2014 NPC & CPPCC Guizhou aims high on drones

Huge commercial market available for unmanned civilian aircraft, experts say

By ZHAO LEI

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The southwestern province of Guizhou is determined to become China's biggest supplier of civilian drones, according to national legislators from the province.

"I have submitted my proposal to the government that favorable policies should be creat-**AVIATION** ed and carried out to stimulate the development opment of a civil-purpose unmanned aircraft industry in Guizhou," said Chu Haitao, a deputy to the National People's Congress, China's top legislature. and chairman of Guizhou Aviation

Industry Group. The Aviation Industry Corp of China, the nation's leading aircraft manufacturer that owns Chu's company, has chosen Guizhou, one of the underdeveloped regions in the country, as its design and production base for civilian drones, he said.

Guizhou has a history of 50 years in the aircraft industry and is able to produce about 70 percent of an aircraft's parts, he said, adding that the group began to develop unmanned aircraft in 1999.

The province has designated a considerable amount of resources to construct modern manufacturing facilities and living infrastructure and pledged to guarantee decent housing for aviation industry employees, said Zhou Jiankun, another congress deputy and Party chief of Guizhou's Anshun, home to many aircraft parts companies.

He noted that Guizhou has been striving to attract more aviation companies, especially those surrounding unmanned aircraft, to invest in the province.



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Unmanned aerial vehicles, also known as drones, on display at a disaster, emergency response and security expo in Shanghai in October.

The provincial government set up an unmanned aircraft research center in 2012, aiming to advance research in fields such as cuttingedge materials and airborne equipment

Civilian drones have a huge market in China, said Zhu Junjian, deputy chief engineer at Guizhou Aviation Industry Group. Geographic survey, aerial mapping, forest patrols, resource exploration as well as maritime operations can greatly benefit from the use of drones, he added.

However, Chu said the government must assist or cooperate with enterprises to remove obstacles that affect the industry's development before the sector can thrive.

"At present, the civilian drone industry in China is troubled by the absence of national standards, flight restrictions caused by low-altitude airspace control, high opera-

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tion costs as well as low mobility of ground systems," he said. There are 44 national standards that govern military drones but

those for civilian versions have yet to be created. The government is aware of the situation, and several central departments, including the Ministry of Industry and Information Technology and Civil Aviation Administration of China, are drafting guidelines on technical requirements and airworthiness standards.

The government should allocate more low-altitude airspace in which civilian drones can fly, Chu said, urging military and civil aviation authorities to further relax their grip on low-altitude airspace

For his part, the chairman said the group will explore methods to help clients reduce the high cost of flying drones, while continuing to

develop advanced versions that require fewer support personnel to improve the mobility of the unmanned system.

According information to released at the 2013 China Unmanned Aircraft System Summit held in Beijing in September, there were more than 130 Stateowned and private enterprises on the Chinese mainland involved in the civilian unmanned aircraft business - and they had produced nearly 15,000 drones.

A recent report by BI Intelligence, a consulting service in the United States, estimates that commercial drones will represent nearly \$12 billion in global sales over the next decade.

Chu said foreign clients have been in touch with his company over the export of military drones, but the civilian types are not likely to be exported in the short term.

Advisers call for more low-altitude airspace

By ZHAO LEI

The government should speed up the reform of low-altitude airspace management to boost Chigeneral aviation sector, national lawmakers and political advisers have suggested.

"The civil aviation and military authorities should **POLICY** publish the Regulation on Low-altitude

Airspace Management as soon as possible and open more low-altitude airspace," said Meng Xiangkai, a deputy to the National People's Congress, China's top legislature, and chairman of China Aviation Industry General Aircraft. He was talking on the sidelines of the annual meeting of the congress.

"Most of the opened airspace is above remote, underdeveloped areas and separated from each other. Moreover, many restrictions are still in place for flights near big cities."

China started to relax tight control on its low-altitude airspace in 2011 and opened up the airspace below 1.000 meters in nine selected regions to suitably qualified general aviation aircraft.

However, the country's low-altitude airspace is still dominated by the air force and the Civil Aviation Administration of China.

Private aircraft are required to file for approval before they can take off. The time-consuming and complicated application procedure has frustrated many who want to own aircraft and has hampered demand for private jets in the country. "We request related authorities

to continue to streamline their approval procedures for general aviation flights," Meng said. "The government should also gradually open the airspace below 3,000 meters to enable more aircraft to flv."

Even after an aircraft receives permission for a flight, the pilot still has to deal with a host of difficulties, such as a lack of airports that can support general aviation aircraft and a lack of ground service professionals.

Meng said that by the end of 2013, the United States, which operates more than 300.000 general aviation aircraft, had at least 24,000 airports and landing points that could handle flights made by such aircraft but that China had just 399 on the mainland.

"Some airports don't even have aviation gasoline, which is usual ly used by small aircraft that employ piston engines, forcing the pilot to carry the fuel on the plane," said Wu Guanghui, a member of the Chinese People's Political Consultative Conference National Committee, the country's top political advisory body, and deputy general manager of Commercial Aircraft Corp of China.

Meng suggested that if the government wants to give this industry a strong push, it can start by transferring the airspace's control to the civil aviation department from the military and investing more in airport construction.

He urged the government to provide favorable policies in terms of tax, loan and project approvals for domestically developed general aviation aircraft.

Support is also needed in the training of pilots, export of domestically developed aircraft as well as ground aeronautical services, according to Wu.

China has made a succession of moves to facilitate the general aviation sector.

Since late November, flight students for private aircraft have begun to benefit from relaxed standards for theoretical exams, flight tests and the physical condition they must meet before obtaining a certificate.

The relaxation satisfied a longvoiced demand from aviation insiders who blame the rigid physical requirements for the shortage of pilots.

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