

China's GA 'to follow US model'

While GA in Europe continues to shrink, in China it is about to storm ahead. **Liz Moscrop** reports from Beijing

There are so many facts we take for granted about general aviation in China: it is hugely costly, almost impossible to fly recreationally since there are so few aircraft and you need at least three days to arrange a permit to fly – and even then you may not get it. Airspace is thornily restricted. There are too few airfields and a woeful lack of instructors to teach wannabe students. The Chinese government is not interested at all in the sector, which is such a small part of the aviation industry that it is of negligible importance...

Hang on – that last sentence is not true. Recent movements in the GA sector have turned many of these 'facts' on their heads. Hu Ke, deputy chairman of AOPA China, was brimming with enthusiasm at November's Airshow China in Zhuhai. He has huge ambitions for the association's growth in the country next year. He believes that AOPA will grow from around 100 members today to – yes this is the correct number of zeros – 10,000 by the end of 2011.

Is this an exaggeration? Hu reckoned not. He is adamant that with government support the figure is achievable. He said that the Civil Aviation Authority of China (CAAC) would promote AOPA to its lists throughout the country and support the

2007 GA contributed only 0.001% to the country's GDP and employed 7,000 people. There are still only around 900 privately registered aircraft, including 125 helicopters, and 74 operators. Compare that with Australia, which has ten times as many serving a population that is just 2% of that of China. Interestingly there are about 1,000 general aviation pilots in China, only about ten of whom are instrument rated.

Additionally most people live in the developed east. GA activities are all located in this region, which covers only 20% of the country's whole area. The Civil Aviation Flight University of China operates the world's largest commercial pilot training school, which flies more than 200 planes at seven airports in south west China, providing 1,000 new pilots every year to support China's airline industry.

Private flying

Despite his enthusiasm, Hu spoke about the many problems holding back the growth of recreational, personal, and business aviation in China. He pointed out that 85% of the airspace is owned by the military. He said: "It is difficult to get approval to fly cross-country in low-altitude airspace." Airlines and business jets use the IFR routes between cities that comprise

the 15% civilian airspace. There are also no good general aviation airports with paved runways and facilities, such as hangars and fixed base operators for fuel and maintenance services.

However, colleague Wen Fang pointed out that the government is keen to win over hearts and minds in terms of developing the aviation sector and that attracting young people is seen as an important part of that strategy. Fang said: "We are going into schools and receiving a great response. This will help us reach our target of obtaining 10,000 members."

The good news is that China has recognised an urgent need to open up low-altitude airspace, develop new general aviation airports and FBOs, and make regulatory changes to reduce costs for private general aviation operations. We're not talking next year, or even five years' time, but there is a real possibility that the next decade could herald a burgeoning recreational flying community.

A key development is the announcement by Chinese defence officials in August that later this year the military will be loosening access to the country's low-altitude airspace for general aviation traffic. This will result in three separate zones: areas remaining under full control, areas under surveillance and areas that can be freely used by operators filing flight plans in advance. This is a huge step forward from having to request permits three days ahead of time.

Right: Qingdao Jiutian International Flight Academy stand at Zhuhai

organisation's marketing efforts, in particular with young people in schools and colleges. He said: "The government has many lists of interested parties and will put out a message to thousands of people throughout the country."

Indeed AOPA China detailed in last quarter's IAOPA bulletin (available on <http://www.iaopa.org>) how it is helping stimulate GA development in the country. President Yu Yanen and vice president Zhang Feng explained that GA in China is for the most part aerial work, including agricultural and forestry pest spraying, forest fire detection and commercial pilot flight training. The report said: "All of these operations are conducted by government-owned GA companies for government customers and use commercial pilots."

The numbers tell China's GA story. In



In addition the government is implementing a five-year plan (2011-15), covering training, fleet development, airport construction and fuel supply. There are also plans to build new general aviation airports and airstrips with new standards, plus new training and testing for general aviation pilots and mechanics, and more general aviation flight schools.

The rise of an affluent middle class and development of airports in smaller towns, coupled with the access to lower altitude airspace means that a new generation of PPLs is likely to emerge. Flight training organisations (FTOs) are eyeing the market; although there is still so much room for growth in the airline training sector that recreational flying is still a poor second cousin in terms of FTO attention.

But for today there is still a shortage of infrastructure away from the major coastal economic centres. There are very few

Top right: hmm... okaay, it takes all sorts, including composite gyrocopters
Right: home-grown composite seaplane from Yan Zhou Aircraft

airports able or allowed to handle small GA aircraft so student pilots have to be really keen to complete their licenses, frequently driving two hours or more each way to get to their nearest airfields. And that after waiting for three days for their permits to fly.

While the government is investing more in airports and roads, it will be years before the effects are thoroughly felt. AOPA UK member and aviation lawyer David Tang is confident that the private sector will chip in. He said: "I know of several entrepreneurs in property development who are also interested in building airports where they're building houses."

Other signs of improvement

This year's International General Aviation Forum (IGAF) at the Zhuhai Airshow bore out Hu's optimism. IGAF was hugely well-attended and included influential speakers from across the aviation spectrum. A key player was vice-director of the State Air Traffic Control Commission Du Qiang, who spoke about how general aviation had become one of the government's main priorities. It is he who orchestrated the recent relaxation in lower altitude airspace restrictions. He said: "This is an important first step in developing general aviation in China."

The impressive list of dignitaries gathered for the forum was further testimony to the fact that China is taking the sector seriously. Zhuhai's vice-mayor Liu Xiaolong opened the proceedings, and was joined by luminaries including China Aviation News president Xiao Zhi Yuan, the vice-chairman of the Guangdong People's Government, the president of Aviation Industry Corporation of China (AVIC) Lin



Zuomin, the vice-director of the Civil Aviation Authority of China, Xia Xinghua, the president of AVIC General Aviation aircraft company, Meng Xingkai, the president of the Civil Aviation University of China Wu Tong Shui and Dr Jackson Ho from the Hong Kong Aviation Industry Association. Two Westerners took to the podium, too – Cessna's VP of International Aircraft Sales and Business Development Robert Gibbs and Mike Rowley, Honeywell's VP of Worldwide Sales.

Although the conference focused primarily on business aviation, several flight training schools, aero clubs and light sport aircraft peppered the Airshow halls and static park. There were several new prototypes of composite light aircraft and gyrocopters on display. GA companies exhibiting at Zhuhai included flight-training institutions such as Australia's Diamond, Heliflite, the US national test pilot school, Qingdao Jiutian International Flight Academy, and the Civil Aviation University.

Underscoring the point that outsiders are really seeing potential change in the market and backing that potential with cash was the plethora of foreign aircraft manufactures at the show. Germany's Light Aircraft Company brought a

composite gyroplane that dominated one of the halls. Japanese composite manufacturer Jon72 also stood out on the static with pretty girls in jump suits promoting an as yet uncertified one-off edition composite microlight. The company said: "As more people can afford to learn to fly, they will want to buy such an aircraft and keep costs down. This is why we have brought it to Zhuhai."

Smaller home-grown companies included Qingdao Haili Helicopter Manufacturing, Juijiang Red Eagle Aircraft Manufacturing, Harbin Aircraft Industry Group and Shijiazhuang Aircraft Industry.

There were also a couple of recreational flying clubs, such as the Zhuhai Apollo Aero Club, which had plenty of young people milling round, but closer questioning revealed that only the older proprietor had actually flown the aircraft on display. However, there was no denying the enthusiasm from the young people helping to promote the club.

However – and the story may seem too familiar to UK GA pilots – there remains a lack of awareness of the functions and roles of GA in China as compared with scheduled commercial aviation. During the IGAF the deputy administrator of the



overseas support for major repairs. There are few airports and limited access to many of them. Airspace is divided into Class A, B, C and D, which are tightly controlled by the military and offer limited access and air traffic management services.

The CAAC is determined to develop the GA sector, however, and is throwing its full weight behind development programmes. These include formulating new GA policies and regulations; pilot programmes of reforms in north east China, with a view to expanding into other parts of the country. It is also encouraging international exchanges and cooperation, such as with the ACP, and encouraging contributions from industry associations.

The Lower Altitude Airspace Access pilot programme will be launched at the end of the year in Changchun, Guangzhou, Shenyang, Zhuhai and Xinjiang and

Top left: Robinson R44 helicopter already sells well in China

Left: first of the many - the only pilot at the Apollo flying club



expand nationwide by 2015, with low altitude airspace to be opened in the country's five aviation control areas including Beijing and Lanzhou.

Crucially the CAAC has pledged to simplify the process for establishing a GA operating company, which will also benefit flight training schools. As commercial pilot training often forms the bread and butter of such companies the fact that the CAAC will promulgate CCAR 91 and 135, similar to the US operating standards, will be a shot in the arm for the industry, facilitating flight operation and certification for commercial operators using small aircraft.

There are also reviews under way designed to lower operating costs (e.g., takeoff, landing, and handling fees) for GA flights, plus a reduction of import duties and value added taxes on GA aircraft and parts.

According to Booz and Co, the GA sector could grow at approximately 20 percent annually, generate RMB 7 billion of annual output and create 43,000 jobs and a range of indirect benefits. Estimates for annual growth of the Chinese GA fleet tend to come in anywhere between 10–20 percent, with more than 2,500 aircraft predicted for 2015.

Beijing

Zhuhai was not the only GA forum where China's great and good gathered. It seems the momentum has been picking up for some time. In June in Beijing another China General Aviation Forum took place, hosted by the China Civil Aviation Report. The event was co-organized by the Luyanghu Modern Industrial Development Zone, sponsored by Capital Jet Company Limited and supported by the China Civil

CAAC, Li Jian, said: "The current development level of general aviation is unable to keep pace with China's social and economic development needs. GA has tremendous development potential and the outlook is bright. GA can make a significant economic contribution and generate sizeable employment for China."

Interestingly, he pointed to the US as an example of how GA contributes to a major world economy, specifically corporate aviation. He added, however, that developing business aviation would be a key economic strategy for China.

Sino-US relations

Putting its money where its mouth is, the CAAC is actively cooperating with the US in order to emulate the world's friendliest GA economy. The US-China Aviation Cooperation Program (ACP) recently hired consultants Booz & Company to examine

the outlook for China's GA sector. The subsequent report identified several factors constraining its growth, including a restrictive regulatory environment, airspace access, and an underdeveloped infrastructure and supply system. Growth has also been hampered by import duties and value added taxes, which are higher for GA aircraft than for commercial aircraft.

There is obviously still a lack of an effective regulatory framework to encourage GA development in a safe and secure manner. European pilots will empathise with the disjointed regulations and policies across stakeholders, which impede effective rulemaking. Approval processes are lengthy, time consuming and costly.

Additionally in China, the light aircraft manufacturing industry is at an embryonic stage, with companies struggling to break even. Imported aircraft still rely on

Aviation Science Popularization Foundation. Attendees reported an air of great excitement as the promise of GA expansion loomed.

The forum attracted more than 180 attendees and reportedly gave rise to passionate discussion, which was possibly a key driver in the opening up later in the year of lower altitude airspace. Mao Shunping, vice president of the China Civil Aviation Science Popularization Foundation, delivered the welcoming remarks, and Francis Chao, who publishes the China Civil Aviation Report spoke to the value of developing GA in China, highlighting the need for safety in a largely under regulated sector. He called on attendees to sign their names on a 'self discipline board,' which read: "Industrial self-discipline in GA is the best guarantee to maintain flight safety.

Let's push forward industrial self-discipline together!" Mao was first to sign. Zhao Qijiang, Chairman of Capital Jet Company and Lin Mingyang, president of Textron China also inked their names.

The cordial Sino-US relationship was evident. Mu Jun, the civil aviation specialist for the FAA Beijing showed a North American GA aviation safety video. Landon Loomis, commercial officer of the US Embassy, Beijing spoke about the history of America's GA and the role GA had played in the country's economic development. Dr. Carl Chen also spoke about obtaining an FAA Type Certification, demonstrating China's determination to export its products. To date he is the only Chinese individual who has gained two FAA certificates for jet aircraft.

Kevin Wu, vice president of business

development and government affairs, spoke about how GA sustains economic growth and pointed to the fact that in 2006 GA had contributed 1% of the GDP for the US and offered millions of job opportunities. He said that this showed that GA had "a huge latent function in China's national economy development."

The forum also sparked a lively discussion when it asked whether China should build GA 'Top Down' or 'Bottom Up' Now that the government is considering constructing a national aviation emergency relief system, it is due to assign money to offer national emergency relief in appointed bases. The conclusion was that the 'top down' infrastructure would have the advantage of uniform equipment and supplies throughout the country, but would fail to cover most areas of China. However, if the government agrees to pay for the private sector to provide such services, the 'bottom up' operation model would cover most areas.

The final speaker was Ram Pattisapu, MD, and president of IndUS Aviation, who advocated more recreational aviation, especially as costs will come down thanks to cheaper composite aircraft entering the

AOPA central to China's GA revolution

AOPA China was founded in 2004 by its original president, pilot and former China Southern Airlines Chairman Yu Yanen. The organisation has been an IAOPA member from the outset. As the Chinese government moves to support GA growth, AOPA China is also expanding and modernising itself to support its members.

Yu is supported by vice president Zhang Feng, who works alongside ten other team members in Beijing developing programs to make AOPA China a vital part of China's general aviation development. There are four internal AOPA committees: Flight, General Aviation and Local Economic Development, General Aviation Requirements and Standards, and General Aviation Aircraft Development.

AOPA China's mission is to promote the affordable and safe use of GA aircraft. To do this it is pushing for more GA airports, as well as access to comms, weather reports, navigation systems and other aviation infrastructure. It also helps obtain permits to enter and leave China.

Relationships are vital in China, so AOPA is establishing a strong working relationship with the national authorities to devise appropriate general aviation operating rules and procedures. Like AOPAs everywhere, it provides advice and support to its members, and speaks to them via its website and other publications. Indeed, this article will be translated into Chinese and published in China.

The CAAC has commissioned AOPA to conduct a national survey analysing the state of Chinese GA, and AOPA is now organising the first annual exhibition of Chinese private aircraft for its members, and anyone interested in aviation.

Yu, Feng and Hu also all attended November's AOPA-US Aviation Summit, along with 30 Chinese AOPA members, where they met with IAOPA and AOPA officials and members and toured several general aviation airports and flight schools and other facilities in Southern California, hosted by Cirrus Aircraft.

Yu said: "Promotion initiatives—like America's 'Young Eagles Program' should also encourage growth in demand for flight schools coming into China."

Demand for flight schools is rising since China must resolve a long-term pilot shortage. In 2006 the country had 1,768 GA pilots and the CAAC forecast a need for 3,091 GA pilots in 2010. The limited number of available military veterans and the lack of flight schools exacerbate the severe pilot shortage. China only has about ten GA flight schools, with an average annual output of 50 pilots.

One such is Shaanxi-based Zhongfei General Aviation Company - the fifth largest general aviation firm in China. In 2007 Zhongfei started offering private pilot training, establishing an aviation club, offering a 130,000 Yuan (£12,600) PPL course over six months. However, the club only trained 11 pilots in two years, partly because it takes three days to arrange a permit for low-altitude flights (which all private flights presently need) through the military.



Above: AOPA China Deputy Chairman Hu Ke - 10,000 members within a year?

market. Francis Chao concluded the forum by saying that the "GA spring was coming and all colleagues in GA are happy – if slightly panicked – as they hope the development matches their dreams."

Let's hope these dreams are realised. My tip would be to watch out for a new generation of middle class Chinese PPLs gradually emerging as GA becomes more accessible. The private sector will work alongside the government. Britain's David Tang said: "It's a very exciting time for China. Real change is coming for GA." ■