

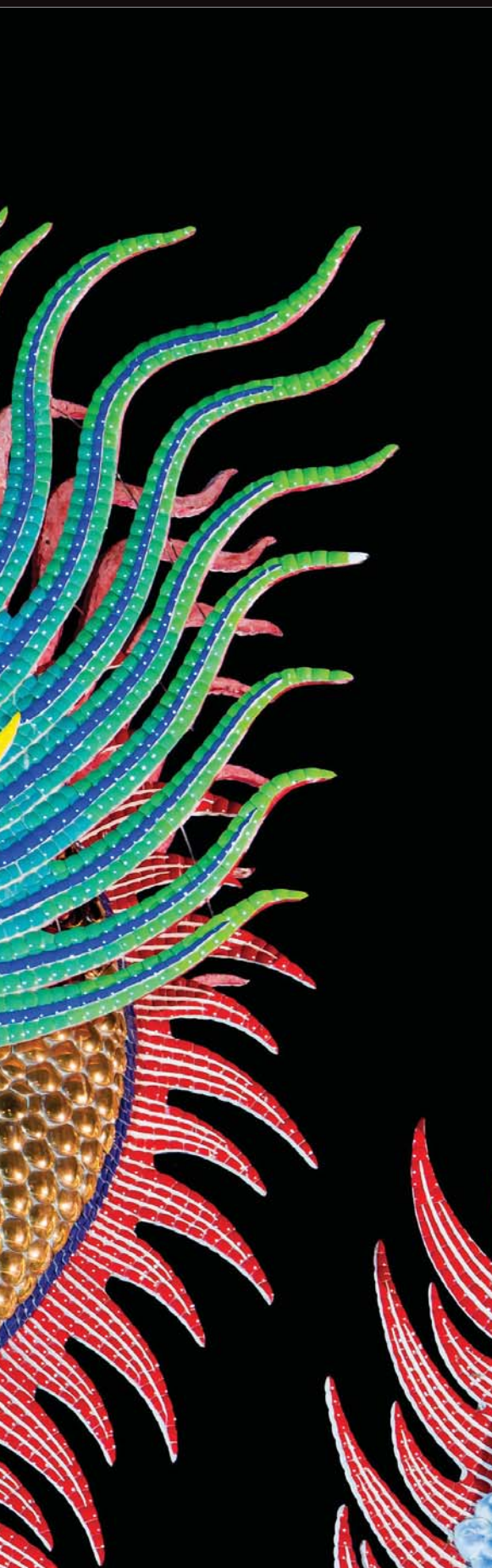
As the drums fall silent, and the acrid smoke of fire-crackers drifts away on the chill breeze, China returns to work after its long New Year celebrations. This is the Year of the Dragon, and there is strong temptation to talk about 'sleeping dragons awakening'. But it is clear this year might well be the one in which the West's relationship with China changes. Instead of being considered a source of supply, low-cost labour and cheap manufacturing, China could now be considered a land of opportunity, potential sales and long-term partnerships, especially for the aerospace manufacturing industry.

It is almost a cliché to say so, but China is changing rapidly. Its booming economy is driving manufacturing and construction, creating infrastructure, promoting exports and generating significant benefits for a large part of the population. But while the number of entrepreneurial millionaires continues to rise, and the well-off middle class continues to grow, industrial expansion is becoming hostage to wage inflation as more and more companies chase limited intellectual resources. China's university population increased from 4.1 million in 2007 to 5.2 million in 2010, but there are still too few qualified engineers and experienced commercial managers to meet an ever-increasing demand. In the ultra-modern Zizhu High-Tech Business Park, next door to the prestigious Jiao Tong University in the Minhang district of Shanghai, it only needs a foreign multinational to open a new office or production facility for local wages to go spiralling upwards. Newcomers are willing to pay top rates to recruit experienced staff at salaries still relatively low compared with Western standards (a middle-aged senior executive of a Chinese aerospace company currently earns around €3,500 a month). Established companies are obliged to increase salaries or risk losing complete departments overnight. Personnel turnover of qualified staff is admitted to be in excess of 30% per year and can be more than 70% for less specialised and more mobile staff. So, while 'boots and shovels' remain cheap, experienced, white-collar 'desk jockeys' will soon cost as much as their Western counterparts. Add to this the gaping difference in experience,

Go East!

David Cook, president of ASM Consulting, says China should be seen as a land of sales opportunity rather than low-cost manufacturing





quality and efficiency, and the 'low-cost' advantages of China as a manufacturing nation are quickly being eroded. Some companies, such as Safran in France, have already repatriated production away from China due to better productivity at their European sites. But as China's attractiveness as a low-cost producer wanes, the West should not lose interest. On the contrary, China is becoming even more attractive as a potential customer for Western goods and services.

The demand for air travel in China continues to grow at a dramatic rate. While year-on-year passenger traffic growth is expected to slow, from 14.3% (CAGR 2000–2010) to 11.4% (predicted CAGR 2011–2015), China still expects to see more than 450 million passengers flying in 2015. According to one aerospace industry chief executive, if China's population were to attain the same frequency of air travel as is currently seen in the US, we would need to double the current world fleet of commercial airliners. Good news for the likes of Boeing and Airbus: Western aircraft manufacturers have already done substantial business with Chinese airlines and will continue to do so. The Chinese-registered airline fleet accounts for just over 9% of the world's airliners, and this will grow to 15% by 2030, representing a sales potential of more than \$600 billion. The biggest growth will be in single-aisle aircraft, with a four-fold increase from today's 1,330 units to more than 4,000 units (according to the Boeing Current Market Outlook).

But even these large numbers of aircraft cannot meet the potential demand, and the Chinese government recognises this. It has set out on a strategy of providing for its own air transport requirements from domestic sources rather than being totally dependent on Western suppliers. During its 11th Five-Year Plan, from 2005–2010, China invested \$29 billion in civil aerospace. In the 12th Five-Year Plan, from 2010–2015, this sum will be increased to \$200 billion. Other forms of transport, such as high-speed rail systems, are also being encouraged to the tune of \$108 billion a year, recognition of the fact that, due to the country's size and geography, rapid surface or air transport is key to ensuring economic growth. But it is not enough to simply buy a large fleet of aircraft – they must have somewhere to take off and

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land. In January 2008, the Chinese State Council announced its National Airport Allocation Plan, whereby 52 new airports will be built by 2020. It has allocated \$67.1 billion for this, a third of which has been spent already. The objective is for 82% of the country's population to be within 100km of an airport by 2020, up from 61% today. Nonetheless, assuming 231 airports in China by 2015 for a population of 1.3 billion people, this is still a much lower density than can be found in the US today, leaving potential for further airport growth beyond 2030.

It is easy to understand the Chinese government's desire to encourage domestic production of aircraft, not just as an expression of political will but also out of simple economic necessity. For China to grow, it must have a sound transportation infrastructure, and air transport will be a significant and strategically important part of that infrastructure. But China's economic growth cannot be held to ransom by Western aircraft suppliers, and so it must have its own projects. However, even though the intention is to support a domestic market, that is not to say China is prepared to accept the levels of quality it experienced when most of its aircraft were bought, or copied, from the Soviet Union. Chinese airlines, and the Chinese travelling public, are now used to modern Western aircraft, and any domestic product must be able to meet the same levels of safety, reliability, quality and customer service as anything offered by Boeing or Airbus. So while the market for these products is essentially domestic, if China can produce aircraft to standards equivalent to Western products then it does, effectively, become a strong competitor to the traditional suppliers in the West. While some might consider Ryanair's recent demonstration of interest in the Comac

919 to be a bluff, there will come a time when Chinese domestically designed and manufactured aircraft will find their way into the major Western airline fleets.

Those of us with more than a few grey hairs can point to previous attempts by the Chinese to build indigenous aircraft programmes based on co-operation with Western manufacturers. We can bare our arms and show the scars of programmes such as the McDonnell Douglas MD90 ‘Trunkliner’, the Embraer ERJ 145 and other, more obscure, programmes. The Chinese certainly learned from them, but their value to the Western partners is debatable. In March 2002, the Chinese stated their intention to do things differently by launching the ARJ21 project. With the ARJ21, China has dedicated itself to a strategy of building its own aircraft designs, and has since launched other projects such as the Comac 919 and the MA700 turboprop.

While Western equipment manufacturers, particularly engine manufacturers, are an essential part of these projects, the intention is to further develop China’s own equipment manufacturing industry. For example, the Comac 919 will be equipped with CFM Leap-XC1 engines, designed and manufactured by the CFM International partners Snecma and GE, but the intention is that, at some time in the life of the programme, these engines will be assembled in Shanghai by Avic Commercial Aircraft Engines (ACAЕ). ACAЕ is also busy with its own engine design, the CJ1000A turbofan, due to

enter service some time after 2020. This engine will be available to power derivatives of the Comac 919 or any other future programmes in the 100–200 seat range. And so, whereas the early development of indigenous Chinese aircraft presented opportunities to major Western suppliers such as engine, landing gear or avionics manufacturers, the continued development of the Chinese aerospace industry, with its own tier-one equipment suppliers, will present outstanding sales opportunities for Western tier-two component suppliers, where their highly specialised technology is still beyond the reach of Chinese manufacturers.

Opportunities are not just limited to aircraft equipment. ACAЕ, for example, will need to build completely new engine design, test and manufacturing facilities on a greenfield site. It will need to acquire design tools, test equipment and highly specialised manufacturing machinery, and have them all installed within a short period of time. One can imagine that the walls and floors of such establishments will be provided by China’s highly efficient and cost-effective civil construction force, but the machines and test equipment will probably have to come from the West. Major components for the new engine, such as cases, frames and shafts, will also come from Western suppliers – or Chinese suppliers schooled in Western techniques following years of close co-operation with Western partners. It is not just a question of technology: to design, develop, test, certify and manufacture a

completely new engine from a greenfield site in less than eight years is a major challenge with some tough deadlines. Chinese companies are notoriously slow, not because, as some might suggest, the Chinese have a different notion of time, but because many high-tech Chinese companies are state-owned. Under China’s current economic and political system, every decision has to go up through the hierarchy and back down again, adding considerably to the time necessary to make and approve decisions.

Doing business in China is not easy: notwithstanding the difficulties related to such a large country with a highly diversified and dispersed industrial base, there are also the classic issues of culture and language. Another layer of difficulty is added by the highly complex nature of the Chinese aerospace industry. Aviation Industry of China (Avic) was created in 1999 to try to harmonise the already complex domestic aerospace industry. Even so, Avic today is an industrial group with a capital of \$9.5 billion and more than 430,000 employees, and comprises 10 business groups, 101 different companies and 34 research institutes. If we consider the structural elements of the Comac 919 aircraft as an example, there are 26 different work packages distributed through nine different subsidiaries of the Avic Group.

How does a small business in rural England, or France, or Germany, know who to speak to or how to identify the decision-makers in such an organisation? As with any maze, the best solution to finding one’s way to the objective is to use a reliable guide. Matthieu Devoiselle is a founding partner of Avia-Tek, a Shanghai-based specialist in developing business relationships with Chinese aerospace companies. He says: “As with any business development project, you need to be focused on the product you are trying to sell and the potential applications of your product. The Chinese aerospace industry is so highly fragmented, both structurally and geographically, that a Western company can waste a lot of time and effort trying to identify the right person in the right organisation. Understanding that the Chinese economy is centrally controlled is critical, because the authority to make decisions is not always where a Western businessperson would expect it to be.”

CURRENT AVIC ORGANISATION



Source: Avia-Tek

The names behind Comac: the state-owned shareholders

State-owned Assets Supervision and Administration Commission of the State Council (Sasac)

Sasac is responsible for supervising and administering the state-owned assets of the enterprises under the supervision of the central government (excluding financial institutions). Sasac dispatches the supervisory board to some large-scale enterprises on behalf of PRC and takes charge of daily management of the supervisory board. Sasac appoints, removes and checks the top executives of the supervised enterprises through legal procedures, grants rewards or disciplinary measures in accordance with their business performance, establishes the executive selection system in accordance with the requirements of the socialist market economy system and modern enterprise system, and improves the incentive and check-and-balance system for corporate management.

Shanghai Guosheng Group

Shanghai Guosheng (Group) Co Ltd is the investment arm of the Shanghai government tasked to participate in the Large Aircraft Programme. Guosheng is a large state-owned assets management company in Shanghai, and an investment and financing platform for key industry projects supported by the Shanghai government. It has registered capital of RMB10 billion, and its scope of business mainly covers non-financial investment plus minor financial investment, capital operation, asset management, industry research, and socioeconomic consultation.

Aviation Industry Corporation of China

Aviation Industry Corporation of China (Avic) is a large state-owned enterprise managed by the central government, and also an investment institution authorised by the PRC. It is reorganised on top of Avic I and Avic II. Avic has 10 business units: defence, transport aircraft, engine, helicopter, avionics and systems, general aviation aircraft, aviation research and development, flight testing, trade and logistics, and asset management, with nearly 200 subsidiaries and over 20 listed companies. Avic develops a series of fighter, fighter bomber, bomber, transport aircraft, trainer, reconnaissance aircraft, helicopter, attack aircraft, general aviation aircraft, UAVs and missiles. It also develops engines such as turboprops, turbo-shafts, turbojets and turbfans.

Aluminum Corporation of China

Aluminum Corporation of China (Chinalco) is an investment management institution and holding company authorised by the PRC, and is also one of the key state-owned enterprises directly supervised by the central government. At the end of 2007, it had total assets of more than RMB200 billion. With respect to the value-appreciation and value-preservation state-owned assets and the return-on-net assets, the firm has a leading status among China's state-owned enterprises. Chinalco is the world's second largest alumina producer and third largest electrolytic aluminum producer. It is the controlling shareholder of Aluminum Corpo-

ration of China, which is listed on the New York Stock Exchange, Hong Kong Stock Exchange, and Shanghai Stock Exchange, respectively, with a BBB+ rating by Standard & Poor's for three years in succession.

Baosteel Group Corporation

Baosteel Group Corporation is a producer of steel products with an extensive research and development base for new processes, new technologies and new materials of the steel industry, featuring the most modernised organisation, the largest production scale, most varieties and most advanced technology, and ranks among the world's most advanced steel enterprises. Baosteel has a credit rating of A- with Standard & Poor's. Baosteel has formed a production capability of more than 23 million tons, covering three major categories: carbon steel, stainless steel and special steel.

Sinochem Group

Since 1998, Sinochem has explored the transformation of the traditional state-owned foreign trade enterprises under the condition of a socialist market economy in areas that include: agriculture, energy, chemical industries, finance and real estate. The corporation provides a variety of financial products and services for markets, and its branches, such as Foreign Trade Trust, Far Eastern Leasing, Lion Fund Management and Manulife-sinochen Life Insurance, have stronger market positions and industry influences in respective fields.

Developing relationships in any business is a long-term project, but this is particularly so in China. Its culture favours the deep levels of understanding and trust that can only come from long-held friendships and the wisdom that matures with age. Western companies that have long-standing partnerships with Chinese companies will reap the rewards of their patience. But how do companies with no previous contact with China break into this market? "Avia-Tek is comprised of people who are fluent in the Chinese language, deeply understand the culture, and have many years of combined business experience in China," says Todd Siena, who is also a founding partner of Avia-Tek. "We know the key people in the aviation industry and have built a high level of trust, understanding and respect with them. This places us

in a unique position to advise our clients of opportunities that are appropriate to their goals, help them set strategies to support the opportunities, and most importantly, introduce them to companies and people who would be critical to the successful execution of their strategies. Avia-Tek can add real and practical value to any Western aerospace company that desires to participate in the Chinese market."

As Chinese aerospace manufacturing accelerates in its development towards becoming a fully integrated industry with original equipment manufacturers and all four tiers of suppliers, it offers now, more than ever, opportunities for Western manufacturers to sell their goods and services in support of China's many new and exciting projects. So, while the Chinese New Year is a moment of reflection

for Chinese companies, maybe now is also the time for Western aerospace manufacturers and service suppliers to re-evaluate their relationship with China. Maybe now is the time to consider China not just as a source of low-cost manufacturing but also as a land of sales opportunities, where Western suppliers can respond to the increasing demand of China's own burgeoning aerospace equipment industry. Maybe now is the time to go East to look for sales growth and new, long-term customer relationships. *Xin nian hao!* Happy New Year!

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