsha Zhigu College Students' Entrepreneurship Base in Hunan. PROVIDED TO CHINA DAILY

department. The event recruited college graduates and attracted entrepreneurship projects from eight cities such as Beijing and Shanghai from Sept 21 to Nov 9.

Liu Gengye, a doctoral graduate from Tsinghua University, attended the promotional event and ended up at an innovation and entrepreneurship base in Changsha's National

Business-friendly policies attracting young graduates to Hunan provincial capital

Wangcheng Economic and Technological Development Zone. His project focuses on satellite communication terminals and on-board payloads.

He said the base provides 360 square meters of R&D and office space with a three-year rent-free period. It also offers a 200,000-yuan (\$28,400) startup subsidy and an

annual 100,000-yuan technical service subsidy. "It effectively alleviates the financial pressure in the initial startup stage," he said.

The base also provides 11 free entrepreneurship support services, including industrial and commercial registration, investment and financing matchmaking, and one-on-one mentoring and guidance from startup advisors.

"In terms of daily life, apartments are located just 500 meters away from the base. As a doctoral graduate, I can rent an apartment at a 50 percent discount for only about 400 yuan per month," he added.

Within a 1-kilometer radius of the office building, there are well-equipped pilot-scale and industrialization workshops, which provide "seamless convenience for our subsequent product trial production and large-scale manufacturing", according to Liu.

The base also has cafeterias and shuttle buses for entrepreneurs. Jiang Ruodan, director of the investment promotion and innovation and entrepreneurship service center in the zone, said it welcomes early-stage, small projects. There are more

than 60 college students' projects, including 10 receiving a total of 6.8 million yuan in funds from the province, he said.

Li Peiheng, 23, founder of startup Changsha Moshushi Intelligent Technology Co, registered the company at the Changsha Zhigu College Students' Entrepreneurship Base earlier this month, focusing on wireless charging systems for drones and robots. He said the base provided robust support for industries engaged in the low-altitude economy and robotics, and has approved dedicated test sites for them.

In addition, the company has received sufficient funding from the government for R&D efforts, as well as a patent preexamination channel, enabling Li to obtain patent authorization within just a few months. It also assists in recruiting interns and fresh graduates, he added.

A native of Shenyang in Northeast China's Liaoning province, Li graduated from the Harbin Institute of Technology last year.

He said the reason he chose to settle there is that Changsha is a dynamic and livable city.

"It has a strong appeal to young

people, boasts abundant medical resources, and features relatively affordable housing prices as well as diverse entertainment options. Furthermore, Changsha offers robust support for college students' entrepreneurship," he said.

From October last year to October this year, Changsha saw an addition of 8,730 business entities founded by college students, according to local authorities.

Entrepreneurship projects launched by those with a master's degree or above account for 61.74 percent. Technology-driven innovation projects make up 74.78 percent, while projects related to emerging and future industries account for 70.43 percent, data from local authorities showed.

Hunan established the country's first dedicated investment fund for college students valued at 505 million yuan in October last year.

A series of supportive policies have also been introduced, covering college students' training, guaranteed loans for startups, and entrepreneurship subsidies, according to Li Yongjun, director of the provincial human resources and social security department.

"Now is the perfect time to start a business in Hunan, as we have the right timing, favorable conditions and vibrant atmosphere," Li said.

As of the end of November, the province had 427 entrepreneurship incubation bases housing 16,255 projects. Among them, there were 3,982 college student entrepreneurship projects, representing a 91.4 percent increase compared with May, data from local authorities showed.

The Standing Committee of the Communist Party of China Hunan Provincial Committee discussed the Implementation Opinions on Building a Youth-Friendly Province on Dec 15, with a core goal to attract more young talents to grow and thrive in Hunan. It's regarded as a key part of the province's social and economic development during the 15th Five-Year Plan (2026-30).

Among the opinions were those on implementing measures such as boosting employment by developing manufacturing and service industries, supporting high-caliber talent in technology, improving public services, and organizing consumption activities for young people.

Zhu Youfang in Changsha contributed to this story.

Contact the writers at chenmeiling@chinadaily.com.cn

Construction underway on aircraft maintenance hub

By YAN DONGJIE in Tianjin and YAN YUJIE in Kunming

Construction on the largest aircraft maintenance base in Southwest China began in Kunming, Yunnan province, earlier this month.

Once completed in 2028, the first phase of the base at Kunming Changshui International Airport will feature a maintenance hangar capable of simultaneously accommodating 10 narrow-body aircraft for regular inspections.

Upon operation, the facility will handle maintenance tasks for mainstream series aircraft such as the B737 and A320, as well as the replacement of engines, landing gear and auxiliary power units.

Built by China Railway Construction Engineering Group, the hangar will span 260 meters with a total area of nearly 100,000 square meters. An investment of over 1.5 billion yuan (\$212 million) has been sunk into the project.

The project will provide one-stop services, including aircraft disassembly, modification and accessory maintenance, and is supported by 12 stand alone projects such as the construction of a comprehensive maintenance workshop, an aircraft parts warehouse and a chemical products warehouse.

"In the early days, we did not have the conditions for independent domestic research and development in the field of aviation engines," said Yang Laihao, an expert from Xi'an Jiaotong University's High-End Intelligent Equipment Research Institute.

"The entire process of produc-

tion, manufacturing and maintenance was provided by foreign original equipment manufacturers. Sometimes, the maintenance strategies of foreign manufacturers might not be reasonable, with inefficient tools and poor accessibility," he said.

In recent years, China has improved in aircraft manufacturing, moving from having a reliance on imports to independent research and development. From the production of aircraft body structure materials to the core components of engines, a series of breakthroughs have laid a solid foundation for the rapid development of China's aviation industry, Yang said.

He said that previously, the engine had to be taken apart and sent to a repair shop for inspection, which meant returning to the original equipment manufacturer abroad, or sending it to some fixed major repair bases in the local area. This was extremely time-consuming and labor-intensive, with very high costs and significant economic losses. Now, the plan is to promote in-situ maintenance.

"In the future, there may be a greater demand for independent maintenance technologies in the country," Yang added.

The 14th Five-Year Plan for Civil Aviation Development, issued by the Civil Aviation Administration of China in December 2021, says that efforts should be made to build a digital and intelligent aircraft maintenance and repair system, ensuring the safe, reliable and efficient operation of aircraft.

In terms of digital construction applications, the building information modeling adopted in the

project provides comprehensive and reliable data support for airport operation and maintenance, facilitating the digital and intelligent operation of the airport and establishing a digital twin system where the physical airport and the virtual airport are mutually mapped.

"By relying on the digital construction platform, the electronic data is more complete and easier to query," said Su Shuai, the chief engineer of the Kunming Changshui International Airport Maintenance Base Project of CRCEG. "The experience and standards we have accumulated in areas such as design information, construction management data, construction plans and processes have provided an important guarantee for the digital construction of the expansion and renovation project of Kunming Changshui International Airport."

For Yang, an important development in aircraft maintenance has been the advancement of artificial intelligence technology throughout the entire supply chain.

Li Jianwei, Party secretary of the base project, said that advanced measures have already been implemented, such as grid-based management, 5G tower crane technology, robot applications, smart construction site systems, unmanned weighbridge systems, and concrete automatic curing systems.

The construction of the maintenance base will be conducive to an adjustment of the industrial structure, and will serve as an important support for Yunnan in building an aviation maintenance industry platform facing the whole country, South Asia and Southeast Asia.

Chen Yijun contributed to this story.

Contact the writers at yandongjie@chinadaily.com.cn

China, Malaysia link skills via training

By ZHANG LI in Nanning zhangli@chinadaily.com.cn

China and Malaysia have launched a vocational education alliance aimed at linking skills training more closely with industrial development, as the two countries deepen cooperation on major infrastructure and manufacturing projects.

The China-Malaysia Technical and Vocational Education and Training Industry-Education Alliance was established on Dec 19 in Liuzhou, in the Guangxi Zhuang autonomous region. It brings together 33 institutions from both countries, including vocational colleges, universities, enterprises, industry bodies and research institutes.

The alliance is designed to align vocational education with the needs of industry, particularly in sectors such as rail transport, new energy vehicles, intelligent manufacturing and artificial intelligence.

The alliance's Chinese secretariat is based at Liuzhou Railway Vocational Technical College, which has been closely involved in training technical staff for Malaysia's East Coast Rail Link, a flagship infrastructure project built with Chinese participation, according to Wang Hanqiang, Party secretary of the college.

Wang said the institution has developed a replicable model for exporting vocational education, providing both skilled personnel and technical support for the East Coast Rail Link.

The railway, stretching more than 600 kilometers, is expected to open in 2027 and is intended to boost connectivity and economic development along Malaysia's east coast.

The alliance will serve as a bridge



Malaysian trainees learn high-speed rail technology at Liuzhou Railway Vocational Technical College in Liuzhou, Guangxi Zhuang autonomous region, in 2024. PROVIDED TO CHINA DAILY

between vocational institutions in the two countries, according to Abdul Razak Bin Sabtu, a senior official at the Department of Polytechnic and Community College Education of Malaysia's Ministry of Higher Education.

He said it would connect Malaysian polytechnics and community colleges with their Chinese counterparts to train "future-ready" workers in advanced manufacturing, automotive engineering, smart logistics, digital technologies and green industries.

"Through joint curriculum development, shared competency standards, industry-recognized certifications, and staff and student mobility, this alliance has the potential to become a model for ASEAN-China TVET cooperation," he added.

Local authorities in Liuzhou have pledged support for the initiative. Hu Lan, the city's deputy mayor, said the government would work to create a stable and convenient envi-

ronment for international cooperation. Four joint projects were announced at the launch, covering areas including urban rail transit, new energy vehicles, AI and modern agriculture.

Liuzhou Railway Vocational Technical College has already integrated Chinese railway technical standards into the East Coast Rail Link project, providing training and operational support. Currently, 208 Malaysian students are enrolled at the college in railway-related disciplines, and are expected to take part in testing and commissioning work on the railway after graduation, according to the college.

Over the past five years, the college has trained 247 international students from Association of Southeast Asian Nations countries, including Thailand, Laos and Malaysia, and has provided 25,307 person-days of specialized technical training for Chinese-funded enterprises overseas.