Simplifying Operations





hina's aviation market has experienced unparalleled success in the past decade. This rapid growth and the increasing demands of airlines and operators means the country's aviation infrastructure is constantly under pressure. The Chinese government is moving quickly to update and enhance its aviation resources with significant investment in the construction of new airports and the modernization of others. As this ambitious investment

continues, solutions must be found to simplify operations in the meantime. In this resource, UAS' Asia Pacific team provides expert operational advice and tips on smarter trip planning. Ultimately, this resource will inform you of the procedures for operations in China, and more importantly, give you options and ways around any potential obstacles in this unique and challenging environment.

China's Aviation **Market**

hina's aviation sector has developed exponentially over the past two decades, distinguishing the emerging economy from the more established business aviation sectors of Europe and North America. These industry stalwarts have been experiencing a slowdown in recent times. Meanwhile, China's rapid growth is set to continue into the future. The Chinese market is buoyed by increasing business travel, as well as more international travel by the emerging middle class. While this means good times for operators, the unique nature of the country's sector can often make their jobs challenging and complicated.

ccording to the Organization for Economic Cooperation and Development (OECD), Chinese economic growth will gradually decline to 6.2% by 2017. That said, separate research by Goldman Sachs and Frost and Sullivan project China's GDP leading the world by 2025. The Civil Aviation Administration of China (CAAC) maintains that the Chinese aviation market had been increasing by approximately 15 percent annually since the 1980s. Although this has slowed in recent years, growth remains in the double digits and this is expected to continue for the next decade.

Government Investment

Inder the government's twelfth Five Year Plan, the number of Chinese airports was set to grow from 175 in 2010 to 230 by 2015. The importance of optimizing airports' layout and an overhaul of airspace management systems also featured in the plan. All in all, CAAC plans to invest \$500 million in the construction of 69 regional airports in China by 2019. Head of CAAC, Li Jiaxiang, announced in June 2015 that the government would invest \$80 billion in aviation projects in that year alone. With this massive expansion, it's expected that demand for smart airport technologies will also grow significantly.

Chinese airports are focused on developing:

- More intelligent air traffic control systems
- System integration in ATC
- More innovative planning and implementation processes



UAS GROUND PRESENCE IN CHINA AND HONG KONG

Supported by data showing rising passenger numbers, CAAC has admitted that it is struggling to catch up with the demand. Airports will have experienced several changes after the full implantation of China aviation's twelfth 5 Year Plan. By 2020, it's expected that more automated services will be in place, as well as different landing systems. China is also investing in automated air traffic control systems in order to better manage ATC and thereby better utilize airspace.

Whith the rapid speed of airport construction and development, the areas of sustainability and safety also need constant attention. It's a massive undertaking. However, China can consider methods that have been successfully employed throughout the world in more developed aviation markets. In the meantime, operators and business jet users must find ways around these issues. Again, innovation and intelligent planning are paramount.

Operational **Challenges**

Private flights into and out of China provide pilots, operators, and ITPs with some serious operational challenges. Some are infrastructural, some cultural, others procedural.

INFRASTRUCTURE

While the sheer volume of aircraft and increasing demand makes airport congestion a major issue, much of it is also caused by outdated design because of rapid traffic growth. For example, certain airport runways are too short for certain aircraft, limiting the options for operators. Due to the mounting pressure on Chinese airports and the need to remain open for traffic, there is significantly less time for the maintenance of runways and taxiways. Operational downtime is often the result of consistent maintenance not being able to take place. Managing crowded taxiways and runways is also a massive challenge. Securing both short-term and overnight parking is extremely difficult in China's main airports. Therefore, expansion of facilities and improved efficiency is paramount.

PROCEDURES

espite the recent simplification of some permit application procedures in China, obtaining permits can be challenging and the requirements extensive. The method of applying for and obtaining permissions for China is lengthy and complex.

CULTURE

hina's governance structure and business culture are unique and distinguished from other areas of the world. Also, language barriers have the potential to impact operational efficiency. rowth is currently being stifled by a lack of airway capacity and China's expanding public ground transport links mean there will soon be even more pressure on airports. More innovative infrastructure will help alleviate congestion. However, innovation in air traffic control is just as powerful when battling congestion of the skies and the runways. The more congested the airport, the more optimal operational efficiency become vital. Shortening turnaround time by utilizing high-tech systems that allow aircraft to move faster after landing and taxiing would increase the airport's efficiency and performance massively. Also, better allocation of the gates could also significantly decrease congestion. With increased passenger throughput, innovation must be used to improve sustainability and guarantee safety.

ost foreign clients operating to China obtain sufficient information before conducting their trip. However, their main challenge is the lack of English-speaking staff, a different style of service in comparison to more established markets, and a lack of facilities dedicated to General Aviation. There are many contentious issues for operators and trip support providers. Many of their challenges are infrastructural, for example, lack of parking availability and general congestion. An example of a regulatory challenge is the slow pace of permit allocation.

he following pain points create major inconveniences to all foreign operators and are also closely connected, one often being a by-product of another.

Pain points for operations in China:

- Airport congestion
- Difficulty acquiring permissions (Trips must be planned well in advance)
- Queues (taxiing)
- Lack of parking (overnight and daytime)

Operational **Solutions**

AVOID CONGESTED AIRPORTS

he Chinese government is making efforts to develop aviation infrastructure, but in the meantime general aviation remains neglected. The emphasis is currently on increasing facilities for commercial aviation. The GA handling market in China remains closed, and there is no competition or dedicated facilities in most of the airports. This affects the quality of service, delays response time and the provision of solutions to match the world standards for business aviation.

Here's how to avoid congested airports:

- Try to plan the trip in advance and ensure that you have a local agent able to assist with any changes in the best possible way
- Demand that your local partner identifies non-peak hours and request these timings on your behalf
- It is preferable to use airports at the quietest times as a lot of congestion is caused by operators not abiding to their allocated slots. Also, as commercial traffic is prioritized, a quieter time is more favorable to GA.
- Consider alternative airports close to your destination
- For example, Tianjin instead of Beijing Capital International Airport- it's a two-hour drive further, however, considering the road congestion in and around BCIA you may well reach the Business District in Beijing quicker from Tianjin then from Beijing Capital Airport. Also, slots are not an issue at Tianjin, nor does commercial traffic affect general aviation there.

ACQUIRE PERMISSIONS EASIER

When operating in China, one entry and exit is considered as one trip, so multiple stops within the country require multiple applications. Foreign operators cannot operate to more than five airports, and as one arrival or one departure is considered one sector, operating more than six sectors is impossible. This restricts the possibility to position an aircraft at other airports if the trip is planned with three stops.

Here's how to obtain overflight and landing permits easier:

- Ensure that you familiarize yourself with the traffic flow processes in China.
- Obtain accurate slots and try to maintain them as any departure might be rejected if you are not compliant with the regulation in place for the particular airport or airspace.
- Every document required for passengers and crew must be provided in the time frame specified.
- Any changes shall be communicated as soon as possible and reconfirmed in the same manner as notified in the applicable regulation.
- Hire a reliable local partner to simplify the process, its familiarity with the entire process and requirements is a must to ensure a smooth operation.
- Never underestimate the language barrier which is still persistent in China. Communication with local staff and post holders, particularly with local airport authorities, cannot take place unless you speak fluent Mandarin.

Operational **Solutions**

BEAT THE QUEUES

ueuing for take-off or parking is very common at all major airports in China. It is completely normal for operators to arrive and remain parked on a taxiway until their allocated parking becomes available. Dedicated parking spaces at Beijing and Shanghai airports are extremely restricted forcing the airport authorities to use commercial stands to accommodate general aviation traffic for a quick turnaround. Take-off queues are also common. As the cause of much congestion, this is also created by some commercial traffic and other traffic not abiding by their slot allocation.

The best way to beat the queues:

- Try to fix your schedule and obtain slots as far in advance as possible
- Maintain your initial schedule as much as possible
- If you're allocated slot and won't use it, ask your operations to release it immediately as unused, and non-cancelled slots contribute to congestion and air traffic and flow

emember, airport authorities and CAAC penalize operators that do not abide by the rules and fail to maintain their slots as allocated.

SECURE SLOTS AND PARKING

ack of parking space - as mentioned before - is because airports in China were traditionally planned, built, and further expanded with an intention to serve commercial airlines. Lack of parking in the busiest airports and requirements to reposition aircraft other nearby airports also creates additional pressure.

vernight parking in Beijing is not allowed for GA operators and most of the traffic is required to position itself at Tianjin. Following on from this, another pair of slots is required for the aircraft to return to Beijing and pick up its passengers. By adding additional arrivals and departures, such requirements increase airport traffic, contribute to longer waiting times, impact crew duty limitations, puts additional cycles on the aircraft, and culminates on additional pressure on with environmental issues.

Possible solution to the parking and slot issues:

- To plan your initial trip to an airport with dedicated facilities or airport which does not require slots
- Once again, planning your trip as far in advance as possible
- Having a local agent with considerable knowledge will help minimize implications and secure slots and parking on your behalf.





HONG KONG

he shortage of runway slots and parking for general aviation purposes are the two more prominent challenges at HKIA. Only 3% of all runway slots are available for general aviation and that includes the use of Hong Kong based operators. Parking remains a big issue, and despite attempts by the Airport Authority to release additional parking spaces in the near future, the issue will remain unresolved if traffic continues to increase as predicted. There is no straightforward, universal solution for these challenges, nor is there a guaranteed back-up plan to ensure that clients' planned schedules will not be affected.

Operating into Hong Kong

- Plan your trip well in advance and try to maintain the schedule and avoid any last minute changes.
- In the case of being required to spend more than four days on the ground, review the feasibility of repositioning the aircraft to nearest the airport (Shenzhen, Macau, or Taiwan).
- Last minute itinerary changes present major problems in Hong Kong as parking is limited. For instance, if you are confirmed on a short turnaround and the time slot co-ordination center does not allocate you a departure because none is available, you won't be able to take off.
- Consider operating to Macau directly and arranging a helicopter transfer to Hong Kong from there. Traveling on the ground from Hong Kong International Airport on Lantau Island to the central business district on Hong Kong Island takes 40 minutes to an hour. On the other hand, a helicopter transfer from Macau requires only 25 minutes and the heliport is conveniently located within a short walking or driving distance to Hong Kong's financial area.

MACAU

Acau is busy with its own traffic and in addition to this it is busy with traffic overflow from Hong Kong. The shortage of parking again appears to be a common problem and this trend has been steadily increasing in recent times. Although some infrastructural investment is already taking place already with additional hangarage and general aviation-dedicated parking spaces, it is unlikely to be sufficient if the traffic continues to increase at the current rate experienced at the airport.

Discussions have been taking place as to whether Zhuhai airport should be opened for general aviation traffic, complete with immigration, customs, etc. Even in this case it will still be necessary to get a visa for China and other formalities will also remain.

Operating to Macau

- The best way to plan operations to Macau is to make sure you have good local coordination.
- Ensure to plan ahead to guarantee your requirements are met and you don't experience any last minute surprises that could affect you in negative way.
- The best mid to long-term parking alternatives for Hong Kong and Macau remain Taipei and the Philippines.

Immigration, Customs, and MRO

CHINESE IMMIGRATION

Passengers and crew should have appropriate visas before they arrive.

Passengers

A Passport and visa are required. Also, it's important to have the original copy of your sponsor letter. A sponsor letter from a local business contact is required for trips to China – no exceptions. There is a specific format for sponsor letters, so it is advised that your international trip planner or local handler coordinate the sponsor letter to ensure it is acceptable to the CAAC.

Crew

- Crew members have to secure valid China visa prior to arrival
- Crew members normally require C-type visas
- Passport and Crew ID are required
- Passport not required for nationals of China
- Crew should register their documents at the immigration



CUSTOMS

Import regulations

- Animals and plants, and products made of animals and plants, microorganisms, biological products, human organism, blood products.
- Articles worth more than RMB2000 that non-resident passengers intend to leave in China.
- Alcohol (containing more than 12% alcohol) of a volume more than 1500 ml; more than 400 cigarettes; more than 100 cigars; more than 500 grams of cut tobacco.
- More than RMB 20,000 in cash, or cash in foreign currency equivalent to more than 5000 US dollars.
- Separately-transported baggage, goods, samples
- and advertisements.
- Other items that need to be declared to the customs.

Articles prohibited from entering into China

- Weapons, simulated weapons, ammunition and explosives.
- Counterfeit currencies and counterfeit securities.
- Prints, roll films, photos, disc, movies, tapes, video tape, computer storage media and other articles that impair the politics, economics, culture and morals of China.
- All varieties of strong poison.
- Fresh fruits, eggplant vegetables, living animals (dogs and cats excluded), products made of animals and plants, pathogenic micro-organisms of animals and plants, insect pest and other harmful organisms, animal carcasses, soil, materials of transgenic organisms, relevant plants and animals in countries and regions where there is an epidemic.
- Unsanitary foods, medicine or other articles.

Export regulations

Articles to be declared when leaving China

- Cultural relics, endangered plants and animals and products of endangered plants and animals, resources of biological species, valuable metals such as gold and silver.
- More than RMB 20,000 in cash, or cash in foreign currency equivalent to more than USD 5,000.
- Goods, samples of goods and advertisements.
- Other declarable articles.

Articles prohibited from leaving China

- All articles that are prohibited from entering China.
- Manuscripts, prints, films, photos, discs, movies, tapes, video tape, computer storage media and other articles that involve state secrets.
- Rare cultural relics and other relics that are prohibited from leaving China.
- Endangered and rare plants and animals (including their specimens) and seeds and related material.
- Less than RMB 20,000 in cash, or cash in foreign currency equivalent to less than USD 5,000 is allowed.



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Tel.: +41 58 158 4111 Fax: +41 58 158 7079 Website: www.jetaviation.com/macau Chinese business aviation and general aviation are still in the early stages of development. The substantial pressure on Chinese airports from commercial aviation is stifling their capabilities in the country. Change will come, but development may struggle to catch up and keep up with the massive growth anticipated. Therefore, smart planning and regional insight remain the most important tools for effective trip planning to China for the foreseeable future.

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