China Civil Aviation Report
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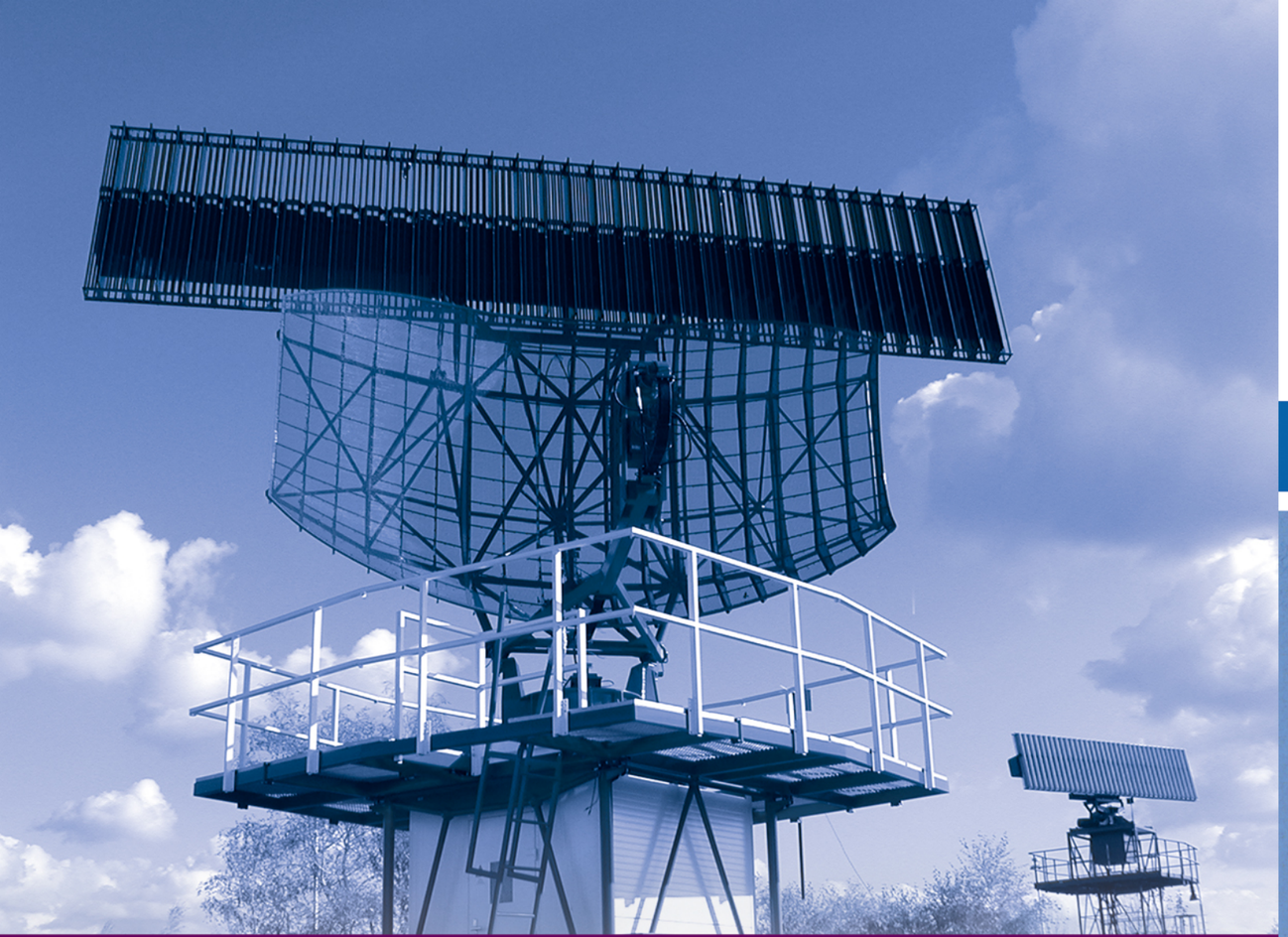

中国民航科普基金会
China Civil Aviation Science Popularization Foundation

中国民航科普基金会简介

中国民航科普基金会于2006年3月6日经中华人民共和国民政部批准成立的全国性公募基金会，2008年4月民政部授予“AAA”级基金会。中国民航科普基金会主要任务是，动员国内外社会团体和有关组织以及个人，自愿捐赠资金，支持民航科技研究和民航职业教育，开展民航科普宣传教育，组织民航学术、史志、文化研究与交流，扶持民航博物馆建设，推动中国通用航空事业发展。

主要公益项目有：一是支持中国民航博物馆建设；二是组织中国民航科普教育基地建设；三是开展青少年航空科普教育活动；四是扶持中国通用航空产业建设。

中国民航科普基金会理事长鲍培德，副理事长兼秘书长茅顺平。

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From the Publisher's Desk | 编者的话

Self-discipline to gain Aviation Safety
飞行安全与自律

The annual China General Aviation Forum will be held in Beijing once again this June. Many local and international GA suppliers as well as operators and government regulators are going to gather once again under one roof to discuss the development and future of China's General Aviation.

This year's meeting is more meaningful than ever; driven by the Chinese government's various policies and plans, the take off of China's GA is foreseeable. Great amounts of GA investments and operation opportunities will be presented to the Chinese people. In order to prevent the common phenomenon - "chaos after market opening, market dies down after government intervention" that had occurred in many other industries, I believe the Chinese government has implemented the necessary regulations and laws, and the industry players have prepared themselves with the proper equipment and investments. Besides all these, China's GA industry still needs an understanding of "self-discipline" in order to reach the maximum level of aviation safety. The level of this understanding will be the most important factor and indicator in building a healthy general aviation industry in China.

一年一度的通用航空商务交流会又将在北京举行，来自国内外的通航业者，政府管理机构，投资商等将又聚集一堂讨论通用航空的发展与未来。

今年的通航会比起往年更具历史意义； 在国家多重政策与规划的推动下，通用航空的起步与腾飞将指日可见。大量的通用航空投资，运行机会将会像雨后春笋般地展现在国人面前。为了避免在别的行业曾经发生过的"一开就乱，一收就死"的惯例，相信政府已经在法规法令的部分进行了规划与部署，产业界在装备设施的投入与建设上也不落人后。除了这些要素以外，中国的通用航空业界更需要有一个"自律"的共识来达成最大程度的飞行安全。这个共识将会是通用航空快速发展的关键因素和指标。

Francis Chao 赵嘉国
Publisher 发行人

Aviation Headlines

国际航协理事长乔瓦尼·比西尼亚尼

IATA Supports China Aviation Through In-Depth Cooperation in 4 Major Areas

四大领域深入合作 IATA助力中国航空

International Air Transport Association (IATA) announced in Beijing recently that it would engage in-depth cooperation with China aviation industry on four major areas including flight safety, simplify business process, infrastructures and free trades in expect to step up its support and service for the development of China aviation industry.

Giovanni Bisignani, Director-General of IATA, told reporters during an interview saying "in 2009, Asia-Pacific has surpassed North America to become the largest aviation market worldwide. The departed or arrived passenger volume in China took up 38% of the Asia market last year. It was predicted in 2013, such ratio would continue to increase to 45%. China is continuously growing and developing that the market potential is tremendous. IATA hopes to be able to help develop and strengthen China aviation industry."

"This year, we predict the global aviation industry will loose US $2.8 billion, but the Asia-Pacific region outshines others to become the largest profitable area worldwide with a gain of $900 million US. The powerful growth trend of the China market will exalt the profit of the whole Asia-Pacific area." Giovanni Bisignani emphasized. He introduced in details the four major aspects which the IATA would cooperate in-depth with China aviation industry including flight safety, business process simplification, infrastructures and free trades. Moreover, the IATA would also expand its North Asia District Office located in Beijing.

国际航空运输协会(International Air Transport Association，IATA，简称“国际航协”)近日在北京宣布，将与中国航空业在飞行安全、简化商务、基础设施和商业自由等四大领域进行深入合作，以期进一步助力和服务中国航空业的发展。

国际航协理事长乔瓦尼·比西尼亚尼在接受记者采访时表示：“2009年，亚太区已超过北美成为全球最大的航空市场。去年在中国离境或到港的乘客数量占了亚洲市场的38%。预计到2013年，这一比例将继续增至45%。中国在不断成长和发展，市场潜力巨大。国际航协希望能协助中国航空业发展和壮大。”

“今年，我们预计全球航空业将亏损28亿美元，但亚太区一枝独秀，将会取得9亿美元的盈利，成为全球收益最大的区域。中国市场强劲的增长势头将拉升亚太区的整体收益。”比西尼亚尼对记者强调。比西尼亚尼详细介绍了国际航协将与中国航空业深入合作的四大领域，包括在飞行安全、简化商务、基础设施、商业自由方面。另外，国际航协还将扩展其位于北京的北亚区办公室。

CAAC: Aviation Industry Made a 9.39 Billion Yuan Profit in the First 4 Months

民航局：1-4月航空业盈利93.9亿元

Sha Hongjiang, Deputy Director of the Department of Policy and Regulation, pointed out on May 27 at the 2010 China Airport Economy International Summit that our nation's aviation industry has maintained a speedy development trend. The overall profit reached 12.2 billion Yuan last year with airport profits totaling 3 billion Yuan.

Sha Hongjiang said that from January to April this year, the entire industry and the whole airport activity maintained a faster growth tendency in which the entire industry continued to make profit. The profit made in first 4 months was 9.39 billion Yuan, a 20.4% growth compared to the same period last year, and the airport profit growth was higher than the growth average of the entire industry.

Sha Hongjiang also said that the construction of major airports needed to be promoted rapidly this year; investment funds would be gathered thru multi-channels and concentrated on bring out the best efforts between central and local government to ensure the availability of the entire fund for the airport construction. Simultaneously, CAAC would continue to support the development of medium small airports, establish subsidies for medium small airport operations including their take-offs and landings, and subsidize regional aviation etc.

国家民用航空局政策法规司副司长沙洪江27日在2010中国临空经济国际高峰论坛上指出，我国航空业保持快速发展态势，去年全行业利润达122亿，机场利润总额达30亿。

沙洪江表示，今年1—4月，全行业及整体机场生产保持较快增长的态势，全行业继续保持盈利，1—4月盈利93.9亿元，较去年同年累计增长20.4%，机场盈利增长高于全行业的增长水平。

沙洪江表示，今年要加快推进重点机场建设，将多渠道争取资金，注重发挥好中央和地方两个积极性，确保整个机场资金建设的到位，同时继续扶持中小机场发展，继续实施对中小机场运营补贴，包括中小机场起降、支线航空补贴等。

The Third China-Korea Civil Aviation Cooperation Conference Held in Xian

第三次中韩民航合作会议在西安举行

The third China-Korea Civil Aviation Cooperation Conference was held in Xian on March 4, 2010. Xia Xinghua, Vice Minister of the CAAC, and Choi Jang-Hyun,PPS(Parliamentary Private Secretary) of the Ministry of Land, Transport and Maritime Affairs accompanied by their respective delegations attended the meeting.

At the meeting, representatives from both sides exchanged and discussed information on issues regarding air transportation policies, long term planning for airports and their investments as well as management methods, aviation security, air traffic control techniques and cooperation. Both parties also confirmed on the joint cooperation programs that would start in 2010, and signed a conference minutes afterward.

The China-Korea Civil Aviation Cooperation Conference is a high level regular exchange mechanism between the civil aviation department of both nations. The first meeting was held in Zhangjiajie in 2005.

第三次中韩民航合作会议于2010年3月4日在西安举行，中国民航局副局长夏兴华及韩国国土海洋部次官崔壮贤分别率团与会。

会上，双方代表团分别就航空运输政策、机场长期规划与投资及管理模式、航空保安、空管技术与合作等议题进行了交流，并确定了2010年拟开展的双边合作项目。会后双方签署了会谈纪要。

中韩民航合作会议为两国民航部门间高级别定期交流机制，第一次中韩民航合作会议于2005年在张家界举行。

2010 Guideline for Programs of the Civil Aviation Joint Fund

2010年民航联合基金项目指南

The joint research fund is set up jointly by the National Natural Science Foundation of China (NSFC) and Civil Aviation Administration of China (CAAC). The Foundation is to attract researchers from universities and research institutes all over China to participate in basic research and applied basic research backgrounds in technological development of civil aviation science and technology, so as to enhance the ability of original innovations in aviation industry combining knowledge and technical innovations, and to contribute to making China a nation with the strongest aviation industry in the world.

Under mutual consultation, NSFC and CAAC decided to start up the third phase of the Joint Research Fund of Civil Aviation from 2010, with a 10 million Yuan annual budget and a five years duration.

As part of the National Natural Science Foundation, the programs funded by the Joint Research Fund are managed by both parties. Researchers in both aviation and non-aviation sectors are encouraged to participate in practical joint research programs.

In 2010, the Joint Fund plans to subsidize 2-3 Key Programs and 20-25 General Programs. The overall funding for Key Programs is 1.3 to 1.8 million Yuan.

Encouraged research areas for General Programs in 2010 include:

1.Theory and technology of new navigation system, simulation technology for civil aviation system, basic theory and technology for aviation safety, intelligent air traffic and information security, new theory and methods for security check, system reliability and system security theory and methods; theory and technology for airport perception.

2. Theory and methods for management of national airspace resources, theory on aviation security management and aviation crime prevention and controls, contingency decision for emergency.

3. Theory of new materials and geotechnical engineering for runway surface, theory and techniques of new materials for aircraft design.

Research areas for Key Programs in 2010 are:

1. Basic theory and key technology for perception of moving targets at airport.

2. Basic theory and key technology for intelligent service of air traffic management.

3. Display and prediction of the approaching threats to aircraft based on multi-source information.

4. Replay and analysis simulation of pilot environment of civil aircraft's in-flight accident.

民航联合研究基金由国家自然科学基金委员会和中国民用航空局（Civil Aviation Administration of China，简称“民航局”）共同出资设立。该联合研究基金面向全国，旨在吸引国内高等院校、科研机构的科研人员参与以民用航空科技发展为背景的基础研究和应用基础研究，提升民用航空科技的源头创新能力，促进知识创新与技术创新的结合，为实现民航事业从大国走向强国的跨越做出贡献。

经国家自然科学基金委员会与民航局共同协商，决定自2010年起设立为期五年的第三期“民航联合研究基金”，年度总经费1000万元。

民航联合研究基金资助项目作为国家自然科学基金的组成部分之一，鼓励民航系统内外的研究人员开展实质性的合作研究。该类项目由双方共同管理。

2010年民航联合研究基金拟资助重点项目2—3项、面上项目20—25项；重点项目资助强度130—180万元。

项目主要研究领域

1．新航行系统理论与技术，民航系统仿真技术，航空安全基础理论与技术，空中智能交通与信息安全，安全检查新理论与方法；系统可靠性与系统安全性理论及方法；机场感知理论与技术。

2．国家空域资源管理理论与方法，航空安全管理与航空犯罪预防控制理论、突发事件应急决策系统。

3．与机场道面相关的新材料及岩土工程理论，飞机新材料、新工艺理论与技术。

重点项目研究领域

1．机场动目标感知的基础理论与关键技术

2．空中交通管理智能服务的基础理论与关键技术

3．基于多源信息的飞行器进近威胁目标表达及行为预测

4．民用航空器飞行事故驾驶环境再现与分析模拟

CAAC Toughens Reward-Punishment Mechanism to Guarantee Flight Regularities

严格奖惩机制 保障航班正常

In 2010, the CAAC will implement and improve the strict and effective reward-punishment mechanism to guarantee flight regularities. The irregular flight situation will face public scrutiny and subject to social supervision. Li Jiaxiang, minister of the CAAC, has pointed out that all levels of the administration of the civil aviation will view flight regularities as an important content of market supervision and regulation and also regard airlines flight regularity rates as an important reference indicator for airlines to apply for new scheduled flights and new flight routes. Airlines with serious flight delays will either be suspended of operation rights temporarily or canceled the scheduled times.

It is reported that during period of rectification, leader groups of every branches of the CAAC have to announce the information of delayed departure flights once every 15 days. Domestic flights (excluding domestic segments of international flights) whose flight schedule regularity rates are under 50% (excluding 50%) and rank last 20 will be issued the internal warning through circular released twice a month, and the warning bulletin will be sent to the office of the rectification group of CAAC.

2010年，中国民航将建立和完善保障航班正常的严格有效的奖惩机制，航班不正常情况面向公众，接受社会监督。民航局局长李家祥表示，民航各级行政机关要将航班正常作为市场监管的重要内容，要将航班正常率作为航空公司申请航班、航线的重要参考指标，对航班延误较严重的航空公司，该取消时刻的取消时刻，该暂停许可的暂停许可

据悉，整治工作期间，各地区管理局领导小组每15天要公布一次整治机场离港航班延误信息。对航班正常率排名后20位且航班正常率在50%以下（不含50%）的国内航班（不包括国际航班国内段）进行一次内部警告通报，每月发布警告通报两次，并将通报抄报民航局整治工作领导小组办公室。

China and Australia Hold Talks on Civil Aviation

中国与澳大利亚举行航空会谈

On February 4th and 5th, 2010, the delegation headed by Xia Xinghua, Vice Minister of CAAC, visited Australia and held talks with the Australian civil aviation delegation headed by Andrew Wilson,the Deputy Secretary-General of Australia Ministry of Local Government on infrastructures, transportation and locality developments. The two parties had sincerely exchanged opinions on issues like enhancement of mutual flight transport capacity, the fifth business right, commercial cooperation and adjustment of transit visa, and a memorandum of understanding was signed by both. In light of the new agreement, passenger flight transportation capacity gets increased greatly between the two countries, which lays a legal foundation for further cooperation between aviation enterprises. Both sides agreed to hold another round of talks in 2011 concerning policies of international air transports between them, and exchange views on further opening up mutual air transport market.

2010年2月4日至5日，民航局夏兴华副局长率中国民航代表团访问澳大利亚，与澳基础设施、运输、地区发展与地方政府部副常秘安德鲁.威尔森（Andrew Wilson）率领的澳民航代表团举行航空会谈。双方就扩大两国间航班运力安排，第五业务权、商务合作、调整澳大利亚过境签证政策等议题坦诚地交换了意见，并签署谅解备忘录。新协议大幅扩大了两国间客运运力安排，为双方空运企业未来进一步开辟、拓展航线奠定了法律基础；双方同意于2011年举行新一轮航空会谈，就两国的国际航空运输政策开展交流，探讨进一步开放两国间航空运输市场。

Feature Articles

Feature Articles

2010 China Civil Aviation Development Forum Was Held in Beijing

2010年中国民航发展论坛在京举行

The 2010 China Civil Aviation Development Forum was held in Beijing on May 12-13. The theme of the forum was 'Welcoming the New Generation of Global Civil Aviation Industry' where numerous specialists and representatives from aviation sectors at home and abroad participated in collaborated discussions and conformed agreements to propagate the future of global civil aviation industry.

Li Jiaxiang, Minister of the CAAC, delivered the theme presentation at the forum, and 39 prominent guests including Mr. Raymond Benjamin, Secretary General of ICAO, Mr. J. Randolph Babbitt, FAA Administrator, Mr. Daniel Calleja, Director of Air Transport Directorate-General for Mobility and Transport European Commission, and others from governments, Global Associations of Civil Aviation and civil aviation enterprises participated in presentations and discussions. More than 300 representatives from 80 plus government and enterprise units of over 10 nations including Asia, North America, Europe and Africa attended the forum.

During the 2-day forum, the attendees started extensive discussions and exchanges on aspects such as experiences recount and future anticipations on global civil aviation industry, the new 10-years and new opportunities of civil aviation industry, the future strategies and competitions of commercial aviation, the overall development of supports for civil aviation industry, Green aviation, the trend and anticipation of airport development, the effects of new techniques on changing civil aviation industry in the next 10 years, general aviation and air rescue etc.

Even though the global civil aviation industry was bouncing back gradually from the economic crisis, but the unpredictability of world macro-economic development, the highly fluctuated prices of aviation fuel and the daily intensified world trade conflicts etc. were the many unavoidable challenges, the attendees were unanimous on, that global civil aviation industry development must encounter. To guarantee the continual development of civil aviation industry, new techniques and Green techniques must be strongly applied; strengthen the international compatibility and cooperation, grasp the development opportunity of the next 10 years, accurately predict the developmental trend and direction of global air transportation industry, continuously sum up experiences, continuously try changing the trade and profit modes of air transportation, enhance developments on simplifying business process and numeric techniques, and at the same time as greatly develop commercial aviation, general aviation should be sped up to initiate public-affairs aviation and regional aviation market reforms.

5月12日至13日，2010年中国民航发展论坛在北京举行。本次论坛以“迎接全球民航业的新年代”为主题，众多中外航空界专家代表共同探讨、凝聚共识，纵论全球民航业的未来。

中国民用航空局局长李家祥在论坛上发表了主旨演讲，国际民航组织秘书长雷蒙·邦雅曼、美国联邦航空局局长J. Randolph Babbitt、欧盟流动与交通总司航空运输司司长丹尼尔·卡勒雅等来自政府、国际行业协会以及民航企业的39位嘉宾参与了演讲和讨论。来自亚洲、北美、欧洲、非洲等10多个国家和80多个政府与企事业单位的300多位代表参加了本次论坛。

为期两天的论坛，与会代表们就全球民航业的经验回顾与未来展望、民航业的新十年、新机遇、商业航空的未来战略与竞争、助力民航业的全面发展、绿色航空、机场发展的趋势与展望、新技术在未来十年将如何改变民航业、通用航空与空中救援等议题展开充分的讨论与交流。

与会代表一致认为，虽然全球民航业正从此轮经济危机中逐步复苏，但世界宏观经济发展的不可预测性、航空原油价格的高位震荡、日益增强的世界贸易摩擦等，都不可避免地为全球民航业的发展带来了诸多挑战。要保证民航业的可持续发展，就必须加强新技术、绿色技术在民航业的应用，加强国际协调与合作；抓住未来10年的发展机遇，准确预测全球航空运输业的发展趋势和走向，不断总结经验；不断尝试变革航空运输的商业模式与盈利模式，强化商务简化与数字技术的发展；在大力发展商业航空的同时，加快发展通用航空，引导公务航空与支线航空市场变革。

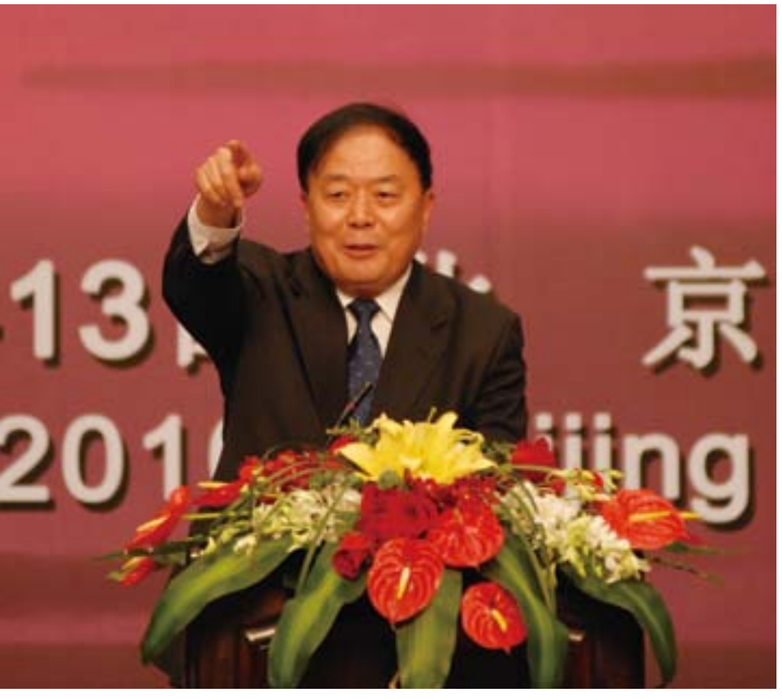
Feature Articles

Understanding Clearly the Theory of Macroeconomic Regulation and Control to Establish a Faster and Stable Development of Civil Aviation

清晰行业宏观调控理念 实现民航平稳较快发展

Li Jiaxiang made the Keynote Speech at China Civil Aviation Development Forum 2010

——李家祥在2010民航发展论坛上发表主旨演讲



Air transport industry is a high risk industry derived from aviation industry, and is most sensitive to the periodic economy and various unexpected incidents. Positively response to the challenges that air transport industry faces is a complex mechanism as well as a process for the entire industry to continuously adapt to changes and be innovated. The key within is to bring out the best purpose of both the market and government. I am going to introduce some personal learning and the initial set up of the macroeconomic regulation and control.

I. Consider the goal for both regulation and control

Last year, the entire industry completed a total of 37.4 billion ton-kilometer of transport turnover volume, 192 million passenger throughput and 4.03 million tons of cargo-mail, a 2.4%, 3.3% and 0.2% increase respectively compared to the previous before last year. Last December, we introduced ten policies to establish controlled transport, expanded demand, guaranteed growth and increased benefit as a combined effort. This and next year, the total airport construction investment funds for our nation is more than 300 billion Yuan.

II. Lighten the burden of airline companies

Up till the end of April, 2009, the average asset of our nation's airline companies had a 88.8% debit rate while foreign airline companies had basically maintained a debit rate at around 60-70%. Besides, the overly fast price increase rate for aviation fuel and materials causing an increase in operational cost was another important reason. Among the ten measures that we disclosed, seven of them helped airline companies to response to international economic crisis directly or indirectly. In the first four months of this year, our nation's entire civil aviation industry had gained 1.99 billion Yuan in which airline companies gained a total of 1.94 billion Yuan.

III. Deeply reform of trading mechanism and governing system

On the aspect of promoting balanced development of civil aviation areas, in last year's newly increased 100 billion Yuan investment fund from the central government, 3 billion Yuan was allocated for infrastructure construction of civil aviation, and 1.8 billion Yuan is funded again this year. The fund is used mainly on 39 newly constructed and reconstructed-expanded mid-western regional and western trunk line civil aviation airports. With additional invested funds from local governments and airports, the investment totaled 58.1 billion Yuan. On support for general aviation development, we are examining the measures for general aviation development and dedicated project subsidies. We will continue to promote the pilot works on general aviation policies in North-eastern areas, to build general aviation airports and supplementary infrastuctures. We will gradually implement the emergency rescue system for civil aviation and general aviation, and to initiate and promote the public population's spending on general aviation. On deeply reform of the management system of airports, Prime Minister Wen Jiabao signed the Regulation of the State Council of PRC on April 13, 2010 which officially announced The Regulation on the Administration of Civil Airports that will take effect on July 1, 2010. Airport, according to the Regulation, is set as public infrastructure, thus needs managed service as its main function.

Judging from now, a come-back of the domestic air transport market starts to appear. The first four months of this year, the transport total turn-over volume of the entire industry had a 1.7% increase compared to the same period of last year in which domestic flight routes increased 13.7% while international flight routes dropped 20.2%. The passenger throughput showed a 14.2% growth from last year, and the cargo-mail volume dropped 10.9% than last year. The prominent difference between international and domestic markets stated, from a side view, that the series of related policies came out of the Government of PRC since last year has made visible effects on expanding domestic demands and guaranteeing growth. We can also judge from this that China's economic come-back is faster than other nations.

We firmly believe that China's civil aviation industry is still a favorable asset with a brilliant future.

我们所从事的航空运输业，是一个高风险行业，属于派生产业，对经济周期性和各种突发事件最为敏感。积极应对航空运输业面临的挑战，是一个复杂的系统工程，也是整个行业不断适应变化和改革创新的过程。这其中，关键要发挥好市场和政府两方面的作用。下面，我介绍一些个人认识和行业宏观调控的初步实践。

一、兼顾调控目标

去年全行业累计完成运输总周转量、旅客运输量、货邮运输量分别为374亿吨公里、1.92亿人次和403万吨，比上年分别增长2.4%、3.3%和0.2%。去年12月份，我们出台了十项措施，实现控运力、扩需求、保增长、增效益的有机结合。今明两年，我国机场建设投资总规模3000多亿元。

二、减轻航空公司负担

截至2009年4月底，我国航空公司平均资产负债率88.8%，而国外航空公司资产负债率基本保持在60%—70%左右。另外，航空油料等项成本增速过快也是又一个重要原因。在我们出台的10项措施中，有7条措施是直接或间接帮助航空公司应对国际金融危机的。今年1—4月份，我国民航全行业盈利19.9亿元，其中，航空公司累计盈利19.4亿元。全行业的盈利主要是由航空公司盈利所贡献的。

三、深化机制体制改革

在促进民航区域均衡发展方面，在去年中央新增1000亿元投资中，安排民航基础设施建设资金30亿元，今年又安排资金18亿元。主要安排投放于民航中西部支线、西部干线机场的39个新建、改扩建项目，加上地方政府和机场资金投入，总投资581亿元；在扶持通用航空发展方面，我们正在研究通用航空发展政策及专项补贴政策。继续积极推进东北地区通用航空政策试点工作，兴建通用航空机场与辅助基础设施。逐步建立民航通用航空应急救援体系，引导和促进公众对通用航空的消费；在深化机场管理体制改革方面，4月13日，由温家宝总理签署国务院令，正式公布《民用机场管理条例》，7月1日起施行。其中，在《条例》中，机场定位为公共基础设施，将要以管理服务为主要职能。

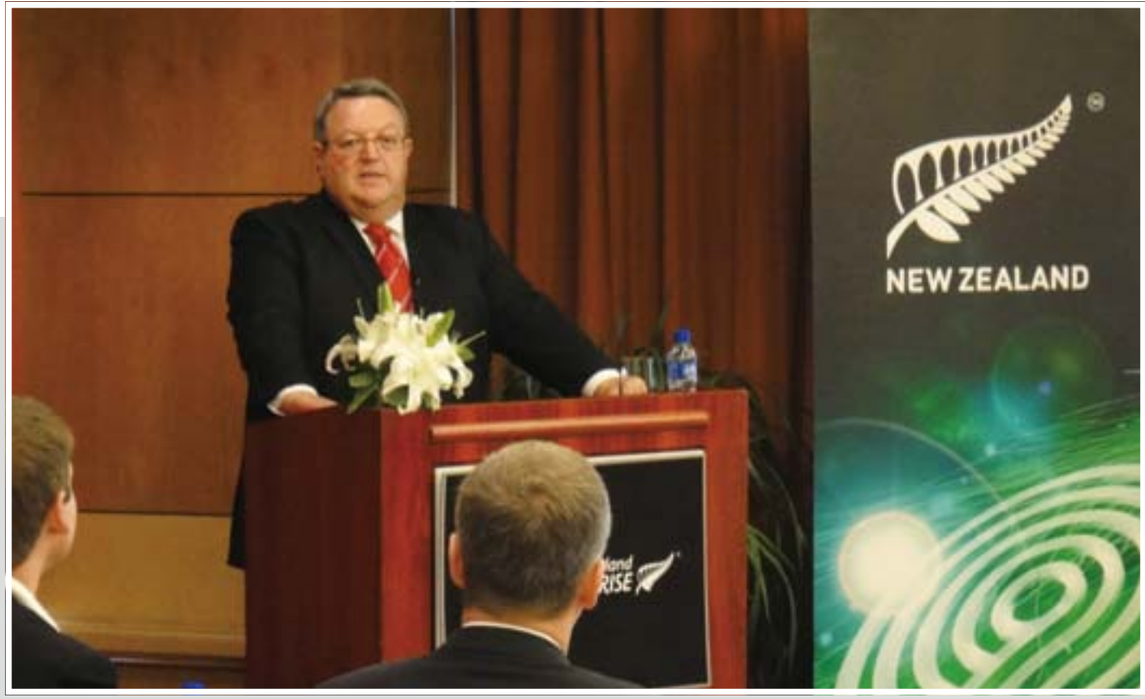
从目前看，国内航空运输市场开始出现回暖迹象。今年1—4月份，全行业运输总周转量比上年同期累计增长1.7%，其中，国内航线增长13.7%，而国际航线却为－20.2%。旅客运输量比上年同期累计增长14.2%，货邮运输量比上年同期累计增长为－10.9%。而国际国内市场反差情况明显，从一个侧面说明，去年以来中国政府出台的一系列相关政策，已对扩内需、保增长产生明显的效果。我们由此还可以判断，中国经济复苏要快于其他国家。

我们坚信，中国民航业仍然是朝阳产业，有着辉煌的未来。

Feature Articles

新西兰航空产业论坛2010

New Zealand Aviation Industry Seminar 2010



Hon Gerry Brownlee, Minister of Economic Development of New Zealand led a New Zealand Aviation Sector trade mission to China in June 2010. China is one of New Zealand's most important and fastest growing trading partners, particularly since the signing of the bilateral Free Trade Agreement in April 2008.

Annual trade in goods between the two countries now exceeds NZD 10 billon, with exports from New Zealand reaching NZD 3.5 billion and imports from China reaching NZD 6.5 billion. The strength of China-New Zealand relationship has been particularly evident during the global financial crisis where, despite a serious downturn in international trade activity, our bilateral trade levels have continued to grow.

The aviation sector is an increasingly important contributor to China's economy as it caters to both the burgeoning demand driven by massive upgrading of airport infrastructure and the significant growth in numbers of both business and leisure travelers.

New Zealand has world class aviation technology as a result of a history of innovation in the sector that has developed from New Zealand's early recognition of the potential of aviation in the agriculture, horticulture, forestry and tourism industries. As a result of this, New Zealand aviation companies offered their services and products in many offshore markets and across a range of products and services, including "fit for purpose" pilot training, airport design and project management, airport equipment, competitive engineering, Maintenance Repair and Overhaul (MRO) expertise and service solutions.

The June trade mission is aimed to bring to China some of New Zealand's leading companies in the aviation sector and their senior management. The mission's primary objective is to develop long term relationships with key Chinese agencies and counterpart companies in the aviation sector in China, particularly in Beijing, Tianjin and Shanghai where the delegation visited from 7-11 June 2010.

2010 New Zealand Aviation Industry Seminars were held both in Beijing and Shanghai for two major topics – aviation services (MRO and pilot training), and airport equipment.

The members of the delegation were: Air New Zealand Airlines, ATRAX Group NZ Ltd., Aviation New Zealand, Christchurch Engine Centre, CTC Aviation Training, Gallagher Group Ltd., Glidepath Limited, Peet Aviation Limited, and UFL Group Limited.

新西兰经济发展部部长、能源与资源部长、议会领袖及橄榄球世界杯副部长格里·布朗阁下率领新西兰航空贸易使团于2010年6月访华。双方在2008年4月签署了双边自由贸易协定之后，中国成为了新西兰最重要的、双边贸易增长速度最快的贸易伙伴之一。

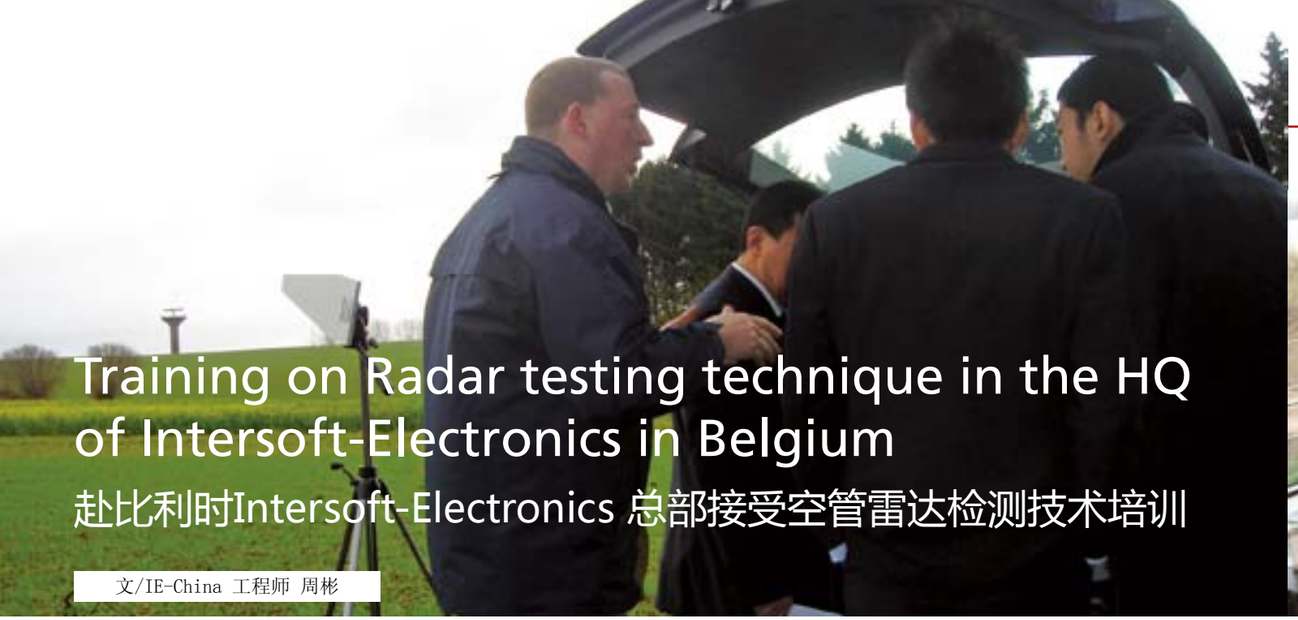
现在，两国每年的商品贸易往来已经超过了100亿新西兰元，新西兰出口到中国的商品创汇35亿新西兰元，进口的中国商品额为65亿新西兰元。双方合作的优势在全球金融危机爆发时尤其明显。期间，尽管国际上的贸易活动大幅度减少，但我们的双边贸易仍然保持增长态势。

在中国，机场的基础架构不断升级，乘坐飞机进行商务旅行或休闲度假的人数大幅度增加，推动航空业日益成为中国经济发展的重要生力军。

新西兰在很久以前便意识到了航空业在农业、园艺、林业及旅游业中具有极大的发展潜力，从而不断进行创新，借此成为世界一流的航空技术领先国家。新西兰航空企业在多个海外市场提供广泛的产品和服务，包括"量身定做"（fit for purpose）驾驶培训、机场设计与项目管理、机场装备、工程竞争、维护维修及大修（MRO ）服务解决方案等。

本次访华的贸易使团由新西兰航空业的一些主要公司及其高层领导组成，访华的主要目标就是与中国航空产业的主要政府机构及公司建立长期合作关系，使团在2010年6月7–11日访问北京、天津和上海地区，并在北京和上海两地举办分别针对航空服务（MRO与飞行培训）与机场设备的两大主题的新西兰航空产业论坛暨交流会。

此次访华团队由以下公司组成：新西兰航空公司航空培训部、ATRAX Group NZ Ltd.，新西兰航空协会、基督城发动机中心、CTC航空培训（新西兰）有限公司、盖里格集团公司、格莱德有限公司、Peet航空有限公司，及UFL集团有限公司。



Training on Radar testing technique in the HQ of Intersoft-Electronics in Belgium

赴比利时Intersoft-Electronics 总部接受空管雷达检测技术培训

文/IE-China 工程师 周彬

At 5 o'clock in the morning in December of 2009, I arrived at the small town of Geel, which is about 70 kilometers away from Brussels. I Stood in the square, looked around at the Nordic style buildings, and also at the world famous Belgian Chocolates along the street. All these come at me so suddenly. But I was not here in Belgium for leisure, but to get training on Radar testing techniques in the HQ of Intersoft-Electronics.

Intersoft-Electronics is a professional company that develops electronic scanning equipment. Its Radar Testing technique plays a leading role around the world and is widely being used in the radar testing area of developed countries. Besides my colleagues and I, another 7 people from the technique center of the ATMB of CAAC, and the CNSD of CAAC came to Intersoft-Electronics for RASS-S & RASS-R to receive the first stage training of IE radar testing.

The next morning, we went to Olen (where IE HQ is located) by way of IE's shuttle bus. 20 minutes later, we got the destination. It's a 3 floor building that looks inconspicuous while still maintaining a modern feel. Erwin, our guide, introduced the Intersoft-Electronics company and took us through the whole building, included management offices, the R & D Office, the manufacturing workshop, the Materials library, the technique support office and other areas of the building. What attracted me the most was that the world's leading radar testing team was located all within this 3 floor building. From R&D to manufacturing, from sales to after sale services, it is all handled here. The first impression that the Intersoft-Electronics HQ gave me was that just like their equipment: They just integrate efficiently.

The training had began with the basic introduction to IE. Intersoft-Electronics was successful in interfacing of hardware and software. which can be realized from it's products:

RASS-S is a basic radar testing equipment could make the measurement of Antenna, receiver/ transmitter, processor and even analyzing Protocol of output ; could also make the evaluation of the capability of radar system, make the measurement of element of antenna, cable, and coupler. RASS-S nearly covers all radar measurements.

RASS-R is a software system to evaluate radar quality according to radar's data. RASS-R could provide series of use like data display, filter, statistics' gathering; and also could combine the influence caused by topography factor and refraction caused by the pressure difference. On that basis, RASS-R could process the multi-radar comparison, track analysis, calculate the probability of detection and systematic errors.

After the brief introduction of their products, the next topic was IE radar testing. Our training method was matching IE's testing theory, which is a Top-Down Analysis. The first day of training was Antenna Measurement. It was an open training session and felt more like a radar technique seminar. We had a perfect interaction with the tutors, and I benefited a lot from the discussions between Erwin (the IE senior engineer) and our domestic experts.

Training was continuing on and finishing fast in 2 weeks.

The second to last day of the training, 5 of us drove to a Radar Site nearby Brussels Airport for antennae field measurements. The entire Programmable testing flow let the heavy and complicated signal sampling and data statistics in field, become highly efficient and fast. We had a nice period of leisure time and enjoyed the country side as we stood in the field, Under this sunshine, it suddenly occurred to me: Technology lets me enjoy the beauty of life.

We finished the training session before Christmas Eve, and we said goodbye to a Geel and Belgium covered in snow. Being an employee of IE, I hope IE's technique and products could be widely used in China and could also prosper the radar testing industry. Being a part of the Chinese people, I sincerely hope China, as it becomes a member of the aviation developed countries, it could introduce more advanced aviation support techniques and equipment to allow its aviation sector to soar safe and free.

Let us try our best for a better future of the Chinese Aviation Industry.

2009年12月一天清晨5点，我从机场到达了距布鲁塞尔70公里的小镇海尔，站在小镇的广场上,环顾着北欧风格的建筑，这一切来都是那么突然，但是这次比利时之行不是旅游，目的是前往Intersoft-Electronics总部进行雷达检测技术培训。

Intersoft-Electronics公司是一家电子扫描设备的专业公司，其雷达检测技术在全球范围内处于领先地位，其产品和技术广泛用于在航空发达国家的雷达检测领域。此次比利时之行除了我和我的同事之外，还有中国民航空管局信息中心、通导处等部门一行7人。他们此行的目的是来接收RASS-S(雷达质量分析设备)和RASS-R(雷达实时质量分析系统)，并进行第一阶段的IE雷达检测培训。

第二天早晨，我们坐上了IE安排的班车，前往IE总部所在地奥兰。20分钟后到达了目的地，一栋三层的建筑，与城中的建筑比起来感觉现代而低调。Erwin带我拜访了各个办公室，CEO等管理层办公室、各个研发办公室、生产间、材料库、技术支持办公室、资料室……这让我有些感慨引领全球雷达检测技术发展的力量全部蕴藏于这个栋办公楼里，从研发、生产、销售、支持服务都集中在这里，IE总部给我的第一印象就像IE的设备一样，整合得如次高效。

培训的开始是从IE的基本介绍开始，Intersoft源于软件硬件的良好融合（successful INTERfacing of Hardware and SOFTware），这一点从他的产品中可以深深的体会到：

RASS-S雷达基本的检测设备，可以检测从天线、接收机/发射机、到录取器最终输出的协议分析，从雷达系统性能的评估到、天线馈列、线缆、耦合器的检测，覆盖了雷达站检测全部项目，类似于年度维护、巡检……

RASS-R是一套依靠雷达数据对雷达进行质量评估的软件系统，基本数据的显示、筛选、统计；还有结合地形因素、气压差造成折射的影响等，在此基础上进行多雷达比较和轨迹分析，计算雷达目标检测概率、偏差……

简单介绍之后的主题是IE雷达检测的，IE的检测理论是自上而下，我们的课程也如，第一天的培训就是天线的测试。培训形式是的开放式的，老师在讲，我们配合以强有力的互动！除了学习IE的检测理论，培训的课堂更像一个雷达技术讨论的大讲堂。课堂中除了老师Erwin-IE资深的工程师，还有信息中心的任处长和装备公司的牛总，他们都是国内中雷达行业的专家，与他们同堂，倾听他们之间的问与答，对于我这个后生来讲真是受益匪浅！

培训在每天不同课程中周而复始地，渐进尾声。

在培训的倒数第二天，我们一行五人驱车到布鲁塞尔机场附近的雷达站，进行天线的外场测试。全部程序化设计的测试流程，让原本繁复、困难的外场信号采样和数据统计工作，变得高效、快捷。在外场测试中我们还忙里偷闲，利用记录的时间欣赏清新如画的乡村风光，看着云层中倾泻的阳光投映在远处的原野上。此时突然间想起一段广告词：科技让我享受生活之美！

圣诞节前夕我们结束了这次培训的行程，在漫天风雪中与银装素裹海尔作别，与比利时作别。作为IE的中方雇员，我希望IE的产品和技术在中国的得到广泛的应用和推广；同带动雷达检测产业在中国蓬勃发展。作为一个生活在中国的中国人，我也由衷希望即将进入步入航空发达国家行列的中国，引入更多的成熟、先进的航空保障技术和设备，让我们的航空飞行更加安全。

让我们中国航空产业更加美好的明天而努力！

Feature Articles

NextGen for Airports
The Far-Term Perspective
机场新航行系统 远景展望

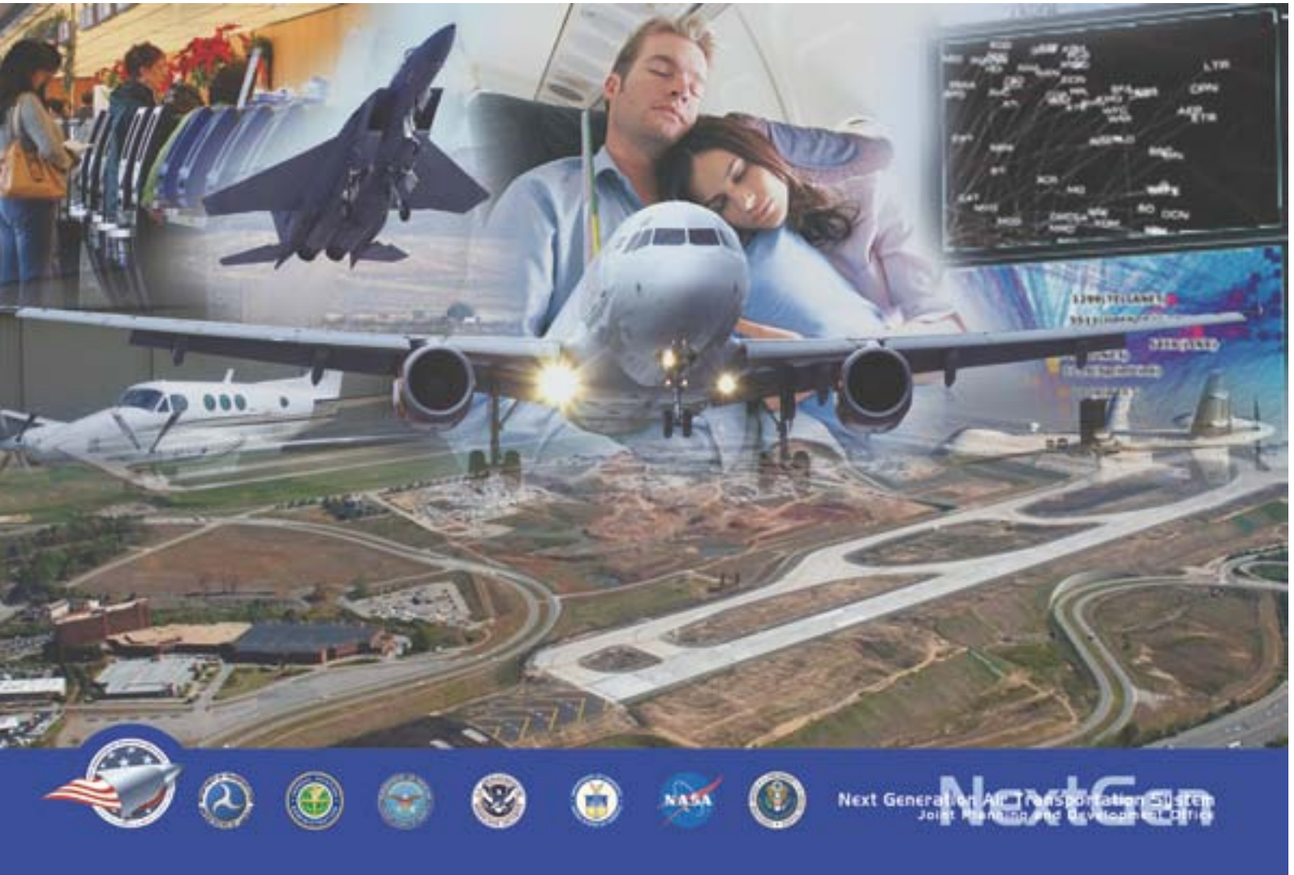
By: Diana Khera, Director Airport and Airspace Planning: Harris Miller Miller & Hanson Inc
文/Diana Khera，机场及空域规划主管：HMMH公司

Many of the near-term applications and plans under the Federal Aviation Administration's (FAA) NextGen initiative are widely understood within the aviation industry. The implementation of new Performance-Based Navigation (PBN) routes and procedures will lead to enhancements in the use of airspace, resulting in increased safety, efficiency and environmental benefits. The latest version of FAA's NextGen Implementation Plan will provide additional detail and clarity on these near-term applications. But what about longer-term NextGen initiatives and what will they mean for airport facilities?

FAA currently defines the "far-term" for NextGen as 2018 and beyond.

在美国联邦航空管理局（FAA）倡导许多近程应用与计划中，关于新航行系统的提案在航空业内已得到了广泛了解。全新的基于性能导航(PBN)的航路与飞行程序的执行将强化空域使用率，最终达到增强飞行安全，提高机场效率，有益于机场周边环境的目的。最新版本的FAA新航行系统执行计划将为这些近程应用提供额外的细节描述与说明。那么长期的新航行系统提案又是什么，它对于机场设施又意味着什么呢？

美国航联邦空管理局（FAA）近期明确了2018年及以后的新航行系统计划的远期目标。美国联合策划及发展办公室（JPDO）承担着开发远期计划的任务。从长远来看，机场顾问们应意识到这些直接关系到机场，或是将对机场运行与设计造成着重大影响的相关概念、技术与政策。



The Joint Planning and Development Office (JPDO) is tasked with developing the far-term plans. Looking ahead, airport consultants should be aware of several concepts, technologies and policies that are directly related to airports or will have significant impact on airport operations and design.

CLOSELY SPACED RUNWAY OPERATIONS:

NextGen applications are expected to allow more closely spaced runway operations at airports across the country. The JPDO is currently developing a roadmap for deriving the far-term benefits from these closely spaced operations. This includes determining the benefits and costs for operations in marginal visual and instrument meteorological conditions (MVMC and IMC), along with assessing the readiness of associated enabling technologies and supporting policies. The ambitious and complex evaluation will identify opportunities for closely spaced operations at the 35 airports named in the FAA's Operational Evolution Partnership (OEP) plan.

The JPDO will:

• Synthesize all research and analysis on this subject by the FAA, NASA, and their respective contractors, as well as other organizations such as the Airport Cooperative Research Program (ACRP) and Radio Technical Commission for Aeronautics (RTCA);

• Develop a description of capabilities at various separations of parallel runways for arrival and departure procedures, as well as wake turbulence mitigation;

• Identify candidate airports for implementation. Priority airports will be those that are currently capacity-constrained as well as those that are expected to have capacity challenges in the far-term;

• Conduct a high-level, low fidelity operational analysis for these candidate airports under various operating configurations and meteorological conditions to determine the feasibility of the proposed operating procedures;

• Study in greater detail the airports that prove feasible in the low fidelity exercise to determine a cost/benefit relationship of such procedures given the diversity of aircraft fleet mixes, flight schedules, parallel runway configurations and weather conditions; and

• Identify implementation issues such as environmental considerations, infrastructure enhancements, requirements for additional navigational and visual aids, and finally the development of resulting procedures and associated certification issues.

FAR-TERM LANDSIDE CAPACITY ANALYSIS:

Another airport-specific project underway at the JPDO is the far-term landside capacity study for the OEP 35 airports. The study will take a look at the available landside improvements for the 35 OEP airports in the 2018 timeframe. This is a unique enterprise because previous capacity analyses at the JPDO have centered on airside improvements.

近距跑道运行：

新航行系统将允许全美机场有更多的近距跑道运行。美国联合策划及发展办公室（JPDO）近期制定出了一套发展蓝图，意在从这些近距跑道运行中获得成本效益。蓝图包括明确在最低能见气象条件（MVMC）与仪表气象条件（IMC）下运行时所带来的益处和成本，以及评估其运行可操作性所需的相关技术与政策支持。这个雄心勃勃且相当复杂的评估将在FAA运行发展伙伴（OEP）计划中明确可执行近距跑道运行的35家机场。

美国联合策划及发展办公室（JPDO）将进行如下工作：

整合各方所有与该项目相关的研究与分析，包括美国联邦航空管理局（FAA），美国国家航空航天局（NASA），以及及其项目承包方，也包括如机场合作研究计划（ACRP），航空无线电技术委员会（RTCA）等组织。

开发出一种描述方法，用来描述各种分离类型的平行跑道进场和离场程序的容量，同时减少飞机紊流。

确认可执行此计划的候选机场。那些目前容量受限并在远期将面临容量挑战的机场将被优先考虑。

根据候选机场不同的运行模式和气象条件，进行粗略概念上的运行分析，最终确定建议运行程序的可行性。

更加深入地研究以证明机场在这种粗略演习中的可行性，通过这些程序为机队组合、航班时刻表、平行跑道结构与气象条件等所带来的多样性，从而最终确定其成本效益。

确认执行事宜，包括环境因素的考虑，基础设施的强化，对导航与目视辅助系统的额外要求，并最终开发出结论性程序与相关认证问题。

远期地侧容量分析：

美国联合策划及发展办公室（JPDO）的另一项机场特别项目即是对OEP计划中美国35家机场的远期地侧容量研究。此项研究着眼于至2018年OEP计划中35家机场地侧可用性的改善情况。这是一项独一无二的计划，因为美国联合策划及发展办公室（JPDO）此前的容量研究核心在于机场空侧容量的改善。

这项研究的结果将被用于美国联合策划及发展办公室（JPDO）的机构间组合与系统分析（ISPA）部

The results of this study will be used by the JPDO Interagency Portfolio and System Analysis (IPSA) division in modeling curb-to-curb system capacity, identifying system choke points and substantiating the ongoing NextGen business case activities. It examines capacity potential of the passenger and cargo terminals and synthesizes trends in passenger flow in terminal buildings. The study also examines baggage claim and ticketing areas, roadway access and parking accommodations. This effort will supplement the previous airside capacity studies and will allow a more comprehensive analysis of system bottlenecks.

BENEFITS OF NEXTGEN TO SUPPORTING AIRPORTS:

AIRPORTS: In response to industry feedback, the JPDO is also taking a look at NextGen

benefits that will be derived in the far-term by medium and small airports, including non-OEP airports in 15 congested metropolitan areas as well as other public use general aviation airports. Safety, efficiency, security and access benefits are expected at these locations from an increased use of relatively inexpensive NextGen technologies, procedures and infrastructure upgrades.

AIRPORT OPERATIONS CONCEPT OF OPERATIONS (CONOPS):

An Airport Operations ConOps is also under development by the JPDO. This will describe the improved situational awareness resulting from integration of airport operational functions into a NextGen Net Centric Operations (NCO) environment. Information regarding ramp operations, airfield maintenance and inspections, de-icing/antiicing operations and runway snow clearing, emergency response, airport command centers, security, safety and resource management will be integrated and made readily available.

门以建立一个“由出发至到达”的系统容量模型，明确系统阻塞点，论证正在进行的新航行计划的商业活动。它验证了客货运航站楼的潜在容量，并同步结合了旅客在航站楼类的行动流向。这项研究也可以验证行李领取、售票区域、道路入口与停车设施的情况。这项成果将是对此前机场空侧容量研究的补充，并将对一些系统瓶颈进行更广泛的研究。

新航行系统在支持机场上体现出的益处：

机场：对工业界反馈意见的回应，美国联合策划及发展办公室（JPDO）也考虑了新航行计划在未来为中小型机场带来的益处，包括未列入OEP计划的15个拥堵大都市以及其他的公用通航机场。人们希望通过增加相对不很昂贵的新航行系统技术、程序以及基础设施的升级，使得机场更加安全、高效、有保障与便于出入。

机场运行的操作概念（CONOPS）：

机场运行的操作概念也是美国联合策划及发展办公室（JPDO）的研究课题之一。这项研究将描述出机场运行功能加入新航行系统的网络中心运行（NCO）环境后，提升的现况认知结果。关于机坪运行、场内维护与检修、除冰/防冰作业与跑道除雪、应急响应、机场指挥中心、安全与安保，以及资源管理方面的信息将全部加以整合，并得以使用。

政策争议：

长期的新航行系统计划的可行性中至关重要的一个因素就是联邦政府与地方政府对新提案的支持。联

POLICY DEBATE :

A critical component in the feasibility of long-term NextGen benefits is federal and local support for new initiatives. Two major areas of federal level policy are being debated at the JPDO that directly impact airports: a national policy on airport advocacy and a national policy on the role of the federal government in supporting national level system wide planning. The debate considers strategies for increasing the local, state, regional and federal support for preservation of the existing system infrastructure and enhancements to airport system capacity.

It is clear that the public's perception of their metropolitan airports as simply a local asset needs to be altered. This can happen through a coordinated effort between airport operators, users and government officials at all levels. All of these parties need to work together to educate the public and gain popular support for the idea that airports are a national asset and an economic driver for the local , regional and national economy.

To that end, the debate includes:

• Increasing the role of state, regional and metropolitan system plans for aligning local community needs with national aviation system interests;

• Increasing the role of the federal government, and, in particular, the FAA, in advocacy for airport preservation and capacity enhancements; and

• Changing to a more systematic funding approach, as well as changing legislation to allow the FAA to take a more prominent and proactive role in aviation system planning and airport development initiatives.

Certainly these are difficult issues to resolve and the JPDO has a long road ahead before these concepts and policies can be implemented by FAA. However, these ambitious far-term plans are critical for realizing a NextGen program that goes beyond air traffic modernization.

邦级别政策对美国联合策划及发展办公室（JPDO）的两大争议内容直接对机场造成了影响：一个拥护机场的全国性政策，与一个以联邦政府支持全国范围的系统广泛规划的全国性政策。这一争论涉及到增加地方、州、地区与联邦政府对支持保护现存基础设施系统并提高机场的系统容量的多项策略。

很明显地，公众认为他们所在大城市的机场只是地方资产的这一观念需要被改变了。这个结果可以通过包括机场营运者、使用者、各级政府官员共同协作努力而达成。各方通力合作来教育大众并使民众广泛的认同机场是国家的资产并可以推动地方、区域甚至国家经济的发展。

由此，争论包括：

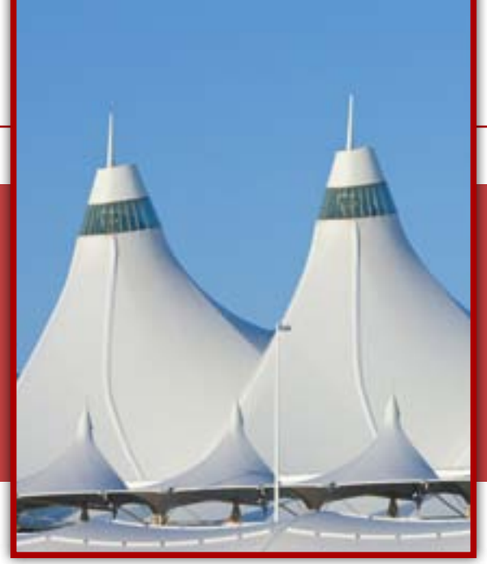
加强州、地区以及大城市系统规划来使得地方需求与国家航空系统的利益紧密结合。

加强联邦政府角色，尤其是美国联邦航空管理局（FAA），提倡机场保护与容量增加。

采用一个更加系统的融资方式，同时也可修改法律，使得美国联邦航空管理局（FAA）可以在航空系统规划与机场发展行动中扮演一个更为突出和前瞻性的角色。

当然以上都是需解决的困难课题，美国联合策划及发展办公室（JPDO）还需经过漫长的努力方可使得上述的观念及政策被美国联邦航空管理局（FAA）接受并实施。不管怎样，这些雄心勃勃的长远计划是至关重要的，正是这些计划使我们认识到新航行系统计划将引领空中交通的现代化进程。

黄昏下的成都双流机场



NextGen in the Near Term ENVIRONMENTAL IMPACTS OF NEXTGEN OPERATIONS

近期新航行计划 新航行系统运行对环境的影响

By: Bob Miller, Senior Vice President, Harris Miller Miller & Hason Inc.

文/Bob Miller，HMMH公司高级副总裁

CASE STUDY: DENVER INTERNATIONAL AIRPORT

In a recent presentation at the Transportation Research Board's Annual Meeting, Lourdes Maurice of FAA's Office of Environment and Energy acknowledged that one of the major challenges to implementing near-term NextGen will be meeting environmental review requirements, even for projects that provide a net environmental benefit. While consolidation of flights through RNAV and other advanced navigational procedures will reduce noise in most locations, it will also increase noise levels in some concentrated locations. This may require numerous NEPA reviews to assess the impacts from the consolidated flight tracks.

Denver International Airport's (DIA) recent work with FAA provides a good case study in how collaborative engagement between the FAA and an airport can result in improved procedures. DIA must comply with an Intergovernmental Agreement (IGA) between the City and County of Denver and Adams County that defines annual average Noise Exposure Performance Standards at 101 points northwest, west and southwest of DIA. Exceedance of these thresholds by more than two decibels in a year results in fines of $500,000 per occurrence.

The noise exposure levels must be computed with "ARTSMAP"®, which uses radar data to model the actual flight path and climb profile for every aircraft taking off or landing at the airport. Novel mitigation measures, developed with DIA staff, the FAA and major carriers, have been key to reducing multi-million dollar penalties over the 15 years that DIA has been operational.

FAA's first NextGen action at DIA is modification of DIA departure procedures to include RNAV "overlays". DIA and its consultants are continuing to meet with FAA, airlines and other stakeholders to fine-tune the procedures to minimize noise impacts over sensitive locations. The FAA expects to incorporate this analysis in its Environmental Assessment.

Looking ahead, ACI-NA has recommended that FAA engage a "Go-Team" that would include various FAA offices (e.g., ATO, AEE, ARP, AGC) to integrate environmental responsibility for implementing NextGen procedures. The experience at Denver shows that early and substantive involvement by the local ATO leadership is critical to effective implementation.

案例分析：丹佛国际机场

在最近的一次美国运输研究委员会（TRB）年会的演讲中，美国联邦航空管理局（FAA）环境与能源办公室的Lourdes Maurice先生提到目前实施近期新航行计划所面临的主要挑战之一就将是如何满足环境评估要求，甚至是那些可带来单纯环境效益的项目。那些采用区域导航（RNAV）和其他先进的导航程序的航班将在大多数区域降低噪音，但它们也将在某些集中的区域增加了噪声声级。这将需要大量的国家环境政策法（NEPA）来评估集中航线所造成的噪音影响。

丹佛国际机场（DIA）目前正与美国联邦航空管理局（FAA）合作研究一个案例，即如何让FAA与机场共同合作开发出改进程序。丹佛机场必须遵守由丹佛县市与亚当斯县签订的政府间协议（IGA），该协议规定丹佛机场西北、西、西南方向的年平均噪音暴露表现标准应为101点。一年内若超出该标准2分贝，则每次罚款500,000美元。

噪音暴露等级必须采用"ARTSMAP"®软件对雷达数据模拟机场内每次飞机起降的真实飞行航迹与爬升剖面加以计算而得出。由丹佛机场工作人员，FAA与主要航空承运人共同开发的这套奇特的降噪措施，正是丹佛机场运营在过去15年来有效地避免高达数百万美金罚款的关键。

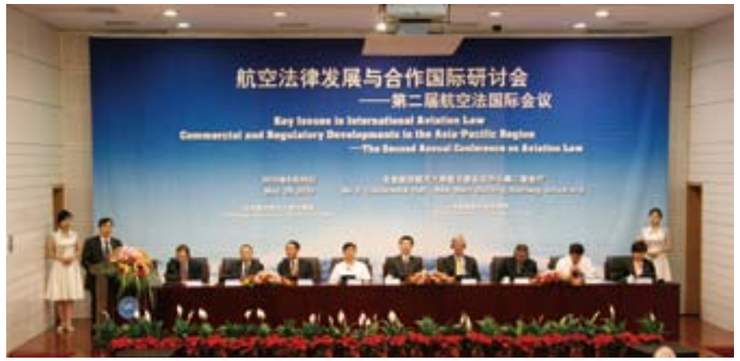
FAA在丹佛机场实施的最初的新航行计划修改了包括区域导航(RNAV)重叠在内的离场程序。丹佛机场及其顾问此后持续与FAA、航空公司以及其他相关利益者保持沟通，调整此程序以使其能够将噪声在敏感区域最小化。FAA希望将此项分析加入环境评估中。

着眼未来，国际机场协会北美分会（ACI–NA）建议FAA参与组建"Go–Team"团队，该团队将包含多个FAA办公室（例如ATO，AEE，ARP，AGC），他们将结合环保责任来实施新航行计划的程序。丹佛机场的经验表明当地ATO领导层及早实质性的参与对有效的实施新航行计划至关重要。

CAAC Updates

International Symposium on Aviation Law Development and Cooperation In Session

航空法律发展与合作国际研讨会召开



The International Symposium of Aviation Law Development and Cooperation co-sponsor by the Law School of Beihang University and DePaul University College of Law was held on May 26, 2010 in the Conference Center of Beihang's new main building. Ma Xin, deputy chief of ATMB(AIR TRAFFIC MANAGEMENT BUREAU) Li Jiangmin, Director-General of the Department of International Organizations and Conferences of CAAC,Zhang Hongying, Director General of CAAC-AAD, Jerold Friedland, Director of the Asian Legal Studies Institutes of DePaul University, and John Byerly, Deputy Assistant Secretary for Transportation Affairs and others totaling more than 80 specialists and representatives at home and abroad attended the opening ceremony as well as other academic exchange and discussion activities.

Attendees focus mainly around hot topics on international cooperation framework, international aviation industry trends, Asia-Pacific aviation industrial development and cooperation, the difficulties on legislation of China aviation system, general aviation business development, foreign aviation legislation and execution experience affecting China aviation legislation etc. and delivered theme presentations and elaborated explanations, which lead into in-depth discussions and opinion exchanges.

"We want to emphasize in the regulations of the Draft on 'Aviation Law' that every chinese citizen shares airspace right, such to express our determination to strengthen and improve the supervisions and managements on airspace and air transportations of China aviation industries," said Ma Zheng, deputy director-general of the Department of Policy and Regulation of CAAC.

Long Weiqiu, dean of the Law School of Beihang University told reporters that 'Aviation Laws' had finished asking for opinion drafts on January 18, 2010 and the investigative studies group will go to countries and places in Russia, European Union, United States etc. for on-site inspection in July.

5月26日，由北京航空航天大学法学院和美国迪堡大学法学院共同主办的航空法律发展与合作国际研讨会在北航新主楼会议中心召开。国家空管局副局长马欣，民用航空局(CAAC)国际司司长李江民、中国民用航空局(CAAC)航空器适航审定司司长张红鹰，美国迪堡大学亚洲法律研究中心主任Jerold Friedland、美国助理国务卿帮办John Byerly等80余位中外专家、代表参加了研讨会开幕式和各项学术交流研讨活动。

与会者主要围绕国际合作框架、国际航空业趋势、亚太航空产业发展与合作、中国航空系统立法难点、通用航空事业发展、国外航空立法与实践经验对中国航空立法的借鉴等热点问题作主题发言和阐述，并展开深入的讨论和交流。

"我们想在《航空法》草案总则部分写明每一位中国公民都享有空域权，借此表达对中国航空业空域管理和空中交通管制加强、改进的决心。"中国民用航空局（Civil Aviation Administration of China，简称"民航局"）政策法规司副司长马正说。

北京航空航天大学法学院院长龙卫球告诉记者，《航空法》在今年1月18日完成了征求意见稿，今年7月调研组将赴俄罗斯、欧盟、美国等国家、地区考察。

武汉天河机场
三期扩建工程建议获发改委批准

Phase 3 Expansion Project Proposalof Wuhan Tianhe Airport Got Approved

Hubei Wuhan Tienhe Airport phase 3 expansion construction project proposal got approved by National Development and Reform Commission on March 8, 2010. The main construction scope for phase 3 includes: a newly constructed 3,600 meters long, 60 meters wide Number 2 runway, 2 parallel taxiway of 3,600 meters long each, an apron for 54 aircrafts, a 350 thousand square meters Number 3 terminal building, and other related facilities that help productivity activities. The total investment for such project is 14.616 billions yuan.

2010年3月8日，湖北武汉天河机场三期扩建工程项目建议书获得国家发改委批准。本期主要建设规模：新建第二条跑道长3600米、宽60米，2条3600米长平行滑行道，54个机位的停机坪，35万平方米第三航站楼，配套建设其他辅助生产生活设施等。项目总投资146.16亿元。

Tangshan Airport Inspection Flight A Success Will Become the Third Civilian Airport in Hebei

唐山机场校飞成功将成河北第三个民航机场

The inspection aircraft of CAAC Flight Inspection Center landed steadily at the runway of Tangshan Sannuhe Airport. With all relative technical parameters meet the demands of Flight Inspection Rule, Tangshan Airport has passed the civil aviation inspection flight and has made one key step towards the opening for operation. Tangshan Sannuhe Airport will become the third civilian airport in Hebei Province.

As reported, Sannuhe Airport is located at FengRun District, 20 kilometers away from Central Tangshan City, a Class 4C civil regional airport with Boeing 737 and Airbus A320 series as the main operating airplanes. Seven primary routes from Tangshan to Shanghai, Guangzhou, Chengdu, Kunming, Changsha, Xian, Sanya and others including Shijiazhuang, Dalian, Qingdao and Harbin will be opened in the future.

中国民用航空飞行校验中心的校检飞机在唐山三女河机场跑道上平稳降落，相关技术参数均达《飞行校验规则》要求，这标志着该机场通过了民航飞行校验，为开航迈出了关键一步。唐山三女河机场通航后，将成为河北省第三个民航机场。

据悉，三女河机场坐落在唐山市丰润区，距唐山市中心区20公里，性质为民用支线机场，飞行等级为4C。适航机型以波音737、空中客车A320系列为主。该机场计划未来开通唐山至上海、广州、成都、昆明、长沙、西安、三亚等7条主航线及到石家庄、大连、青岛、哈尔滨等航线。

Lhasa Airport Flight Area Renovation and Auxiliary Project Start-up Fully

拉萨机场飞行区改造及配套工程全面启动

On April 1, 2010, the groundbreaking ceremony of the subsidiary work, the paving and reinforcement of base structures of Lhasa Airport's flight area renovation and auxiliary project, was held in Lhasa Gonggar Airport, signifying the overall startup of the Lhasa project. Prime leader and Project Commend Department personnel of CAAC Tibet Branch Office, the Supervision Unit staffs and construction unit staffs attended the ceremony. The duration of such reinforcement project would be 45 days, a total 23 million plus Yuan investment, and all the construction works would be done at nights to ensure no interruption or suspension of flights in Lhasa Airport, so it would not affect passengers entering-exiting Tibet during the construction period.

As an aviation hub in the region of Tibet, Lhasa Gonggar Airport undertakes more than 90% of business involving passenger and freight transportation entering and exiting Tibet.

4月1日，拉萨机场飞行区改造及配套工程子项之——道面基础灌浆补强工程开工仪式在拉萨贡嘎机场举行，标志着拉萨贡嘎机场飞行区改造及配套工程全部启动。民航西藏区局主要领导及工程指挥部门、监理单位和施工单位全体人员参加了开工仪式。此次补强工程工期45天，总投资2300多万元，工程采取夜间作业，确保了拉萨机场不停航施工，不会对进出藏旅客的出行造成任何影响。

拉萨机场作为西藏区内的航空枢纽，承担着进出藏航空客货运输90%以上的业务量。

XinJiang Turpan Airport Test Flight A Success

新疆吐鲁番机场试飞成功

On May 9, 2010, a Boeing B757-200 airplane operated by China Southern Airlines Xinjiang Branch Company that took-off from Urumqi International Airport had landed smoothly at Turpan Airport, marking the test flight as a perfect success.

As understood, test flights for the airport is an important task of the airport construction project, it is also a necessary segment before any civilian airport is put into actual operation.

After Turpan Airport is launched for operation, it serves as an important regional airport for the eastern Xinjiang area and an alternate landing airport closest to Urumqi.

5月9日，一架从乌鲁木齐国际机场起飞的南航新疆分公司的一架波音B757-200飞机平稳降落在吐鲁番机场，此举标志着吐鲁番机场试飞圆满成功。

据悉，机场试飞是机场建设工程的一项重要工作，也是民航机场投入使用前的必要环节。

据了解，吐鲁番机场投入使用后，既是新疆东部地区重要的支线机场，又可以成为离乌鲁木齐最近的备降机场。

Ningbo Lishe International Airport Will Have a 3-Fold Expansion

宁波栎社国际机场面积将扩大3倍

"The Complete Plan of Ningbo Lishe International Airport" has passed the group of experts' verification. The occupied areas of Ningbo Lishe Airport will then be expanded 3-folds of its original size, and in due time, the all-cargo flights will be opened.

According to the plan, the development of Ningbo Airport is set to be passenger and cargo concomitantly, but cargo mainly. Based on the classification of Ningbo City, at 2025, Ningbo Airport is assigned as Class 4E large airport, and at 2045, it is classified as Class 4E Airport as well as the Yangtze River Delta international air freight hub airport.

The passenger throughput of Ningbo Airport in 2009 reached 4.03 millions while the cargo-mail throughput was 68.7 thousand tons. Compared to the world class Ningbo Grand Harbour, Ningbo airport's cargo transportation development fell steps far behind. "Grand harbour, small airport" has been a bottle neck which Ningbo faced; plus the fact of the crowding airports in the surroundings: Zhoushan Airport in the east, Hangzhou Airport in the west, Wezhou Airport in the south and Shanghai Airport in the north, Ningbo Airport assumed the wrong positioning development strategy in which cargo transportation will become the airport's important role of future development.

Reporters saw from the plan that the total land usage area of the expanded Ningbo Airport will be 12 square kilometers, a 3-fold increase of the present area. At present, the passenger throughput of Ningbo Airport has brokethrough 4 million and the terminal building has maxed its capacity. For this, the airport has started the preliminary preparation works of the phase 3 expansion project, and plans to finish and submit to the National Development and Reform Commission this year the research on workable prospect of the project.

《宁波栎社国际机场总体规划》通过专家组审核。今后宁波栎社国际机场占地面积将整整扩大 3 倍，并将适时开通全货机航班。

根据规划，宁波机场的发展定位为客货并举，以货为主。根据宁波的城市定位，到2025年，宁波机场的定位为 4 E 级大型机场，而到2045年，该机场的定位则是4E级大型机场和长三角国际航空货运枢纽机场。

2009年，宁波栎社国际机场的旅客吞吐量达到403万人次，而货邮吞吐量仅为6.87万吨。相比世界级的宁波大海港，宁波空港的货运发展远远跟不上步伐。"大海港、小空港，一直是宁波面临的瓶颈，加之周边机场密集，东有舟山机场，西有杭州机场，南有温州机场，北有上海机场，为此宁波机场确立了错位发展战略，货运将成为该机场未来发展的重头戏。

记者从方案中看到，规划的机场总用地面积将达到12平方公里，这将是目前面积的3倍之多。目前，宁波的旅客量已经突破400万人次，航站楼已经处于饱和状态。为此，机场已启动三期扩建项目的前期准备工作，计划今年完成项目预可行性研究工作，并上报国家发改委。

New Approval Policy Introduced: Some Cities Approved for Registration Change

航线时刻审批新规出台：部分城市核准改登记

From now on, for all airline companies, except for the flight operation license and flight schedules of the four airports in Beijing, Shanghai (Hongqiao & Pudong) and Guangzhou that required CAAC's approval to operate, newly added flights in other airports need only registration through the regional administration of CAAC. Such newest policies were posted yesterday on the official CAAC website titled "About Further Reform on Domestic Flight Operation Permit and Flight Management Method".

The method pointed out that in order to better improve the managements of flight rights, flight routes and flight schedules, CAAC will implement tactful rules like decentralize its administrative authorities to emphasize on supervision in process administration, and delegate different responsibilities to various departments. Category and stepwise management are implemented in the management of flight licenses and schedules.

Category management means flight licenses and flight schedules involving the four airports in Beijing, Shanghai (Hungqiao & Pudong) and Guangzhou are subjected to approval/registration process. Flight licenses and flight schedules for other airports as well as freight transports are subjected to registration only.

对于航空公司来说，今后除了北京、上海（虹桥/浦东）、广州三大城市四个机场的航线经营许可和航班需要中国民用航空局（Civil Aviation Administration of China，简称"民航局"）核准审批外，其他新增航线只需要经过地方民航局的登记管理。这是昨天国家民航局网站上公布的《关于进一步改革国内航线经营许可和航班管理的办法》（简称"办法"）中的最新规定。

办法指出，为进一步做好航权航班和时刻管理，在国内航线航班管理中进一步实行"简政放权、分级管理、职责下沉、重在监管"的管理方式，新办法在航线经营许可和航班管理方面，实施分类和分级管理。

分类管理，即涉及北京、上海（虹桥/浦东）、广州三大城市四个机场的航线经营许可和航班为核准/登记管理；其他航线经营许可和航班为登记管理；货运航线经营许可和航班为登记管理。

Capital International Airport Ranked Fourth of the Global Best Service Airports

全球最佳服务机场：首都国际机场升至第四位

The newest annual survey report on global airports' service quality indicated that, in the opinion of passengers, Asia airports' quality of service ranked the top five. Among them, Incheon International Airport of Korea has ranked first for five consecutive years, Singapore Changi International Airport being second, Hong Kong International Airport as the third and Beijing Capital International Airport rises to the fourth this year.

Headquartered in Geneva, the International Airport Association released every year a survey report on global airport service quality which passengers selected the best airport of their choice. Besides Incheon Airport being the best for the fifth times consecutively, Changi and Hong Kong International Airports also keep their second and third best respectively since last year's ranking. Beijing Capital International Airport has impressively replaced Nagoya Chubu Centrair International Airport of Japan as the fourth best, and India Gandhi International Airport ranks fifth replacing Halifax Airport of Canada.

最新年度的全球机场服务质量调查报告显示，在旅客心目中，亚洲机场的服务质素排在全球前五位，其中韩国仁川国际机场更连续五年蝉联榜首，新加坡樟宜国际机场位居亚军，香港国际机场排第三位，而北京首都国际机场今次跃升至第四位。

总部设于日内瓦的国际机场协会每年都发表全球机场服务质量调查报告，由旅客选出心目中的最佳机场。除了仁川机场五连冠外，樟宜和香港国际机场排名亦连续第二年分列次席及季军。北京首都国际机场首次打入第四位，令人刮目相看；排第五位的是印度甘地国际机场。中印两个机场分别取代日本名古屋国际机场和加拿大哈利法斯机场的位置。

Erenhot Saiwusu International Airport Officially Opened on April 1

二连浩特机场4月1日正式通航运营

Subsequent to passing the flight proofing test and having a successful test flight, Erenhot Saiwusu International Airport officially opened its regular flight routes to HuHeHaoTe and Beijing on April 1 and 2, 2010 respectively. The opening of these two routes marks the official operation of Erenhot Airport.

Being the 10th regional airport of Inner Mongolia Aviation Group Company (IMA), Erenhot Airport adopts the operational tactics of "Model Aviation Company", which "model" means: non-registered aviation company, not purchasing aircrafts, not following the real operational structure of enterprise's manpower and lawful management, but rely upon long-term airplane rentals from airliners to carry out flights among each of IMA's regional airports. Model aviation company can greatly lower the risk for airline company running regional services, and substantially reach the win-win goal between the airline company and the airport.

Erenhot is the closest land port of entry from Beijing Capital, and a historical important trade route of our nation's north. The opening of airport's flight routes not only provides convenient transportation for the frequent commercial trades, it also helps in a fast and convenient fashion the far away guests coming to Erenhot to tour the prairie, to view the Gate of Capital, and to visit the Museum of Dinosaurs.

二连浩特机场继通过飞行校验和成功试飞后，4月1日正式开通了二连浩特至呼和浩特定期航线，于4月2日开通二连浩特至北京定期航线。这两条航线的开通，标志着往二连机场正式通航运营。

二连浩特机场作为内蒙古民航机场集团公司的第十个支线机场，采用“模拟航空公司”的运营方式，所谓“模拟”是指：不注册航空公司，不购买飞机，不按照真正的企业法人治理结构来运作，依靠长期租赁航空公司的飞机执行各支线机场之间的航线。模拟航空公司可极大地降低航空公司经营支线的风险，实现机场和航空公司共赢的目标。

二连浩特是距首都北京最近的边境陆路口岸，历来是我国北方的通商要道，机场航线的开通，不仅为频繁的商贸往来提供了运输便利，也便捷了远方的客人来二连浩特游草原、览国门和参观恐龙博物馆。

Qinhuangdao Beidaihe Airport Construction Begins

秦皇岛北戴河机场开工建设

Approved by CAAC, Qinhuangdao City plans to start building the civil airport before May 1, 2010, and named it as Qinhuangdao Beidaihe Airport. At present, the planning design proposal has been confirmed, and the preparation stage of the construction project has started.

Qinhuangdao Beidaihe Airport is a regional airport for tourism approved by the State Council and the Central Military Commission on July 21, 2007. Located at Changli County of Qinhuangdao City, the total investment of the new Airport is 487 million Yuan, and expects to be completed and put into service in 2011.

Qinhuangdao is a famous "Summer Resort". After the completion of Beidaihe Airport, it can satisfy the usage requirements of many model types of civilian aircrafts, and it will mainly serve the tourists, the businessmen, and the politicians traveling as well as the cargo transporting between Qinhuangdao and various destinations nationwide.

经中国民用航空局批准，秦皇岛市计划5月1日前开工建设民航机场，并命名为“秦皇岛北戴河机场”。目前，民航机场项目规划设计方案已确定，正进入工程建设的准备阶段。

秦皇岛北戴河机场为旅游支线机场，2007年7月21日获国务院、中央军委批准立项。位于秦皇岛市昌黎县晒甲坨村南，总投资4.87亿元，计划2011年建成投入使用。

秦皇岛是著名的“夏都”，机场建成后，将主要承担秦皇岛与全国各地之间的旅游、商务、政务等人员的往来和货邮运输任务，可满足多种民航机型的使用要求。

世界最大客机
通过我国航空器运营符合性评审

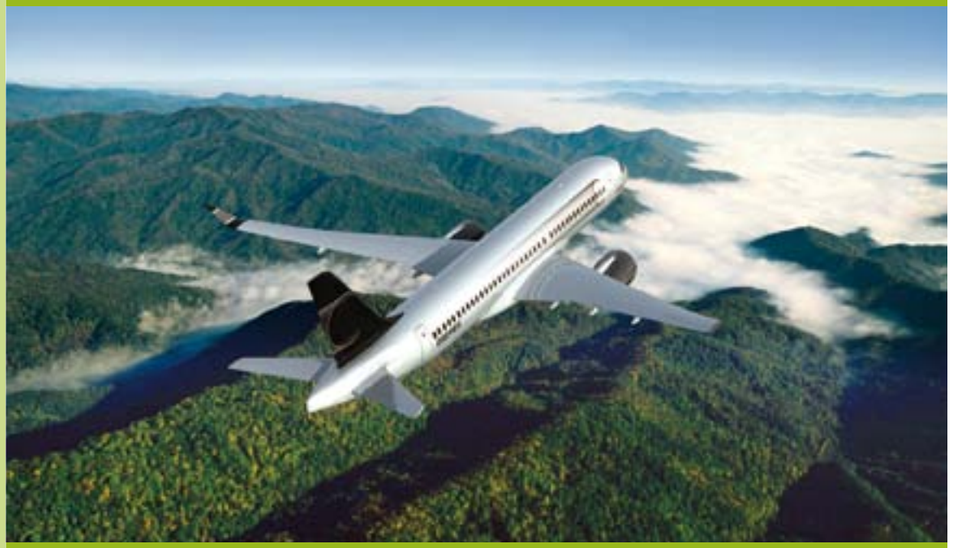
World's Largest Passenger Aircraft Passed Our Nation's Operational Qualification Evaluation

On March 25, 2010 in Beijing, Aircraft Evaluation Group of CAAC has awarded Airbus S.A.S. a final report of A380 Aircraft Operational Qualification Evaluation, confirming that Airbus A380 aircraft totally conforms to the operational requirements of China Civil Aviation Regulations. Such evaluation report is an instructive document used by local administrative branches of CAAC for granting airline companies the permission to operate A380 aircrafts. This is another step forward to create better conditions for A380 aircraft to launch operation in China after its Model recognition awarded by CAAC on December 2009.

中国民用航空局航空器评审小组3月25日在北京向空中客车公司（Airbus S.A.S.）颁发A380飞机运营符合性最终评审报告，确认空中客车A380飞机完全符合中国民用航空规章（CCAR）的运营要求。该评审报告是中国民航局各地区管理局用于批准航空公司运营A380飞机的指导性文件。这是继A380飞机于2009年12月获得中国民航局型号认可之后，为A380飞机在中国投入运营进一步创造了条件。

Commercial Aviation News

Commercial Aviation News



SAC and Canada will jointly Produce the C-Series Aircraft

沈飞将与加拿大合作生产C系列飞机

The C-Series aircraft project company---Shenyang SAC International Commercial Aircraft Ltd. held an opening ceremony in Shenyang on May 31. The company is funded jointly by AVIC (Shenyang) Investment Management Limited of Aviation Industry Corporation of China, and Shenyang Darui Investment Limited of the People's Government of Shenyang with a registered fund of RMB 1.211 billion.

The C-Series project is a risk-cooperation project officially signed at the Famborough International Airshow on July 15, 2008 by SAC International Commercial Aircraft Ltd. and Bombardier Canada. It is the first time for China to participate in a joint project as a research-manufacturing partner. According to the contract signed by both parties, SAC Ltd. is responsible for design, manufacture, assemble, related trial test and product support on three parts of the CS100 and CS300 models. The parts are: the forward cabin, the tail cone and the cabin doors including two of each of the cargo hold, the passenger boarding, the service and the emergency exit. SAC Ltd. will also support the works needed for obtaining the aircraft's airworthiness certificate. The first complete C-Series aircraft will be delivered for operation at the end of 2013.

C系列飞机项目公司——沈阳沈飞国际商用飞机有限公司，31日在沈阳举行揭牌仪式。该公司由中国航空工业集团公司的 投资平台——中航(沈阳)投资管理有限公司、沈阳市政府的投资平台——沈阳达锐投资有限公司共同出资，注册资金12.11亿元人民币。

C系列项目是沈飞公司与加拿大庞巴迪公司于2008年7月15日在范堡罗航展上正式签订的风险合作项目，是中国第一次以研制伙伴的身份进行的合作项目。根据双方签订的合同，沈飞公司承担CS100和CS300两个机型的前中机身、尾锥和舱门(共8个，其中货舱门、登机门、服务门、应急门各两个) 共3个工作包的设计、制造、装配、相应的试验和售后服务等工作，并支持飞机的适航取证工作。此项目将于2013年底进行首架交付运营。

Five Airports in the Pearl River Delta Signed a Memorandum of Understanding in Macau

珠三角五大机场在澳门签署合作备忘录

The Presidents Conference of the Five Major Airports in the Pearl River Delta was held in Macau on April 13, 2010. Airport representatives from Guangzhou, Hong Kong, Shenzhen, Macau and Zhuhai signed a memorandum on "Continual Implementation of Pearl River Delta's Reform Development Plan Outline" focusing on enhancing mutual benefits in businesses, programs and infrastructures. New breakthrough has accomplished: under the cooperation framework among Guangdong, Hong Kong and Macau, the development plans for all five major airports will be adjusted accordingly.

The main focus of the conference was on development plans over the next five years as well as the development conditions on continued cooperation among the five airports. Discussion topics included spatial development of the Pearl River Delta region, airport professional training, importance of government supports for airports, relationships between civil aviation transportation and regional economic development, and implementation of combined sea-land-air transportation within the Pearl River Delta region.

4月13日，珠三角五大机场主席会议在澳门召开，广州、香港、深圳、澳门和珠海五地机场负责人就进一步提升彼此商务、规划与基建等方面合作签署了《大珠三角地区五机场持续落实＜珠江三角洲改革发展规划纲要＞主席会议备忘录》。会议取得了新突破：在粤港澳合作框架下，相应调整五大机场的发展规划。

会议内容主要研究未来五年的发展规划，以及五大机场之间的继续合作发展情况等，议题包括珠三角地区空域拓展、机场专业人员培训、政府对机场扶持的重要性、民航运输与区域经济发展的关系，实现珠三角地区海陆空综合交通联运等。

Regional Passenger Aircraft Received First Airworthiness Review from US Entering into International Threshold is Hopeful

支线客机首接美适航审查 有望迈进国际门槛

Zhang Qingwei, Chairman of the Board of Commercial Aircraft Corporation of China, Ltd. revealed in the opening ceremony of Beijing Overseas Talents and Innovation Base that the domestic-manufactured new regional aircraft ARJ21 is being fully examined by CAAC (Civil Aviation Administration of China) and FAA (Federal Aviation Administration of USA) conducting the joint airworthiness review. This is also the first time for a domestic-made aircraft to receive airworthiness review by FAA. It will help pave the path for ARJ21 to move out of China and open up overseas markets if certification can be obtained successfully.

中国商用飞机有限责任公司（Commercial Aircraft Corporation of China,Ltd.，简称“中国商飞”）董事长张庆伟在北京海外人才创新创业基地开工仪式上透露，国产新支线客机ARJ21正全面接受中国民用航空局（Civil Aviation Administration of China，简称“民航局”）和美国联邦航空局（Federal Aviation Administration，简称“FAA”）的联合适航审查，这也是国产客机首次接受FAA适航审查，如能顺利取证，将为ARJ21走出国门开拓海外市场铺平道路。

Full Implementation of the Regional Navigation Technology at Guangzhou Baiyun International Airport

广州白云机场全面实施区域导航技术

Reporter learned on April 2, 2010 from Civil Aviation South Central Authority that Baiyun Airport will become the first among nation's big airports to adopt the use of regional satellite navigation technology (RNAV) starting April 8, 2010. As introduced, the utilization of RNAV will shorten an aircraft's waiting time interval from 6 to 4 minutes at landings.

As reported, performance based navigation (PBN) including regional navigation has become one of our nation's core technology in constructing a new generation of air transportation system. According to CAAC PBN implementation plan, regional navigation for arrivals and departures will take place gradually in all busy international airport terminals. In order to speed up the process of PBN implementation and reduce the risk of mixed runs, on October 20, 2009, CAAC, South Central Authority and related departments researched jointly and decided to set Guangzhou Baiyun Airport as pilot point for fully implementing the regional navigation flight process. On January 1, 2010, test runs of RNAV flight process kicked off at Baiyun, and execution rate reached above 98.01% during the 3 months trial transition period.

Continues after Baiyun Airport, Shenzhen Baoan Airport, Wuhan Tianhe Airport RNAV and Sanya Fenghuang RNP will also be completed in succession or started to implement within the year.

记者14月2日从民航中南地区管理局获悉，从4月8日起白云机场将成为国内大型机场中率先启用区域卫星导航技术（RNAV）的机场。据介绍，使用该技术后，飞机在降落时等候的时间间隔将由6分钟缩短至4分钟。

据悉，包括区域导航在内的基于性能的导航（PBN）已成为我国建设新一代航空运输系统的核心技术之一。根据中国民航PBN实施规划，将逐步在国际繁忙机场终端区实施区域导航进离场。为加快推进PBN实施，减少混合运行的风险，2009年10月20日，民航局、中南管理局和相关单位共同研究，决定在广州白云机场作为试点全面实施区域导航飞行程序。2010年1月1日，白云机场区域导飞行程序启动试运行。在3个多月的试运行过渡期内，白云机场区域导航执行率达到98.01%以上。

继白云机场之后，深圳宝安机场、武汉天河机场区域导航和三亚凤凰RNP年内也将陆续完成或启动实施计划。

Wuxi Airport Opened the First International (Regional) Freight Charter Plane Route

无锡机场开通首条国际（地区）货运包机航线

At the 1st anniversary of the opened Wuxi-Osaka international passenger flight route, Wuxi Shuofang International Airport (Wuxi Airport) has made another significantly important step towards internationalizing development: in the afternoon of April 10, 2010, the all-cargo maiden flight for Wuxi-Hong Kong became a success. This signified the official beginning of Wuxi Airport's international (regional) air cargo transportation business.

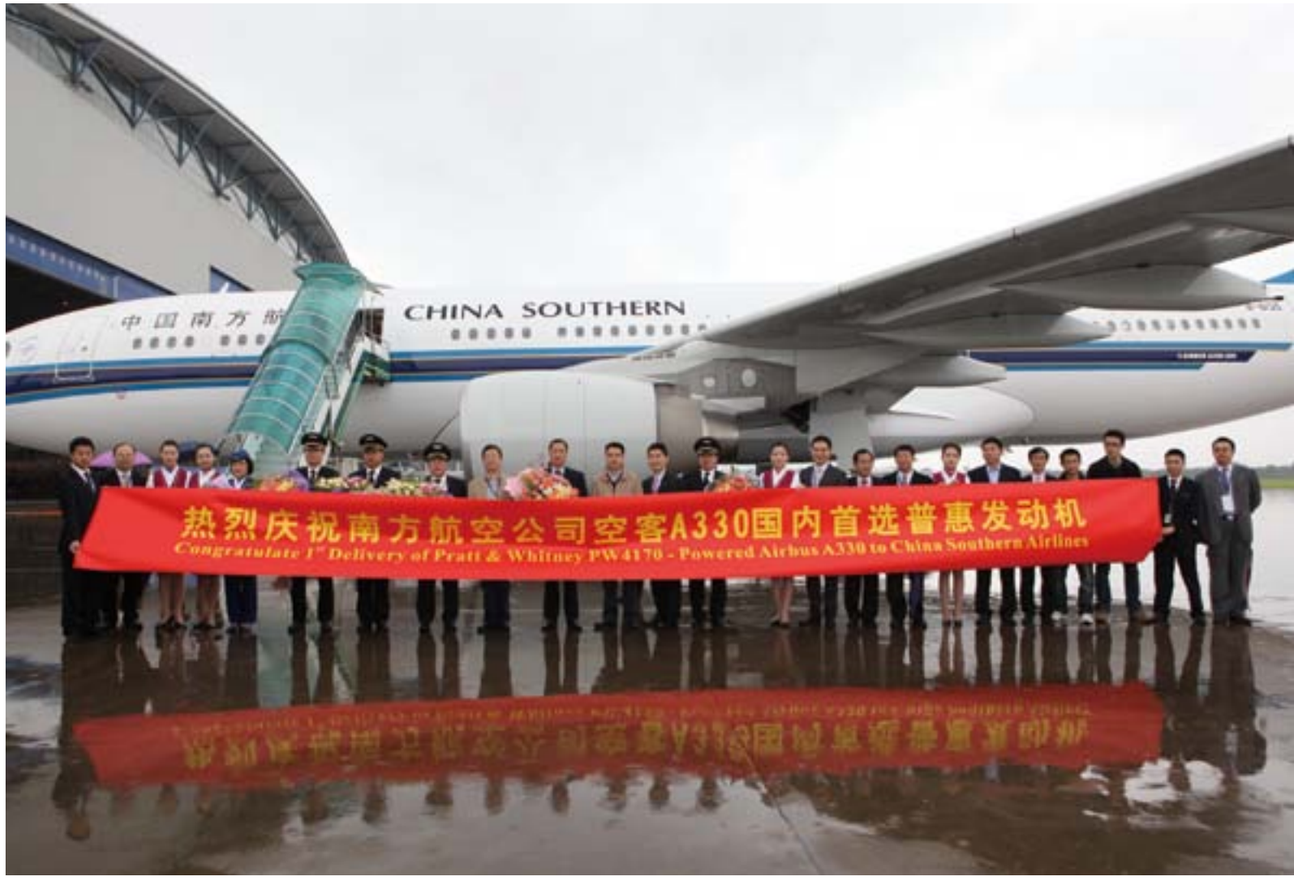
As results from investigation and study of relative aspects indicated, the nearing of Shanghai World Expo has brought forth a tremendous pressure on custom clearance and material distribution of import-export goods on Wuxi and its surrounding areas.

As informed, Wuxi-Hong Kong all-cargo flight uses B737-300F aircraft that can carry 14.5 tons of goods, operates by Shenzhen Donghai Airlines Co., Ltd. bearing flight number J56267/6268 with one flight on every Wednesdays and Saturdays.

在开通无锡——大阪国际客运航线满一周年之际，无锡硕放国际机场（简称"无锡机场"）在向国际化发展的道路上又迈出了意义非凡的重要一步：4月10日下午，无锡——香港全货机航班成功首航！这标志着无锡机场国际（地区）航空货运业务正式启动。

有关方面调研结果显示，日益临近的上海世博会对无锡及周边地区进出口货物带来了很大的通关和物流压力。

据了解，无锡——香港全货机航班采用B737-300F机型，可载货14.5吨，由东海航空执飞，航班号为J56267/6268，每周三、六各一班。



China Southern Airlines' First Pratt & Whitney PW4170 Powered A330 Arrived in Guangzhou

南航首架普惠PW4170发动机A330抵达广州

China Southern Airlines' first Airbus A330 powered by Pratt & Whitney Company's PW4170 engine arrived smoothly in Guangzhou on April 2, 2010, which marks that Airbus A330 aircrafts utilizing powering engine from Pratt & Whitney entered China officially. Early on the 2009 Paris Air Show, Southern Airlines signed a contract total $590 millions US with Pratt & Whitney for using PW4000Advantage70 as the powering engine for 10 Airbus A330. The one arrived in GZ is the first of them.

Pratt & Whitney Engine Company is one of the three most famous engine manufacturer worldwide. Using PW4170 engine in Airbus A330 aircraft will better fulfill Southern Airlines' various demand on seats and cabin layouts, thus improves passenger comfort and satisfaction.

4月2日，南航第一架选用普惠公司PW4170发动机的空客A330顺利抵达广州，这标志着由普惠公司发动机作为动力的空客A330飞机正式进入中国。早在2009年巴黎航展上，南航就与普惠公司签订了10架空客A330选用PW4000Advantage70发动机的合约，合约价值5.9亿美元，今天抵达的空客A330飞机就是合约中的首架。

普惠发动机公司是世界三大著名发动机制造商之一，采用普惠A330PW4170发动机的空客A330飞机，将能更好地满足南航对客舱座位数和客舱布局的各种需求，从而提升乘客舒适性和满意度。

Civil Aviation University of China Achieved Flight English Training Qualification from International Civil Aviation Organization

中国民航大学取得国际民航组织飞行英语培训资格

The Flight Standards Division of CAAC has approved and confirmed that the Civil Aviation University of China complies with the China Civil Aviation Regulation 61 Notification AC-61-5R1 concerning the qualification required for establishing flight English training institutions, and equipped with ICAO (International Civil Aviation Organization) qualifications for flight English training, thus awarded the University the Certificate of Flight English Training Institute.

To ensure our serving pilots are familiar with the Convention on International Civil Aviation and the relevant provisions of CAAC, and meet the English proficiency requirements of pilots flying international routes, the Civil Aviation University established ICAO English Training Center dedicated to ICAO English training. Experts are organized to develop related learning materials and testing questions, and all the preparatory works are implemented to ensure high quality training.

经中国民用航空局飞行标准司审定，确认中国民航大学符合中国民用航空规章第61部咨询通告AC－61－5R1关于飞行英语培训机构的资格要求，具备国际民航组织（ICAO）飞行英语培训资格，民航局飞标司向中国民航大学颁发飞行英语培训机构证书。

为确保我国在职飞行人员熟悉国际民航公约和民航局的相关规定，满足国际航线对飞行人员英语水平的要求，中国民航大学重视开展ICAO英语培训工作，为此专门成立ICAO英语培训中心，并组织专家开发了相关学习教材和测试题库，认真落实各项准备工作，确保培训高质量开展。

The Biggest Freighter B777 Comes to China

中货航引进首架全球最大B777货机

On February 28th, the first Boeing freighter 777-200LRF/B-2076 introduced by China Cargo Airlines, a subsidiary of Eastern Airlines, landed at Shanghai Pudong International Airport, and the maiden flight CK267/8 Pudong-Luxembourg-Pudong will officially kick off on March 2nd. Eastern Airlines is the second domestic airlines, after Southern Airlines, that introduced the world's biggest and newest long-haul aircraft with two engines.

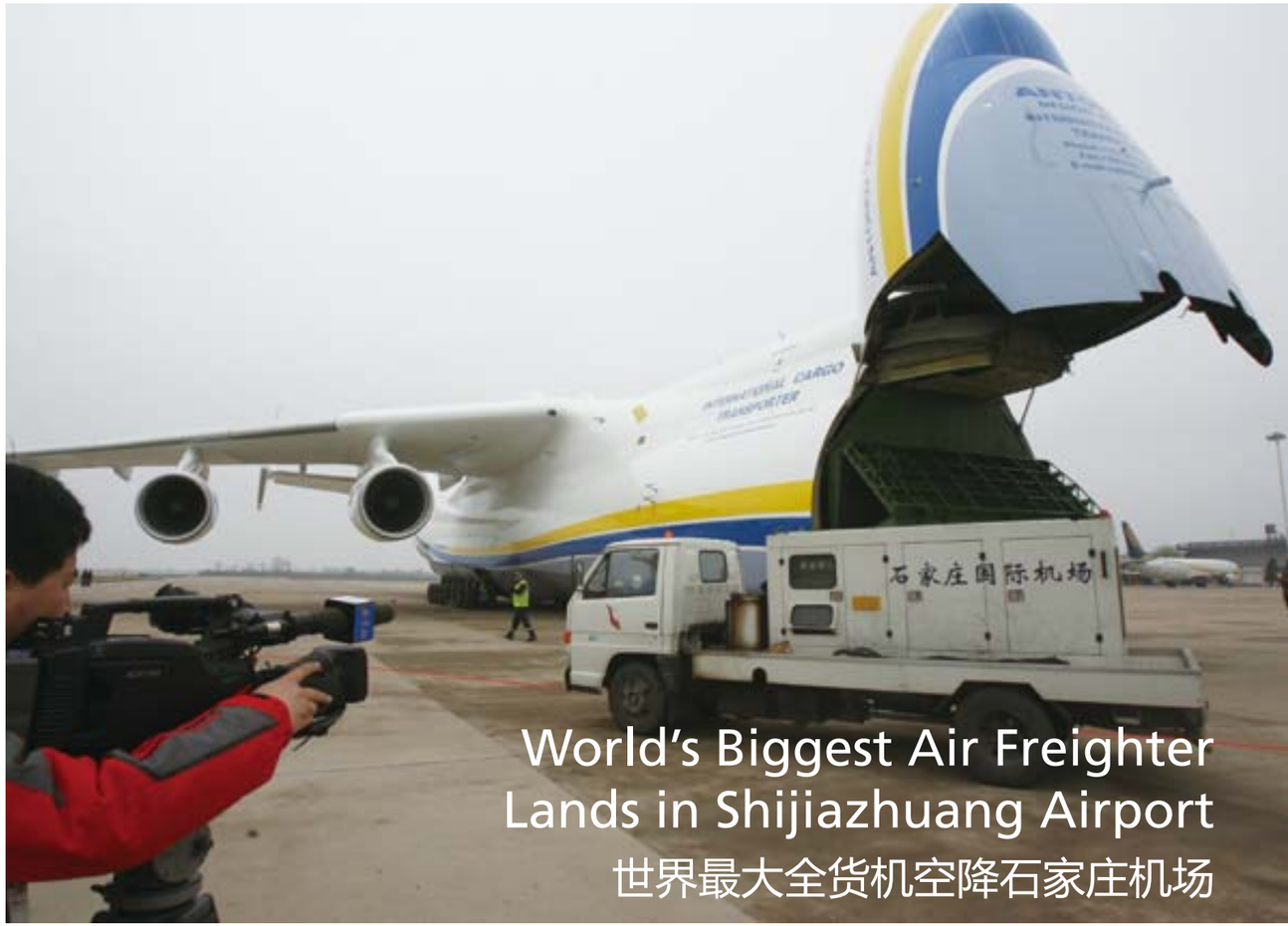
At present, China Cargo Airlines owns six MD11s, two B747s and three A300s. After bringing in the first Boeing 777, another three will join in the freighter fleet before this August. And in the upcoming two years, B777 will take over MD11 gradually in a bid to fully upgrade the freighter fleet to be composed of B777 and B747-400 freighters mainly.

At the same time, China Cargo Airlines operates the cargo service undertaken by 331 passenger planes and runs 27 solely privileged cargo-transporting routes with 151 cargo transporting destinations.

2月28日，东航旗下的货运航空公司中货航引进的首架波音777－200LRF/B－2076号全货机飞抵上海浦东国际机场，并将于3月2日正式首航CK267/8上海浦东－卢森堡－上海浦东航班。这是继南航之后国内第二家航空公司引进这一世界上最新最大的远程双引擎货机。

目前，中货航共拥有6架MD11、2架B747和3架A300货机，继引进此架波音777货机之后，今年8月前还将再引进3架，并在随后的两年里，逐步用B777货机替代MD11货机，实现机队的全面升级，形成以B777货机、B747－400货机为主力机型的货运机队。

同时，中货航经营着新东航331架客机腹舱的货运业务，而且还拥有27条自身的专线货运航线，货运通航点达到了151个。



World's Biggest Air Freighter Lands in Shijiazhuang Airport

世界最大全货机空降石家庄机场

On April 11, 2010, the world's largest deadweight all-cargo freighter An-225 carrying 145 tons device successfully landed at Shijiazhuang International Airport. This is an important step for establishing Shijiazhuang Airport as the 2nd airport having shunt the passenger and cargo distribution enroute Beijing and Tianjin, and it is the 2nd time since 2006 for such freighter to land here.

An-225 large freighter operated by Antonov Airlines of Ukraine is presently the world's largest 6 turbofan heavy transport aircraft as well as the world's only largest payload all-cargo plane. With a wingspan of 88.40 meters, aircraft length of 84 meters and height of 18.2 meters, the freighter has a maximum carrying capacity of 250 tons and the gross takeoff weight is 600 tons.

The opened regular flights of An-225 freighter has conveniently bridged our province with the European countries on international cargo transportation. After the official opening of international air cargo transit business on March 30, 2010, this represents another important progress for Shijiazhuang Airport that will significantly enhance its development level and speed in aspect of freight transportation.

4月11日，世界载重量最大的全货机——安－225运输机载着145吨大型设备成功降落石家庄国际机场，这是石家庄机场打造京津客货分流“第二机场”的重要举措，也是该货机自2006年后第二次在石家庄机场起降。

安－225大型货机由乌克兰安东诺夫航空公司执飞，为目前世界上最大的6发涡扇重型运输机，也是世界上载重量最大的全货机，全球只生产了一架。该机飞机翼展88.40米，机长84米，机高18.2米，最多可装载250吨货物，起飞全重达600吨。

安－225货机定期航班的开通为我省与欧洲国家的国际货运搭建了便捷桥梁，是石家庄机场继3月30日正式开通国际空运转关业务后在货运业务方面取得的又一重要进展，将极大提升石家庄机场国际货运业务的发展水平和速度。