

CHINA CIVIL AVIATION REPORT

www.ChinaCivilAviation.com

民航报导

Volume 7, Issue 8
August 2005

ERJ 145

China and Brazil team up to tackle the regional aviation puzzle. Will it work?

**Judgment Set for Job Hopping Pilots
Guangzhou Baiyun and LAX New Partners
CAAC Rewards West China Flight Development
Guangzhou ATC Center Completes China's New ATC Network
FedEx Makes First Move in Cargo Battle
And More!**



Anytime, Anywhere

Deer Jet



Anytime, Anywhere

Beijing Headquarters:
24-hour Customer Service Center
Tel: +86 10 6506 8300
Fax: +86 10 6506 8221
E-mail: sale1@deerjet.com
[Http://www.deerjet.com](http://www.deerjet.com)

Executive Flight Charter Service Your World According to Your Schedule

China's No. 1 Executive Charter Operator
With nine years of corporate aviation experience and the largest charter fleet in Asia, Deer Jet takes you....
Wherever your business needs you.

Over 140 Civil, Military or C&M Airports across China as well as all commercial airports in Asia, Europe, Americas, and across the world.



Contents

Volume 7, Issue 8

August 2005

Aviation Headlines

2

Airport Spotlight

8

Feature Article

Taming China's "Wild West"

A crash-course in regional aviation development



10

CAAC Corner

12

China Civil Aviation Report (CCAR)

is published monthly by Uniworld LLC in conjunction with China Civil Aviation, a magazine published by the Civil Aviation Administration of China (CAAC).

Publisher
Francis Chao

Productions Director/Staff Writer
George Chao

Advertising/Subscription Director
Andrew Edlefsen

Chief China Correspondent
Lili Wang

China Correspondent
Zhang Yu

China Staff Writer
Jing Fang

Layout and Graphics Design
George Chao
Zhang Lin
Emeng Hu

To contact CCAR or Subscribe, please contact: Info@ChinaCivilAviation.com or visit: www.ChinaCivilAviation.com

US\$95/Year (USA)
US\$120/Year (International)

POSTMASTER: please send address changes and Corrections to:
CCAR, c/o Uniworld LLC
690 Garcia Ave Ste. A/B, Pittsburg, CA 94565, USA

(Applicable to US residents only.)

Aviation Headlines

This month's aviation headlines from the fastest developing aviation nation in the world!

6,500 Pilots Needed in China

A July 3rd report compiled by the Civil Aviation Flight University of China (CAFUC) concludes that China will need 6,500 new pilots in the next six to seven years in order to maintain current sector development. Presently, there are approximately 10,000 total pilots in China's civil aviation sector, with more pilots urgently needed as a result of the rapid aviation development.

In an attempt to help increase the number of available pilots, the CAFUC has signed purchase contracts with several US aircraft manufacturers for new training equipment. The total cost of the deal is reported at RMB 1 billion and consists of 55 new training aircraft including 40 basic trainers, 6 CJ-1 advanced trainers, 6 Seminoles and 3 specialty trainers. According to the CAFUC, the new equipment will allow the training center to double their training capabilities, increasing pilots trained to about 1,200 annually.

Judgment Set for Job Hopping Pilots

In the wake of rampant job hopping and the current need for pilots in China, five state administrations, including the CAAC, have issued formal documents regulating that any airline that recruits pilots will have to pay a transfer fee of RMB .7 million to 2.1 million per pilot. The new regulation also gives the current employer the ultimate say in any pilot transaction, allowing them to effectively reject a pilot's request for a job transfer.

Guangzhou ATC Center Completes China's New ATC Network

The Guangzhou Regional Control Center of CAAC announced on July 10th that the inspection and the acceptance phase of Beijing, Shanghai, and Guangzhou control centers were officially completed.

The three main control centers are cornerstone projects of China civil aviation's "Tenth Five Year Plan", and is expected to modernize and standardize the aviation network. The total investment of the new centers is RMB 2.2 billion and features a cable and satellite communications network connecting the three facilities.

The Beijing regional control center entered the test phase of operation last March while the Shanghai station entered the same test operation phase last

The Guangzhou Regional ATC Center joins Beijing and Shanghai ATC Centers as the most technologically advanced facilities in China



October. The Guangzhou control center formally began construction in March of 2002 and recently completed all necessary inspection and testing. The Guangzhou facility occupies approximately 13.3 hectares and is about 3 kilometers from New Baiyun Airport. The center utilizes the EUROCAT-X automatic system, manufactured by Australia's Thales Company.

Lu Xiaoping, the Vice Director of the Air Traffic Management Bureau (ATMB) of CAAC, said that according to the timeline, Beijing, Shanghai and Guangzhou stations will officially be put into operation by the end of the year.

In-Flight Police Finish Training

China's inaugural class of civil aviation in-flight policemen recently completed their training and have been appointed and recognized by the departments of Public Security and Civil Aviation to become China's premier civil aviation police officers. The class consists of 500 total members, 400 of which were previously employed as in-flight security for China Southern Airlines. In-flight security (not recruited as policemen) will continue to be utilized and the establishment of the Air Police can be seen as added security to the sector.

Upon commencement, the in-flight police will have the same jurisdiction as China's police officers but will be plain clothed and carry non-explosive weapons suitable for use on flights.

China's First Certified Blimp Manufacturer

Beijing's Huajiao General Aviation Company Ltd recently became the first certified blimp manufacturer in Northern China. The company obtained the "Operations Certificate for Commercial Non-Transportation Air Operators" after a rigorous three month certification process.

It was reported that the North China Regional Administration of the CAAC conducted an intensive evaluation of the company before reaching the conclusion that Huajiao General Aviation Company Ltd successfully met the requirements of CCAR-91 General Operation and Flight Rules. This is welcomed news for Huajiao General Aviation because according

to Chinese regulations, general aviation firms must not only have a valid business license, but also hold a valid Operations and Certificate for Commercial Non-Transportation Air Operators before it is officially recognized by the CAAC.

Huajiao General Aviation is the original designer and manufacturer of blimps in Beijing. The firm is optimistic due to the versatile nature of such vessels. Functions range from transportation, sporting event coverage, aerial photography, air traffic control, and much more.

FedEx Makes First Move in Cargo Battle



Cargo giant FedEx reveal plans of a new Asia Pacific hub at Guangzhou Baiyun

On July 13th, FedEx officially announced plans to build a new Asia Pacific hub at the Guangzhou Baiyun International Airport in Southern China to better serve its global customers doing business in and with the fast-growing China and Asia Pacific markets.

The new FedEx Asia Pacific hub will commence operations in December 2008 at which time the existing hub in Subic Bay, Philippines, will close.

"More than two decades ago, we envisioned China as a nexus of global supply and demand and as a result became the first express carrier to enter the market," said Frederick W. Smith, chairman and chief executive officer, FedEx Corporation. "Today, with the announcement of our planned Guangzhou hub - the largest in Asia Pacific - we further invest in our leadership position by creating a new gateway that expands our customers' access to the global marketplace."



sprung

innovation versatility reliability



SPRUNG INSTANT STRUCTURES

Sprung Instant Structures, Ltd

1001 10th Ave, SW

Calgary, Alberta

T2R-0B7

E-mail: info@sprung.com

1-800-528-9899 (Canada callers only)

1-403-245-3371 (from anywhere in the world)

Fax 1-403-229-1980

The Guangzhou facility - representing a \$150 million dollar capital investment by FedEx - will have a total floor space of 82,000 square meters located on 63 hectares (155 acres). The hub will provide employment for 1,200 individuals initially, and will be capable of sorting up to 24,000 packages per hour, double the capacity of the current facility in Subic Bay. This hub is expected to assume and expand the current activities of the existing hub in the Philippines, beginning December 2008.

FedEx based its plan to develop the new hub on several factors including an exhaustive series of feasibility studies which forecasted manufacturing and trading trends, both within Asia and internationally, for the next 30 years.

“We believe this hub will stimulate business both in Southern China and globally,” said David L. Cunningham Jr., senior vice president, FedEx Express Asia Pacific. “Locally, a superior time-definite express service will attract high-value industries that require the speed, reliability and global access that FedEx provides.”

A joint study by China’s Development Research Commission and Campbell-Hill Aviation Group of the United States estimated that the direct output impact of a FedEx hub on China’s economy is \$11 billion in 2010, increasing to \$63 billion by 2020 with the majority resulting from industrial expansion.

According to recent forecasts (1), transportation within Asia remains the world’s fastest growing regional air freight market and is expected to grow each year at 8.5 percent until 2023. China will remain a key factor in that growth due in large part to increasing traffic in semi-finished manufactured goods and steadily rising consumption within China. Air freight from China to the U.S. is expected to grow at an average of 9.6 percent a year over the next 20 years, while traffic to Europe is predicted to grow almost as quickly at 9.3 percent over the same period. The planned new hub will also allow FedEx to significantly improve service levels for locations in China.

FedEx will continue to maintain its presence in the Philippines, where Manila and Cebu will remain integral parts of the FedEx AsiaOne(R) network. The company is currently in the process of developing a regional center and expanding an operations gateway in Manila. The company will be providing back-office

functions as part of a regional strategy to provide continuous quality improvement by centralizing certain services.

UPS Strengthens Its China Network

In an effort to improve its China network, UPS recently signed a Memorandum of Understanding with the Shanghai Airport Authority, which will lead to the establishment of a new UPS International Hub at Pudong International Airport in 2007.

UPS also announced a new direct route between Shanghai and Japan, which will take effect July 10th. The new service route will fly Shanghai-Osaka-Anchorage five times a week and Shanghai-Tokyo six times a week. UPS is utilizing the Japan flight service to consolidate their network from Shanghai prior to the completion of their new 2007 hub. Once operational, the new hub will handle at least 72 cargo flights per week.

UPS will undergo a trial period over the next several months in order to select customers on a contractual basis. The service will eventually be extended to China’s larger cities.

UPS Asia-Pacific President, Mr. Ken Torok, said that since February this year, UPS has begun to invest heavily in the China market. By the end of the year, UPS is expected to employ more than 3,500 employees in China, operating out of 75 facilities with 1,400 vehicles.

Mr. Wu Nianzu, the Chairman of the Board of Directors and President of Shanghai Airport Authority, said: “We are committed to working closely with UPS to develop a successful international hub. With the Pudong Airport Being based in Shanghai, an important transportation point in China, and the commitment of the two parties involved, we look forward to developing a thriving operation.”

The new Shanghai hub’s cargo handling capacity is expected to exceed 200,000 tons and will operate as an express handling unit, sorting facilities, cargo handling, build-up areas and ramp handling operations. Besides direct flights to Japan, the new facility will also serve the US, Korea as well as the UPS Intra-Asia hub in Clark, Philippines.

UPS Supply Chain Solutions also recently announced plans to open an additional twenty facilities in some of China’s major cities over the next

two years. This will expand the number of logistics centers operated in China by UPS Supply Chain Solutions to more than forty.

This news follows hot on the heels of rival FedEx's announcement regarding expansion of its hub operations in Asia.

Source: www.eyeontransportation.com

Shandong Airlines Pass IOSA

Shandong Airlines recently passed the IATA International Operational Safety Audit (IOSA), certifying that the airline's safety operation management standards meets or exceeds the international standard.

The IOSA standards cover eight different aspects of operation, including: Corporate Organization and Management, Flight Operations, Flight Ground Handling and more. The Operational Safety Audit results are recognized by the FAA, European Aviation Safety Agency (EASA), and all other member airlines of IATA. Presently, there are only eleven airlines worldwide with the IOSA certification.

Since its inception in 1994, Shandong Airlines have maintained a high level of security and safety, as evidence by their ten years of accident free operations. An airline insider for Shandong Airlines said that by adopting the international unified operation security standards, it would make Shandong Airlines a good candidate for code sharing with international airlines, therefore increasing international business opportunities.

Shenzhen Airlines Receive IOSA Certificate

On July 10th, Mr. Zhang Baojian, Regional Vice President for North Asia IATA, awarded the Acting General Manger of Shenzhen Airlines, Mr. Liu Jianping, the IOSA operator certificate, indicating the successful certification of the International Operational Safety Audit. Shenzhen Airlines became only the fourth domestic airline to acquire the certificate, following Shanghai, China Eastern and Xiamen Airlines.

The 2005 revised IOSA standard adheres to current audit standards of ICAO, EASA, US DoD and



Shenzhen Airlines was one of the two Chinese carriers to be IOSA certified last month

the FAA and is designed to provide a standardized audit certification for international operators. The goal of the IOSA certification is to increase the level of security operation among airlines, reduce repeating certifications between airlines and agencies, and to promote convenient code-sharing programs between airlines.

Countdown to Radar Control

An official date has been issued for the implementation of radar control command in the Nanchang region. Beginning at midnight, August 4th, the 160 thousand square kilometer Nanchang regional control area will officially be under radar guidance. There are currently 26 air routes in the area and it is the hub airspace connecting East, South and Southwest China. It is also an important air bridge in connecting East and Southeast Asia.

After the introduction of radar control, horizontal flight separation in any direction can be reduced from 75 kilometers to 20 kilometers. Officials expect the new monitoring system to increase airspace capacity and reduce delay.

Boeing and China Cargo Airlines Finalize 747-400ER Freighter Agreement

On July 14, 2005, Boeing Company and China Cargo Airlines confirmed they have finalized an agreement for the acquisition of two Boeing 747-400ER Freighters.

The order is valued at approximately \$430 million at list prices. China Cargo Airlines, a subsidiary of Shanghai-based China Eastern Airlines, will receive its new 747-400ER Freighters in July 2006 and August 2007. The two freighters will be used to further expand the operating capacity of China Cargo Airline's routes.

The two 747-400ERFs will be the first in China Cargo's fleet, which comprises six Boeing MD-11Fs. In recent years it has wet-leased 747 freighters. China Cargo is 70 percent owned by China Eastern and 30 percent owned by China Ocean Shipping Group Company.

Tourism Leading the Way for Xinjiang Aviation Development

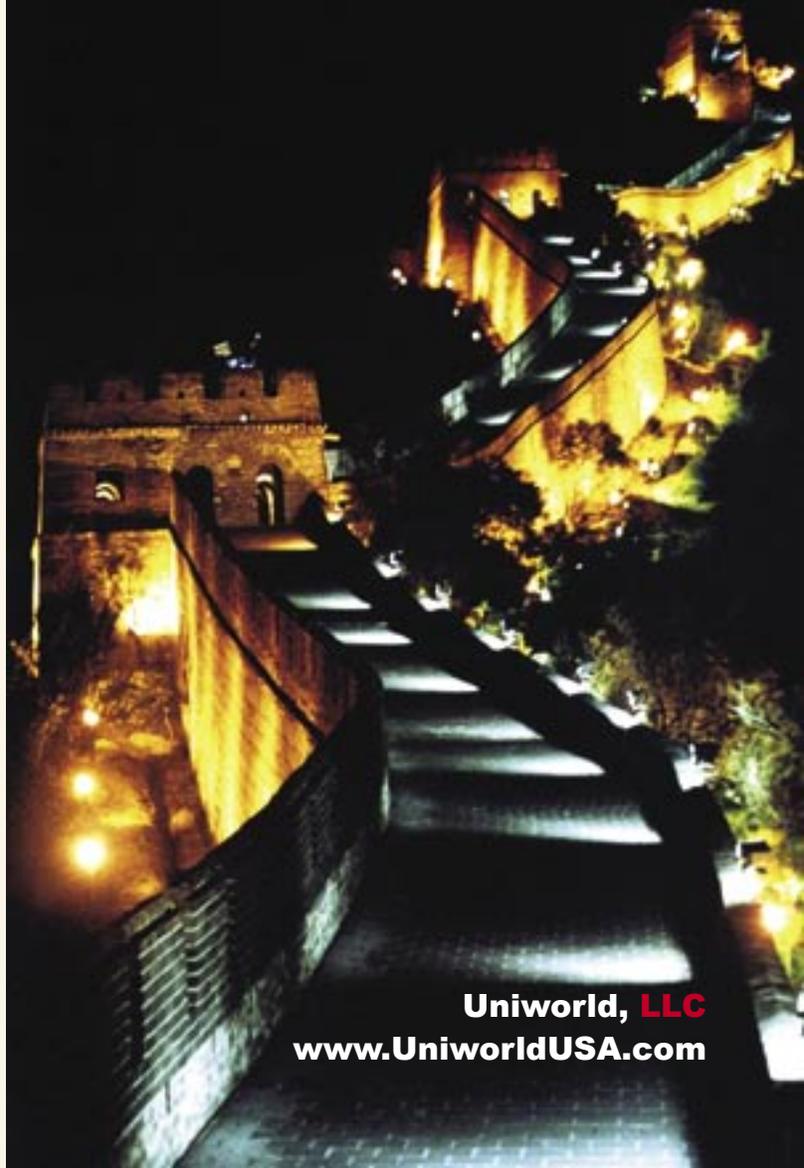
Recent years have witnessed a surge in the development of regional aviation structures surrounding the Xinjiang Province. Air travel is quickly becoming the preferred means of transportation for those who wish to experience the scenic surroundings of the Xinjiang Uygur Autonomous Region. At the present moment, there is a network of 12 airports with one all-weather stand by facility serving Xinjiang civil aviation. The Urumqi Airport serves as the hub of the airport network and provides access with 65 domestic and foreign cities, as well as 12 destinations in the Xinjiang Province. In 2004, the Xinjiang Province's aviation network served over 5 million passengers and expects to break that mark in 2005 with a projected 6.8 million in passenger volume.

The spectacular Xinjiang scenery is the driving force behind the area's accelerated aviation development



Aviation Marketing Services

**Helping businesses identify,
qualify, facilitate and develop
business opportunities in China for
over 16 years**



Uniworld, LLC
www.UniworldUSA.com

Airport Spotlight



Guangzhou Baiyun and LAX New Partners

The Guangdong Airport Management Corporation reported on June 27th that Guangzhou Baiyun International Airport recently finalized a “sister-airport” agreement with Los Angeles International Airport (LAX). The new partnership is the second strategic partnership introduced by Baiyun International in recent years.

Mr. Xu Guangyu, Company Secretary for Baiyun Airport, elaborated on the implications of the new agreement, saying that from here forth, LAX and Baiyun International will cooperate and facilitate exchanges of information, projects, and notes. Both airports are working towards building an information exchange network to mutually analyze and discuss rapidly evolving operational methods in airport management.

Mr. Xu also revealed that Baiyun Airport’s current negotiations with mail/cargo giant, FedEx, was in the final stages. It is expected that the Asia Pacific transfer center for FedEx will be relocated to Baiyun Airport by the second half of 2007, and as a result, will provide a solid foundation for further development of the airport.

Guangzhou Baiyun and LAX vow to work together in the future



Construction of First Private Airport in China Underway

The first privately funded civil airport in China broke ground on July 18th. After five years of planning, the Erdos Airport of Inner Mongolia finally began construction.

Construction and operation of Erdos Airport project was awarded to Ximeng Group Company of Inner Mongolia in



May. The Ximeng Group then signed a joint venture agreement with the Shendong Tianlong Company of Shenhua Group. The total investment of the airport is over RMB 200 million and 51% of the project have been designated to the Ximeng Group Company.

The airport structure will feature a runway of 2,400 meters and a 3,500 to 5,000 square meter terminal building. The airport will be able to accommodate aircraft such as Boeing’s 737-800s. The project is expected to conclude in August 2006.

Ximeng Group is a private enterprise which started as a coal productions company. In June 2003, the Ximeng Group established Erdos General Aviation Company, providing aerial spraying, locust extermination, forest fire prevention, and other aerial services. Ximeng Group has entered a loss compensation agreement with the City of Erdos, noting that if airport profits dip into negatives, Erdos City would provide Ximeng Group with a 25 square kilometer coalfield.

Kanas Regional Airport Confirmed

On July 2nd, reports confirmed the construction of a new civil airport in Kanas, a famous tourist area in the Xinjiang Province. The projected airport will enable tourists to fly directly into the scenic area without having to detour at nearby Urumqi Airport.

The new airport project was initiated after it was approved by the State Council and Central Military Commission. The new facility will be located in Hailiutan, in the Xinjiang Province, 74 kilometers away from Buerjin County, Altay Prefecture. The total cost of the project is estimated at RMB 185 million. One third of the total investment will be raised by the National Development and Reform Commission and the CAAC as well as the Xinjiang Uygur Autonomous Region.

The new Hailiutan airport will feature a 2,200 meter long runway, 14,000 square meter apron, and will be designed to handle a passenger volume of 220,000 passengers annually by 2013. A 1,700 square meter terminal building and a 600 square meter air traffic management building will be the feature structures of the new facility.

Construction of Kanas Regional Airport will begin later this year. Upon completion the facility will be managed by the local government, with industry management provided by the CAAC.

Encouraging Statistics for Harbin Taiping International Airport

The Harbin Civil Aviation Ticket Office reported on July 4th, that the first half year of 2005 saw significant increases in take-offs and landings as well as passenger throughput for Harbin Taiping International Airport. Statistics show an increase of 13% on

Statistics show a 17% increase in passenger volume at Harbin Taiping International Airport over 2004



the number of flights entering and leaving Taiping International, and a 17% increase in passengers served over the same time period in 2004.

The Harbin Taiping International Airport is situated in the Heilongjiang Province, which is adjacent to Russia. The area is known for having geographical advantages in China-Russia trade and increasing frontier tourism. Currently, Harbin Airport is actively exploring new air markets and flight routes such as Harbin-Hohhot-Chengdu, Harbin-Qinhuangdao-Shijiazhuang and Harbin-Yantai-Xi'an. Harbin Taiping International Airport expects these new routes to enhance their network and greatly increase Harbin's ability to connect with larger cities in China.

Shandong Airlines Receive Delivery of New Boeing Aircraft

On June 22nd, at 4:30PM, the first of ten new Boeing 737-800s acquired by Shandong Airlines was delivered to Ji'nan Yaoqiang International Airport from Seattle, Washington. The new Boeing airliner was officially put into service on June 25th, operating Shandong Airlines' Ji'nan-Beijing and Jinan-Hangzhou-Guilin routes. The 737-800 can accommodate 168 passengers and cruise at an altitude of 12,400 meters.

Shandong Airlines announced that it would successively introduce 10 Boeing 737 series airliners, increasing their transport capacity by 48% and total seating by 70%. Shandong Airlines is predicting a net 1 million passenger volume increase in 2005 due to the introduction of the new equipment.

Boeing delivered the 1st of 10 new 737-800s to Shandong Airlines on June 22nd



Taming China's “Wild West”

Written By: George Chao

*Why regional aviation is the key to future economic prosperity;
and how come it has been ignored for so long.
A crash-course in Chinese regional aviation development:
past, present and future.*

Since the introduction of the market system a few decades ago, China has been relentlessly reinventing itself. Every passing year brings investment and development unparalleled to any other nation in the world. Goods and infrastructure are procured at unprecedented rates, and spending has rapidly ascended as the national pastime.

This trend holds especially true in the transportation sector. New railways, subways, highways and airways connect burgeoning cities with rural towns; providing opportunities never before afforded to the citizens of China. However, China has, and remains a country with a skewed distribution of income, and no where is this more evident than the standard of living between those residing in the rural West, and the prosperous East.

Transportation is the lifeline of development; and one glance at the air routes indicate precisely where the arteries of Chinese development lie. China's three main hubs are located in Beijing, Shanghai and Guangzhou, all

thriving metropolitan cities on China's east coast. The uneven development throughout China has created an odd dynamic in the Chinese economy; namely, prosperous cities grow at record rates, while development in



smaller towns remains stagnant.

Aviation in China is directly in sync with the progression of the economy. Large cities attract all airlines while rural aviation development remains close to non-existent. Recently, the CAAC has acknowledged the need to balance the development of the sector, and with good reason. Although anticipated by most as the fastest growing aviation country in the next 15 years; China

will surely be unable to sustain the title if aviation development is allowed to remain askew. Faced with the current situation, the CAAC recently disclosed their intention to develop a new aviation sector, regional aviation.

Now it may be strange to some how a country like China can have maintained for so long without a regional aviation network. But, in order to comprehend the circumstances behind China's regional aviation development, or lack thereof; one must first understand the history of aviation development in China. It is true that history dictates the present, and ultimately the future. Therefore, by understanding why regional aviation never took off in China, it is clear how utterly critical the proper development China's regional aviation actually is.

The history of China's regional aviation

The current state of regional aviation in China can be traced back to the “planned economy” era of Chinese history. In the planned economy era (previous to 1978), China was a country which preferred to develop within its own borders. This governing style effectively isolated China from the international market, resulting in differing rates of development than compared with the rest of the world. One of the sectors which fell behind international development standards was the transportation

sector.

Then, as China entered the late 70's, the economic structure was effectively changed to the current, "market system"; in which interactions with the international market was not only possible, but a necessity. At this time, the aviation infrastructure in China remained bare, and air routes were completely governed by the military.

The official "go-ahead" to begin developing aviation in China was when the CAAC was granted complete jurisdiction over three air routes (Beijing, Guangzhou, Shanghai) by the military. This in effect opened the gates for aviation equipment procurement in China. As a result of the new regulation, the three largest aviation carriers in China were born: Air China, China Eastern and China Southern. The idea of creating a world-class aviation network, and fueled by the waves of investments in the name of national development, China naturally purchased the largest, therefore best aircraft on the market.

Now, allow us to fast forward to the mid-late 90's. Chinese airspace remains regulated by the military, yet the air routes of Beijing-Shanghai-Guangzhou thrive. The equipment of choice for China's air carriers remain the jumbo jet.

Moving along, the 21st century brought forth significant changes to the aviation landscape, most noticeably, the CAAC obtains 26 additional air routes in July 2000, allowing carriers a chance to

expand their network to smaller cities and towns. This marks the first time in Chinese aviation history in which the opportunity for regional aviation surfaces. However, the addition of the new routes witnessed many carriers attempt to expand their service, only to witness profits dip helplessly into the red.

Capacity versus Frequency

Many may wonder how a blossoming aviation sector loses profits in the face of expanding routes and new opportunities; the answer was a simple case of capacity versus frequency. Air carriers such as Sichuan Airlines, attempted to operate remote routes with the same large passenger jets they were using for the main hub routes. The decreased capacity also decreased the frequency of the flights as well. Airlines often found themselves operating one flight per day at half, or even a third of the seating capacity. This practice effectively negated the beneficial aspects provided by aviation. According to statistics from the aircraft manufacturer Embraer, the average Total Operational Cost (TOC) of operating a 150-seater aircraft on a 1,000 km

route in China is estimated at approximately RMB 57,500; while operating costs of a 50-seater regional aircraft in the same sector was found to be 53% more cost effective, averaging only RMB 26,781. Embraer statistics also confirmed that the yield (RMB/KM) of a passenger flight decreases dramatically if equipment utilized does not meet the passenger characteristics of the route. Simply put, oversized aircraft have to slash fares in order to fill empty seats, and when compounded with higher maintenance and operational costs, it is nearly impossible to turn a profit. Passengers often found it cheaper (and often faster) to simply take a bus or travel by rail to their desired destination rather than utilize the still foreign concept of air travel.

China's aviation players quickly realized that their current aviation operation model simply did not work. The main advantage of air travel was its flexibility, but



Embraer-China Managing Director, Mr. Guan Dong Yuan and Mr. Francis Chao, Publisher of CCAR.

CAAC CORNER

*Newest developments from the
Civil Aviation Administration of
China (CAAC)*



CAAC Rewards West China Flight Development

An announcement from the CAAC in early July revealed China's plans to promote the establishment of new flight routes throughout China. The revised policy now features a relaxed application process as well as increased protection for airlines willing to undertake the task of developing new flight routes. The new policy expedites flight route applications to a simple registration process with the proper regional civil aviation administration and has been presented to various aviation industry insiders for suggestions.

The other aspect of the revised Permission Management Regulation for Operation of China Civil Aviation Domestic Flights regulation include offering a two year protection window for airlines willing to take the risk of cultivating new air routes in China. This in effect will allow the airline time to recoup the investments made in developing the new route by granting sole operation of the route for two years.

The new version of the policy differs from the 1996 revision of the Management Regulation for Operation of Domestic Air Routes and Flights policy in that from now on, the CAAC will be in charge of supervising and managing flight operation permission between regional administration areas. The CAAC and regional administrations will respectively establish an examination and approval system for domestic flight operations.

The CAAC also stated that it will continue actively

promoting regional aviation development in West China by granting new air operators priority in establishing Central and East China air routes if they first invest and develop routes in West China. Conversely, the CAAC is increasing the incentive for established air carriers to venture west by granting extensions and connecting flights to populated East China destinations directly from the new West China flight routes.

Not everyone is buying into the revised policy however, one China Southern Airlines researcher expressed that the new regulations are not incentive enough for established airlines to invest in developing new western routes. He premised his argument by saying that the two year protection policy is not enough to ensure proper return on investment. Once the air route has been developed, he argued, other carriers will enter and begin dividing up the profit, leaving the original carrier at an ultimate disadvantage.

Regardless, a member of the Policy and Rules Department announced that the CAAC will continue to encourage and support regional aviation transportation development in Western China through supplementary policies.

CAAC's Top Officials Meet with China's Largest Airports

The CEO's of the six largest airports in China came together in Beijing on June 24th, to discuss

development strategies for China's most utilized airport facilities. In attendance were representatives from Beijing Capital Airport, Shanghai Hongqiao Airport, Shanghai Pudong Airport, Guangzhou Baiyun Airport, Shenzhen Airport and Chengdu Shuangliu Airport. All six of the attending facilities exceeded 10 million in passenger volume last year, and together, comprised 48% of China's total domestic passenger volume, and 68% of China's cargo volume. These six airports possess a very large influence in the direction of domestic airport development in China, and as a result, Mr. Yang Yuanyuan, Minister of the CAAC, and Mr. Yang Guoqing, Vice Minister of the CAAC, were both present at the meeting. Also speaking at the meeting was Dr. David Pang, the Chief Executive Officer of the Airport Authority of Hong Kong (HKIA is currently the number 1 ranked airport in the world).

Minister Yang Yuanyuan expressed in his presentation that a solid developing strategy was crucial for proper development of China's civil aviation sector. He also added that with a successful developing strategy in hand, great airports can grow easily and avoid wasting of resources such as repetitive construction. The CAAC is very concerned about the development of China's highly utilized airports, and Minister Yang Yuanyuan encouraged more cooperation amongst China's main airports through mutual communication and discussions.

The CAAC Vice Minister, Mr. Yang Guoqing, then followed by emphasizing the importance of proper design, construction and operational management through four poignant key issues.

First, the Vice Minister emphasized the importance of a solid layout for each airport, noting that development should consist of, "One layout and implementing through states". He also added that projects should focus on proper long term development and focus on a well-constructed layout plan.

Second, the pace of airport construction in China should be increased. According to statistics, overall airport construction is progressing slower than civil aviation development as a whole. In order to avoid any hindrance to aviation development in China, airport construction should be expedited.

Next, the Vice Minister advocated the need to

improve airport management and service to a level which is on par with the international standard. The lack of successful operational models in Chinese airport management has been an issue which has been faced by China civil aviation as a whole. Mr. Yang went on to say that airport management should dare to innovate and reinforce proper managerial practices; as well as establishing a precise and regular operating system for operators.

Finally, Mr. Yang asserted that cooperation with the international aviation community should also be strengthened. Developing ties to international aviation will not only benefit the development of China's airports, but also the industry as a whole.

The Vice Minister concluded his presentation by elaborating on the current progress of the CAAC's "Civil Aviation Eleventh Five Year Development Plan" and the "2020 Future Plan", noting the integral role that airport development will play.

Mutual Recognition Issues Tackled in Hong Kong

From June 29th-30th, the Civil Aviation Administration of China (CAAC), Hong Kong Civil Aviation Department (CAD) and Macao Civil Aviation Authority (AACM) held the "Third Working Conference" in Hong Kong. The topic of discussion was once again solving mutual recognition issues of maintenance licenses.

Throughout the two day conference, all three parties reported their respective progress and discussed the next step of the mutual recognition process. After the meetings, it was concluded that a JMM license examination module would be established amongst the three parties according to the requirements determined at the conference. The focus of the new examination module will be civil aviation regulations and maintenance publications. At the same time, aircraft certifications will also be standardized and revised to include engine certification as well. A JMM website will soon be created with information of personnel licenses which are mutually acknowledged by all parties.

A contract to resolve the mutual recognition issue is expected to be signed by the parties in mid-2006.



without the proper equipment, the aviation sector had nothing to offer Chinese citizens.

Embraer, and the birth of the ERJ

The early 21st century brought with it a concept never before realized in Chinese aviation. Not only did the large air routes need to be developed, but it was apparent that hundreds of regional jets and smaller cabined aircraft were also critical in ensuring proper progression of the sector. With that in mind, the Chinese proceeded to do what they do best, acquire new equipment.

Mr. Guan Dong Yuan, the Managing Director of Embraer in China, was present during the height of regional jet acquisition in China, and recalls the resonating effects the new air routes had on Chinese aviation. Orders for Embraer's regional jets suddenly poured in, and it was apparent that everyone wanted a piece of the newly established regional market. Soon, orders for Embraer jets began exceeding the maximum production rate, with more buyers

inquiring every day. But inevitably, a market with such demand could not remain unchecked for long.

The demand driven regional aviation market was essentially extinguished in 2001, when the Chinese government issued a 17% Value-Added Tax (VAT) on top of the 6% import tariff to any regional aircraft manufactured internationally. The result: the complete collapse of regional aviation acquisition in China. Aircraft sat completed on the tarmac, unable to be delivered. Companies like Embraer, who witnessed record sales a month before stood helpless as orders plummeted to nearly nothing.

The characteristics of the market remained unchanged, demand for regional jets remained intense; however, the regulation changes in aircraft importing transformed the face of regional aviation in China.

It was at this time, that the Chinese government, along with the CAAC and Aviation Industries of China (AVIC I and II), decided the regional aviation sector should develop within China's own boundaries. As a result of the new regulations and a concentrated effort to develop regional aviation domestically, the Chinese-built ERJ 145 regional jet was born. The ERJ series regional jets had been exclusively produced by Embraer since 1996, however, a joint partnership in January of 2003 between Harbin Aircraft

(a member unit of AVIC II) and Embraer, marked the first ever domestically produced regional jet project in Chinese history.

Backed by an initial investment of USD 40 million, the joint venture between Harbin and Embraer had one very distinct characteristic. Embraer was allowed 51% control of the project, which was an unprecedented first in aviation collaborations in China. The creation of a domestic regional jet manufacturer was in essence the foundation to what the Chinese government hopes will be a prosperous domestic regional aviation infrastructure. The objective was laid out in three distinct phase and continues to progress currently. The first phase was specified as R&D and produce (assemble) the RJ145 in China. Phase two of the collaboration is to subcontract certain components in China with an emphasis on quality as well as cost. Finally, the final stage is to develop products based on Embraer's current product line that specializes in addressing the needs of China's aviation market.

Currently, the focus of Chinese regional aviation development remains domestic aircraft manufacturing. While it is a fact that equipment acquisition is a large part of healthy sector development, there are other issues which are just as important as picking the correct landing gear or avionics.

Hurdles in plain view

One aspect that cannot be overlooked when discussing this multi-layer subject is the current regulatory restraints

confining the development of the regional aviation sector in China. Aside from the sky-high VAT and duty fees established by the central government, airport fees imposed by the CAAC have inadvertently stifled any possible growth of a regional aviation structure. On average, the applicable fees charged to a 50-seat regional aircraft landing at a Category III regional aviation facility averages RMB 3,052, while landing and terminal fees at crowded Category I facilities only averages RMB 2,766. One glance at this staggering fact shows why (and understandably so) regional aviation progress has all but completely halted in China. The majority of aviation facilities throughout China are reporting profit losses; and with major airlines shying away from new air route development, relief has yet to reach the horizon.

The already delicate regional aviation situation in China is further compounded when analyzed alongside current issues plaguing China's aviation sector today. A prime example would be the present pilot shortage phenomenon in the Chinese aviation sector. China's pilot demand in 2005 is approximately 1,200 pilots; however, the expected supply from the three main flight training operations (CAFU, Beihang, and the Air Force) is only 530 pilots. The effects caused by the lack of new pilots entering the sector will inevitably spill over into regional aviation, causing added difficulties in development progress in the sector.

What regional aviation means to China

China's expected dominance of the aviation industry in the next decade and a half has been analyzed and dissected with statistics and expert opinions. But the fact at hand reveals that the trend of disproportional development in China's commercial aviation sector will inevitably become an issue in the near future. Commercial airlines continue to battle over coveted air routes and gate positions at the six most utilized airports in the prosperous East, while regional airports and new air route development continues to be neglected. Report from the 2004 China Airport Traffic Statistic show that 20 of China's most utilized airports represent 80% of the entire sector traffic; while the 50 least utilized facilities report less than 200 passengers a day. Continued development at current trends will not only yield less productivity in the immediate future, but it will also most likely handicap proper long term development. As saturation in congested airports reach capacity, there is only one avenue Chinese aviation can turn to in order to ensure continuous development rates that are up to par with international expectations, and that is regional aviation.

For some Chinese operators, regional aviation is still considered the less glamorous cousin of commercial aviation, however, the fact remains that the establishment of air routes to areas never before privileged to aviation access is

integral to the proper development of China as a whole. Without a thorough transportation network, West China will never have the chance to catch up with the East. Much like the development of the American "Wild West"; consistent development of the Western US began with the establishment of the transcontinental railroad, however, the introduction of aviation and improved mobility brought forth unparalleled rates of development and transformed the new frontier into a thriving coast lined with prosperous cities and world renowned metropolises.

The regional aviation topic is clearly very complex; where socioeconomic status, national development, as well as aviation prosperity are all meticulously woven into this single issue. How the saga will play out is still unknown, but the critical first step of bringing this matter to the attention of national policy makers is well underway.

De-Regulating Development

Currently, regional aircraft comprise only 8.5% of China's national fleet (compared to a 35% average worldwide), with an estimated 635 aircraft needed from 2004 to 2023 (compared to 4,740 estimated in the US), it is safe to say that regional aviation development in China is still inchoate. Yet, with all the subsequent issues dependent on the successful development of regional aviation in China, this topic has simply become too large to ignore.

In June, Mr. Yang Yuanyuan, the Minister of the CAAC, held

a meeting to address ways of solidifying development in the regional aviation sector, at the same time implementing the “2004 – 2010 compendium for China tourism development plan”, which aims at regional aviation growth in the short term. Other such measures have recently been implemented by the CAAC in responses to the issues discussed earlier. For example, the CAAC has begun an airport fee reassessment policy to address the disparity between hub and regional airport landing fees, as well as initiating a rewards policy in attempts to entice airlines to actively develop West China air routes in exchange for increased consideration for the coveted East China flight clearances. Such measures are indeed giant steps in realizing the ultimate regional aviation goal; however, there remain countless issues to be dealt

with. Issues such as introduction of aviation to rural cities and citizens, infrastructure development, equipment acquisition, and proper operational models all still remain to be addressed.

Not only does regional aviation development play an integral part of aviation development in China, it may also be the deciding factor in the development rate of countless towns and villages across the country. The CAAC has taken notice and made their intentions known. But just what effect this issue will have on China still remains to be seen. The regional aviation issue took 18 years to come to a crossroad, now the next 18 will see if it makes or breaks the projected aviation prosperity.



China is ultimately a country of skewed income and resources. The wealthy few live lavish lifestyles while the majority struggle to make ends meet. This regional aviation issue has transcended the aviation category and has manifested itself as a socioeconomic issue.

A special thanks to Mr. Guan Dong Yuan at Embraer for providing the statistics and history which ultimately made this article possible.



**Aircraft Charter
Aircraft Management
FBO**



UPGRADE YOUR AIRCRAFT'S PFD, MFD, FMS AND ROI SIMULTANEOUSLY.



Collins Pro Line 21 provides next-generation technology that makes your aircraft more capable in the air and more valuable on the market. Advanced capabilities include electronic charting, graphical weather, enhanced mapping and more. All designed to deliver flexible growth for the future. So upgrade now and cash in later. 319.295.4085 www.rockwellcollins.com/roi1



Chart © Jeppesen Sanderson, Inc. 1999, 2002.
Chart above is for illustration purposes and not to be used for navigation.

**Rockwell
Collins**



Aviation planning at the leading edge . . .

领先前沿的航空规划 . . .

. . . around the clock,

. . . 与时共具,

. . . around the globe.

. . . 遍及乾坤.

Proudly supporting world-class airport development in China.

荣幸地为向世界一流水平迈进的中国机场服务.

- Airport Master Planning
- Terminal Planning and Design
- Cargo/Logistic Park Planning
- Airside/Airspace Simulation
- Operations Planning
- Transportation Planning
- 机场总体规划
- 航站楼规划与设计
- 货运/物流园规划
- 空侧/空域仿真模拟
- 运营规划
- 交通规划

China Locations: Shanghai • Hong Kong

中国地址: 上海 • 香港

www.landrum-brown.com
+852-2136-8155



Landrum & Brown
Worldwide Services