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山寨版空管设备安全吗？？？

伊春空难事件打破了航空界多年来难能可贵的“零事故”纪录，对整个航空界来说都是一记警钟，大意不得。航空由于产业的特殊性，使得安全的工作成为唯一的考量，远远超过利润的规划与追求。航空安全的保障不应止于“应该没问题”，而是追求“绝对没问题”的结果。

由于航空事故调查属于非常专业严谨的工作，按国际惯例需要较长的时间才能完成，这就给一般社会大众许多臆测的空间和机会。

中国航空的发展自八五以来快速成长，尤其是基础建设的部分。从最早期日元贷款到引进外资，大量国际航空设备陆续加入中国民航的服务阵容，尤其是空中交通管制设备，包括雷达通信等导航设施。

由于这些进口装备成本与关税较高，许多国内机构与企业开始在进口设备的技术基础上加以改良与优化，正式进入供应的行列。这些设备就如同国内山寨版的手机，屏幕更大，内存更多，功能更强，价格更低廉。然而这些山寨手机却都不能超越原厂正版手机的销量和服务品质，每每等待原厂正牌产品出现新型号和新功能后再以优化的方式再次加入市场竞争。

我们对这些山寨手机厂商的生产制造能力完全不需要怀疑，但我们很明白这些山寨手机的公司不是传统通信技术起家的，对于传统通信的用途，理论，实践知之甚少。在正常的运行环境下这些山寨手机运作自如表现不凡，但在具有挑战性的环境，任务和操作下，这些山寨版的手机能否有原厂正牌产品的表现和效果，那就是一个很大的疑问了。

山寨版的空管设备到底是“应该没问题”，还是“绝对没问题”，你知道吗？？？

Francis Chao 赵嘉国
Publisher 发行人

Aviation Headlines

President Hu Visits Bombardier Aircraft Manufacturing Facility

胡锦涛参观庞巴迪飞机制造厂

President Hu Jintao visited the Bombardier Aircraft Manufacturing Facility in Toronto, Canada on June 26, 2010.

Accompanied by Peter Van Loan, Minister of International Trade of Canada, and Dalton McGuinty, Premier of the Canadian Province of Ontario, President Hu arrived before noon by car at the Bombardier facility located at the north of Toronto, and received a heart warming welcome from Laurent Beaudoin, President & CEO of Bombardier Inc., and others.

President Hu listened to the introductions made by a representative of Bombardier on its general scope and cooperation status with China, and watched a video. He also viewed the exhibits of Q400 passenger aircraft, and boarded the Q400 NextGen turboprop airliner and a Global Express XRS business jet.

Laurent Beaudoin, President & CEO of Bombardier Inc. said that President Hu's visit had an important meaning, and he sincerely looked forward to promoting with China the mutual trust, mutual benefit win-win cooperating relationship to enhance the healthy enduring development relationship between China and Canada.

中国国家主席胡锦涛26日在加拿大多伦多参观庞巴迪飞机制造厂。

当天上午，胡锦涛在加拿大国际贸易部长范洛安和安大略省省长麦金蒂的陪同下，乘车来到位于多伦多市以北的庞巴迪飞机制造厂，受到庞巴迪公司总裁兼首席执行官博杜安等的热情迎接。

胡锦涛听取了庞巴迪公司有关负责人介绍该公司总体情况及其对华合作情况，并观看视频资料。他还参观了Q400型客机大部件展示，并分别登上Q400型飞机和新型全球快车5000型飞机参观。

庞巴迪公司总裁兼首席执行官博杜安表示，胡锦涛主席来这里参观具有重要意义，衷心期待同中方共同推进相互信任、互利共赢的合作关系，促进加中两国关系健康持久发展。

Modernized Establishment of Military Transportation Promoted by Civil Aviation Made New Steps

民航推动军交运输现代化建设迈出新步伐

"Intensify civil-military harmony, speed up promoting modernized establishment of military transportation" work conference was held in Beijing on June 21, 2010. Representatives from civil aviation systems were invited to attend. In the morning, attendees listened to the working reports delivered by Qin Yinhe, Vice-Minister of General Logistics Department, and Zhao Zhanping, Minister of Transportation Department of Military & Director of Traffic Combat Readiness Office about intensified civil-military harmony that was mentioned in the report, the Central Governmnet has suggested in putting social-economic development with national defense and military construction closely united, so that economic planning was adjusted to incorporate perfectly with national defense planning; such strategic plan deeply moved the majority of attendees. On methods to raise the modernization level of military aviation transportation, representatives from civil aviation systems felt greatly encouraged as the report stated that civil aviation development has to incorporate into relative development strategies of national and local governments, both long-term and annual plannings, to establish a working format as the same step planning, unity construction and compromise development.

Wang Ronghua, Director General of Department of Air Transportation of CAAC, made a speech saying that civil aviation industry development was superbly fast as it went with the current of social-economic development of China. The actual transporting power has strengthen, the transport volume has gotten bigger, but the problems that civil aviation development faces are getting more also, namely 80% of China aviation transporting tasks can only be completed within a limited 20% aero-space. Low aero-space under strict control, general aviation development is limited, and at remoted border areas and under-developed transportation areas, the emergency response is still weak due to the lack of infrastructures. These problems not only become the bottlenecks of limiting civil aviation development, it also directly affects the civil-military harmony and military air transportation modernization.

On issue of sharing the air-spatial resources, Wang Ronghua believed in ordinary days, we should insist to abide mainly to economic establishment of the nation, but to meet the demands necessary for warfare at war time. Being the important component of our nation's military transportation system, civil aviation should also utilize the resources of the nation's transportation fully to put sharing resources a reality and to make certain that civil aviation "serves ordinarily, responses to emergencies at needy times and goes to fight at war times", that is to serve its special functions to the greatest extend.

Wang Ronghua suggested that the military could consider in strengthening the pre-condition resources establishment. He also suggested to incorporate the layout planning of all civil aviation airports into the developmental planning of our nation's combined transportation industry, to set up civilian-military cooperation mechanism on airport construction and operation protection so that civil aviation could be fully functional in military transportation system.

6月21日，"深化军民融合、加快推进军交运输现代化建设"工作会议在北京召开，民航系统代表也受邀参加。当天上午，与会代表首先共同听取了总后勤部副部长秦银河和军交运输部部长、国家交通战备办公室主任赵占平的工作报告。报告中提到的关于深化军民融合，中央已经提出从顶层设计上把经济社会发展同国防和军队建设衔接统一起来，把经济布局调整与国防布局完善结合起来的战略部署，令广大与会代表感受深刻；在提及如何提高航空军交运输现代化水平时报告指出，要把民航发展融入到国家和地方政府的相关发展战略、长远规划和年度计划中，形成同步规划、一体建设、协调发展的工作格局，更让民航系统代表倍受鼓舞。

民航局运输司司长王荣华作了发言，随着国家经济社会的发展，民航行业发展也突飞猛进，实际运输能力增强，运输量越来越大，但民航发展面临的问题也越来越多，具体表现为，中国80%航空运输任务只能在20%的有限空域完成；低空空域实施严格管制，通用航空发展有限；在偏远边疆、交通不便地区，由于基础设施建设不足，航空的应急能力还不是太强。这些不仅成为了制约民航发展的瓶颈问题，还直接影响了军民融合和军交运输现代化事业。

在空域资源共享问题上，王荣华认为，空域资源共享顶层设计原则，应坚持平时以服从国家经济建设为主，战时以服从战争需要为主。作为国家军事交通运输体系的重要组成部分，民航也应充分利用国家交通运输资源，实现资源共享，确保民航"平时服务、急时应急、战时应战"的特殊功能得到最大化发挥。

王荣华建议，在边远、交通不便地区兴建机场的时候，军方可以考虑加强预置性资源建设。他还建议把全国民用机场布局规划及时主动纳入国家综合交通运输行业的发展规划中，在机场建设和运营维护方面建立军民融合协调机制，充分发挥民航在军事交通运输体系的作用。

Tangshan Sannuhe Airport Will Receive Hainan Airlines Premier Flight

唐山三女河机场迎海航首航

On July 17, 2010, Hainan Airlines would open the Guangzhou-Tangshan flight route. This is the first regular flight route of Tangshan Sannuhe Airport, a subsidiary of Hainan Airlines Airport Group Ltd.

Sannuhe Airport is located at Tangshan City of Hebei Province, 15 kilometers away from Tangshan Fengrun District, and was originally a military airport. It was approved to become Tangshan Civil-military Airport (Tangshan Airport) at the end of 2008 when the expansion construction took place. In April 2009, Tangshan City and Hainan Airlines Group signed a Strategic Cooperation Framework Agreement stating that both parties would follow the low capital operation mode with the established operation of the civilian part of Tangshan Civil-military Airport. Since then, Tangshan Airport was under the control of Hainan Airlines Airport Group Ltd. In May 2009, Tangshan Airport connection line completed for regular traffic, and Tangshan Western Outer-ring Highway Tangshan Airport Exit opened. In June, CAAC approved the civilian part of Tangshan Airport to name as Tangshan/Sannuhe Airport. It is a Level 4C civil aviation airport, which can accommodate the take-off/landing of regional aircrafts including B737 and A320.

2010年7月17日，海南航空股份有限公司（以下简称“海南航空”）将开通广州=唐山航线，这是海航机场集团旗下的唐山三女河机场首航开通的首条定期航线。

三女河机场位于河北省唐山市，据唐山丰润区直线距离15公里，原为军用机场；2008年末，经批准成为唐山军民合用机场（以下简称“唐山机场”），并实施扩建；2009年4月，唐山市与海航集团签署了战略合作框架协议，双方将按照低成本运行模式，共同唐山机场军民合用其民用部分的建设运营。自此，唐山机场纳入海航机场集团麾下。2009年5月，唐山机场连接线竣工通车，唐山西外环高速公路唐山机场出口开通。6月，中国民航局批复唐山机场民用部分的名称为“唐山三女河机场”，英文名称为“TANGSHAN/SANNUHEAIRPORT”；是我国民航4C级机场，可起降包括B737、A320等干线飞机。

China's Aircraft Leasing Market is Huge, Leases Reach US $130 Billion in 2025

中国飞机租赁市场大　2025年达1300多亿美元

At the China Financial Leasing Summit held in Tianjin on May 5, 2010, Wang Changshun, Vice Minister of CAAC revealed that in 2025, our nation's civil aviation fleet would have 3000 aircraft, in which 60% were leased, and it means our civil aviation leasing market amount would attain more than US $130 billion. It also indicated that the future China aviation transportation leasing had an extremely large market potential. For people who worked or invested in the aircraft financial leasing industry, this was no doubt the good news.

Our nation's regular flight total ranked 37th internationally in 1978, but maintained 2nd place for 5 consecutive years since 2005 till now that China emerged as one of the worlds aviation giants. Up to the end of 2009, our civil aviation transportation capacity reached 1417 aircraft, in which 276 were through financial leasing (loan & equipment leasing) and 255 were through equipment leasing (rental). Aircraft leasing became one of the basic means of renewing and expanding its aircraft fleet for airline companies of every country. According to statistics, more than two-thirds of the aircraft used in global aviation transportation industry were obtained through leasing.

From long time ago, since China lacked a professional aircraft leasing company that had the abilities, China's aircraft leasing market was almost completely occupied by foreign organizations; CE, ARC, ACG and other international big companies had totally divided the China market so as to limit further developments of any relevant industry.

At the end of 2006, Bank of China announced the US $965 million cash deal of buying 100% capital share of stocks issued of Singapore Aircraft Leasing Enterprise (SALE), thus became China's first national commercial bank that involved in aircraft leasing industry. Up till the end of March 2010, twelve financial leasing companies were in normal operation with capitals reaching 186 billion Yuan, a 9.3 fold of growth compared to 2007; the net profit was 2.5 billion Yuan, a 12.76 fold of increase from 2007. In recent years, the financial leasing enterprise led by ICBC (Industrial and Commercial Bank of China, Ltd.) Financial Leasing Co. Ltd has grown very fast that it has become the most noticeable fresh-activists in the aircraft financial leasing and aircraft leasing markets domestically as well as internationally.

5月5日在天津举办的“中国金融租赁高峰论坛”上，中国民用航空局（Civil Aviation Administration of China，简称“民航局”）副局长王昌顺透露，预计到2025年，我国民航机队规模将达3000架，其中有60%的租赁率，这意味着我国民航租赁市场金额将达到1300多亿美元。这表明，未来中国航空运输租赁的市场潜力非常巨大，对于从事飞机金融租赁事业的机构和从业者来说，无疑是一个利好。

1978年，我国定期航班运行总量的国际排名是第37位，2005年至今连续5年稳居第2位，已跻身于世界航空大国行列。截至2009年年底，我国民航运输规模达到了1417架，较“十五”期间增加了一倍，其中通过融资租赁有276架，通过金融租赁有255架。飞机租赁已成为各国航空公司更新和扩充机队的基本手段之一，据统计，全球航空运输业所使用的飞机三分之二以上通过租赁方式获得。

长期以来，由于国内缺乏具有实力的专业飞机租赁公司，中国的飞机租赁市场几乎完全被国外机构所占据， CE、ARC及ACG等国际巨头，将中国市场瓜分殆尽，由此限制了相关产业的进一步发展。

2006年底，中国银行宣布：以9.65亿美元现金收购了新加坡飞机租赁有限责任公司的100%已发行股本，从而成为中国第一家介入飞机租赁业的国有商业银行。截至2010年3月底，正常经营的有12家金融租赁公司，资产规模达到1863亿元，比2007年增长9.3倍；净利润达25亿元，比2007年增长12.76倍。近年来，以工银金融租赁有限公司为代表的金融租赁企业，近年来快速迅猛，已经成为国内乃至国际飞机融资和飞机租赁市场上一支不可忽视的生力军

Director of Air Navigation Bureau of ICAO Invited to Visit Civil Aviation University of China

国际民航组织航行局局长等应邀访问民航大学

Invited by Civil Aviation University of China, Nancy J. Graham, Director of Air Navigation Bureau of ICAO and David Alan VanNess, Director of Performance Based Navigation (PBN) Programme, Asia-Pacific Office of ICAO, visited the university on June 25, 2010. Wu Tongshui, Principal of Civil Aviation University of China and Bai Jie, Vice Secretary of the Communist Party Committee, met with the visiting guests and discussed in depth the most concerned cooperative agendas that interested both parties.

During the meeting, Principal Wu first welcomed Ms. Graham for the visit and introduced to her the basic scope of the university. Wu expressed that he hoped to be able to select and send a specialist or professor from the university to work in the specialist group of ICAO. Graham pleasantly accepted and thanked Wu. Wu and Graham also discussed application and cooperation between the two sectors on communication, navigation and surveillance, satellite communication for international communication navigation club as well as China civil aviation.

After the meeting, Graham visited various laboratories of Aviation Management College and Electronic and Communication College.

Civil Aviation University of China and ICAO have a good cooperation basis. The university had hired Dr. Assad Kotaite, former President of the Council of ICAO, as visiting professor in 2007. At early 2010 and the end of May, Principal Wu and Pan Zhixiang, Secretary of the Communist Party Commitee, had individually led a delegation to visit ICAO headquarter in Montreal, Canada, to discuss and sign a cooperation overview on international aviation operator certification registration project namely AOC. The AOC project has proceed smoothly at present.

6月25日，应中国民航大学邀请，国际民航组织（ICAO）航行局局长Nancy J. Graham、国际民航组织亚太地区PBN实施执行官David Alan VanNess一行两人访问该校。中国民航大学校长吴桐水、党委副书记白杰会见了来宾，并就双方感兴趣的合作议题进行了深入的探讨。

会谈期间，吴桐水校长首先对Nacncy女士的来访表示欢迎，并向Nancy女士介绍了学校的基本情况。吴校长表示，希望可以选派民航大学的专家、教授赴国际民航组织航行局的专家组工作。Nancy局长欣然接受并表示感谢。同时，吴校长还与Nancy女士共同探讨了民航大学与ICAO航行局在通信、导航和监视，北斗卫星通信加入国际通信导航俱乐部以及其在中国民航领域的应用的合作。

会谈结束后，Nancy女士参观了民航大学空管学院流量管理、空域规划、塔台模拟等实验室以及电信学院的卫通和地通的相关实验室。

中国民航大学与国际民航组织具有良好的合作基础。学校2007年聘请国际民航组织理事会前任主席阿萨德。柯台特博士为客座教授。2010年年初和5月底，由校长吴桐水和党委书记潘志祥分别率领代表团两度访问国际民航组织蒙特利尔总部，并就国际航空营运人证书注册项目（简称“AOC项目”）开展会谈并签署了合作意向书，目前AOC项目进展顺利。

Civil Aviation Transportation Accomplished a Large Growth in 1st Half Year

民航运输上半年实现大幅度增长

China civil aviation transportation had accomplished a large growth in the 1st half of the year. The total transportation turnaround, passenger throughput and cargo-mail volume were 25.38 billion ton-km, 126 million persons and 2.641 million tons respectively; a year-on-year increase of 31.7%, 17.6% and 38.6%.

Li Jiaxiang, Minister of CAAC, reported the transportation situation of the 1st half year at the Mid-year Civil Aviation Work Conference held on July 13, 2010. At the same time where passenger and cargo transportation attained a double-digit growth, civil aviation safety had a positively stable development. The whole industry had completed 2.438 million hours of flight, an increase of 15.7% from last year, without flying or air defense incident.

Li Jiaxiang expressed that the construction of infrastructures was also carried out steadily. The whole industry had furnished a fixed capital investment of approximately 17 billion Yuan, a 19.7% increase than last year's. Twenty five major construction projects were progressing smoothly; moreover, Shanghai Hong Qiao Airport's expansion and new Alikunsha Airport had completed for official operation.

中国民航运输生产上半年实现大幅增长，共完成运输总周转量、旅客运输量和货邮运输量分别为253.8亿吨公里、1.26亿人和264.1万吨，同比增长31.7%、17.6%和38.6%。

中国民航局局长李家祥１３日在此间召开的民航年中工作会上通报了上半年运输形势。在客货运输都实现两位数增长幅度的同时，民航安全形势平稳向好发展。全行业实现运输飞行243.8万小时，比上年同期增长15.7%，没有发生运输飞行事故和空防事故。

李家祥表示，民航基础设施建设也稳步推进。全行业完成固定资产投资约170亿元，同比增长19.7%。25个重点建设项目进展顺利，上海虹桥机场扩建和阿里新机场项目已竣工通航。

Two Ningxia Regional Airports Construction Completed and Operation Launched

宁夏“十一五”期间两支线机场全部建成通航

June 26, 2010, Guyuan Airport kicked-off its operation successfully. Zhongwei Airport was completed and opened for service on December 26, 2008, and the operation is normal at present. Till now, the two regional airports planned for Ningxia Hui Autonomous Region have finished construction and put into operation. An aviation transportation network is established with one major airport (Yinchuan Hedong Airport), and two regional airports (Guyuan Airport and Zhongwei Airport).

Guyuan Airport is 13 km away from Guyuan City with its construction started in October, 2007 and completed in more than two years. The airport, a more than 400 million Yuan total investment, is designed to satisfy the demands of an annual passenger throughput of 120 thousands with a cargo-mail volume of 530 tons in 2015. It is a Level 4C domestic regional airport with a 2800 m runway that can accommodate Boeing 737 and Airbus A320 series aircrafts. GuYuan Airport's operation has an important strategic meaning on aspects such as improving the transportation situations in poor areas of Ningxia Guyuan, maintaining social stability and enhancing racial unity.

CAAC Ningxia Supervision Bureau will expand its supervising effort as to conduct supervision and examination on various safe operation protections of Guyuan Airport, and gives business guidance to ensure airport's safe operation.

6月26日，固原六盘山机场（简称“固原机场”）顺利通航。中卫香山机场已于2008年12月26日建成通航，现今运行正常。至此，宁夏回族自治区规划的两个支线机场在“十一五”期间全部建成通航，形成了一个干线机场（银川河东机场）、两个支线机场（固原六盘山机场、中卫香山机场）的航空运输网络格局。

固原六盘山机场距固原市区13公里，2007年10月开工建设，历时2年多时间建成完工，机场设计到2015年满足年旅客吞吐量12万人次，货邮吞吐量530吨的需要，设计机型为波音737和空中客车A320系列以下飞机使用，飞行区等级为4C，跑道长2800米，总投资4亿多元，属国内支线机场。固原机场的通航，对于改善宁夏固原贫困地区的交通条件、维护社会稳定、促进民族团结等方面具有重要战略意义。

民航宁夏监管局将加大监管工作力度，对固原机场的各项安全运行保障工作进行监督检查，并给予业务指导，确保机场的安全运行。

Locating Solar Electric Facilities at Airports: The American Experience

在机场安装太阳能电力设施：来自美国的经验

By Stephen Barrett, Director of Clean Energy, Harris Miller Miller & Hanson Inc.
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The characteristics of airports make them very good places to construct solar electric generation facilities. They have flat, wide open spaces where sunlight is not obstructed. They include electric consuming activities and buildings, like terminals, that avoid the need for lengthy transmission components. They also have building and ground surfaces that can be readily prepared to host a solar electric generation facility. Notwithstanding these characteristics, why would an airport have an interest in promoting solar electricity development on its property?

Most importantly, airports should consider solar because it can be profitable to do so. Advances in solar photovoltaic technology development have maximized efficiency of electricity production from solar panels. Increased manufacturing levels worldwide have led to a decrease in capital costs of solar products. These two factors have made solar electricity production more competitive with traditional electric generating sources, like coal and oil fired plants. For airports, solar panels can be located on rooftops or near runways that are not suitable for any other types of uses. These areas are underutilized; placing solar panels on then increases their value.

Airports should also consider solar because it supports government policies that encourage clean, locally produced energy. Governments worldwide have recognized the need to expand electricity generation opportunities and tap into local renewable energy sources as a matter of national self-interest. Doing so can help nations consolidate their fuel source needs at home and avoid exposure to unpredictable fuel supplies and costs from abroad. Clean energies like solar can also contribute to government-mandated renewable energy production standards. Airports are a logical location to invest in renewable energy development due to their suitable site characteristics, long-term mission, and fixed location.

机场的特性使其成为建造太阳能发电设施的理想场所。它拥有平坦开阔的空间，使阳光穿行无阻。机场内含有耗电的操作任务及建筑物如航站楼等，在此发电则可避免过长的电力输送需要。机场的建筑物和露天空地也可使其容易的容纳太阳能发电设备。虽然有这些特性，但是为什么一个机场会有兴趣在机场范围内发展太阳能电力呢？

最重要的是，机场考虑发展太阳能是因为从中有利可图。太阳能光电技术发展的进展可使太阳能电池板的发电效率最优化。国际化高水平制造能力降低太阳能产品的生产成本。这两个因素使太阳能电力产品较传统的发电能源如燃煤电厂更具竞争力。对于机场来说，可将太阳能电池板放置于屋顶或近跑道处这种不大适合用于其他用途的场所。这些场所往往未得到充分利用，放置太阳能电池板可提升其价值。

机场还应该考虑使用太阳能是因为其支持政府鼓励使用清洁的本地生产能源政策。全世界的政府都已意识到扩大发电机会的需要以及把发掘本地可再生能源作为国家自身收益的事业。这样做可以帮助国家巩固其国内的燃料需求并同时避免暴露于不可预知的海外燃料供应与消费中。像太阳能这样的清洁能源还可以对政府指定的可再生能源的生产标准作出贡献。机场合适的场地特性，长期的使命以及固定的位置使其成为投资可再生能源发展的合理的场所。

In the US, a number of large and medium sized airports have constructed solar electric generation projects, including in San Francisco California, Denver Colorado, and Albuquerque New Mexico. These airports have capitalized on strong solar resources and a committed government interest in completing solar construction. Solar projects at small General Aviation (GA) airports have not occurred in the US to date due to the lack of onsite electricity demand and insufficient public policy measures to support remote generation. However, recent policy changes in some states enacted to encourage large grid-connected solar projects will make GA airports ideal locations for future projects. With their wide open spaces that have limited development potential due to their proximity to aircraft, GA airports, from a simple physical perspective, are highly suitable for the construction of large-scale solar.

在美国，许多大中型机场已经开始建造太阳能发电项目，包括在加利福尼亚州的旧金山、科罗拉多州的丹佛和新墨西哥州的阿尔布开克。这些机场利用强大的太阳能资源并且秉承政府职能的理念来完成太阳能设施建造。太阳能项目目前在美国的小型通用航空机场还没有出现，这是由于小型通航机场本身电能需求量相对比较小以及支持远程发电的国家政策措施的不足。然而，最近一些州政府更改其政策，颁布法律鼓励大型太阳能项目并联电网，这将使通用航空机场成为将来此类项目的理想场所。凭借其广大的露天场所以及由于亲近航空器而较为有限的发展潜能，通用航空机场，从一个简单的自然条件前景来看，非常适合大型太阳能设备的建设。

Despite the successes identified above, airport managers in the US have struggled to understand the solar electricity generation opportunity. Airport personnel understand aviation; energy personnel understand solar. Professional consultants and planners who have experience in both fields can be very effective in bringing the two disciplines together. Most importantly, the consultant can work in the airport's best interest to provide it with an independent analysis to determine if solar makes good business sense given the particular location of the facility. The consultant can also manage the project to ensure that it is designed and constructed properly.

除了上述确定的成功之处，美国机场管理者已经在努力的了解太阳能发电这一机遇。机场职员了解航空；能源部门的职员了解太阳能。同时在这两个领域有相关经验的专业顾问可以有效地将这两个学科结合在一起。最重要的是，顾问可以提供对机场最有利的独立的分析，以确定太阳能是否符合机场的商业利益并决定适当的设施地点。顾问也可以通过项目管理以确保合理的设计及建造。

As Airports look for ways to expand their profitability and compete more effectively in a challenging worldwide air transportation market, solar electricity generation can provide monetary value from otherwise underutilized property while meeting important government policy objectives.

机场正在寻找途径以扩大其收益并在世界航空运输市场中更具竞争力，太阳能发电可利用机场其他未被充分使用的资产来创造价值，同时也顺应了政府的重要政策的目标。

About the author: Mr. Stephen Barrett has 20 years of experience environmental and regulatory consulting and project management. Most recently, Mr. Barrett has been active in renewable and sustainable initiatives, including in the siting, design and financial analyses of wind and solar projects, sustainability planning, and the permitting of energy, infrastructure, and real estate projects. Mr. Barrett is currently supporting the Federal Aviation Administration (FAA) in the development of a guidance document for solar projects at US airports.

关于作者：斯蒂芬 巴雷特先生拥有20年的环境法规咨询及项目管理经验。近来，巴雷特先生正活跃于资源的可再生及可持续发展的提议，包括风能及太阳能项目的建筑工地选择、设计和财政分析，可持续发展计划和能源、基础设施及房地产项目的准许。目前巴雷特先生正支持美国联邦航空局制定美国机场太阳能项目的指导文件。

About HMMH: Harris Miller Miller & Hanson Inc. (HMMH) was founded in 1981 to provide the highest quality noise consulting services to airports. Today, HMMH is an international leader in environmental noise and vibration control, air quality analysis, airport and airspace planning, and climate and energy solutions. HMMH provides assistance to airports interested in solar photovoltaic (PV) power generation.

关于HMMH公司：HMMH公司成立于1981年，旨在为机场提供最好的的噪声咨询服务。今天，HMMH公司已经成为环境噪音与震动控制，空气质量分析，机场和空域规划以及气候和能源解决方案等领域的国际领先咨询公司。HMMH公司为对太阳能光电动力发电有兴趣的机场提供协助。

Maiden Flight of Domestic Made Large Aircraft Will Take Place in Changsha in 2014

国产大飞机长沙“起航”2014年将首飞

The Letter of Intended Cooperation of domestic made C919 large passenger aircraft's landing gear and wheels, tires and braking system was signed in Changsha on July 11, 2010. Commercial Aircraft Corporation of China, Ltd. signed the Letter of Intended Cooperation on landing gear with AVIC Landing Gear Advanced Manufacturing Corp. and Liebherr Group; Commercial Aircraft Corp. of China, Ltd. had also signed with Hunan Boyun New Materials Co. Ltd., Changsha Xinhang Wheel and Brake Co., Ltd. and Honeywell International the Letter of Intended Cooperation on wheels, tires and brakes.

As introduced, the domestic made large aircraft C919 had meanings as C=China, 9=forever and 19=190 seats. The manufacturing site of C919's landing gear, wheels, tires, and brakes was located at Changsha Aviation Industry Park of Wangcheng Economic Development District, a 1200 acres construction of 350 million Yuan total investment. Lately, the phase I facility was completed, and would put into production at year end.

国产C919大型客机项目起落架系统和机轮、轮胎及刹车系统合作意向书昨日在长沙签署。 在昨日举行的签约仪式上，中国商用飞机有限责任公司与中航工业起落架公司、德国利勃海尔公司签署了起落架系统合作意向书；中国商飞公司与湖南博云新材料股份有限公司、长沙鑫航机轮刹车有限公司、美国霍尼韦尔公司签署机轮、轮胎及刹车系统合作意向书。

据介绍，国产大型飞机“C919”中的“C”代表“China”（中国），第一个“9”代表“天长地久”，“19”代表飞机的座位为190座。国产C919大型客机项目起落架系统和机轮、轮胎及刹车系统的生产基地，位于望城经济开发区的长沙航空工业园，占地1200亩，项目总投资35亿元。目前，该项目一期厂房已竣工，预计今年底将投产

Ningxia Guyuan Airport Officially Opened

宁夏固原六盘山机场正式通航

Approved by Northwest Civil Aviation Authority, Ningxia Guyuan Airport launched its operation on June 26, 2010.

Guyuan City is located at the south of Ningxia Hui Nationality Autonomous Region with a total population of 1.4552 million; of which 648 thousands, a 44.5%, are Hui Nationalities that makes Guyuan a major living area of Hui in China.

Ningxia Guyuan Airport is located at Gaopo Village, Zhonghe County, 8.5 kilometers from Yuanzhou District, Guyuan. The construction started in October, 2007, and completed in a duration of more than 2 years. The airport is designed to fulfill the demand of yearly passenger throughput of 120 thousand and cargo-mail turnover volume of 530 tons by year 2015. Aircraft models operated are Boeing 737 and Airbus 320 series, and the flight zone level is 4C with a 2800 meters long runway. The project's total investment is more than 0.4 billion Yuan. The test flight on June 8, 2010 was a success.

经西北民航管理局批准，6月26日宁夏固原六盘山机场投入运营

地处宁夏回族自治区南部的固原市，总人口145.52万，回族人口64.8万，占44.5%，是我国回族主要聚居区

宁夏固原六盘山机场位于距固原市原州区8.5公里的中河乡高坡村。该项目2007年10月开工建设，历时2年多时间建成完工。机场设计到2015年满足年旅客吞吐量12万人次，货邮吞吐量530吨的需要。机场设计机型为波音737和空客320系列以下飞机使用，飞行区等级为4C级，跑道长2800米。项目总投资4亿多元。2010年6月8日成功试飞。

ATC Weather Radar Information Integrated Display System Passed Technological Effect Evaluation

航管气象雷达信息综合显示系统通过科技成果鉴定

June 13, 2010, Department of Personnel of CAAC organized a group of specialists to conduct a technological effect evaluation on “ATC weather radar information integrated display system”, researched and developed by Northeast Air Traffic Control Bureau, and acknowledged concurringly that the system passed CAAC's scientific and technologic effects evaluation. The “System” changed the weather service mode during thunderstorms in the past; it would combine the aircrafts and the cumulonimbus echoes positioning signals displayed on different monitors to show on one system interface in real time, clearly displayed the relative positions of aircraft and cumulonimbus, which provided a faster, more convenient, advanced supplementary method under the thundering, rainy conditions. During test operation, system operation was stable, displayed relative positions of aircraft and cumulonimbus echoes were objectively accurate, distance detection function guaranteed the control supervision of aircraft's circling distance, and provided heavy rain echoes animation display function which forecast the weather that could directly help on reasonably arranged the flights.

6月13日，民航局人教司组织专家对东北空管局自主研发的“航管、气象雷达信息综合显示系统”进行科技成果鉴定，一致认同该系统通过民航局科技成果鉴定。“航管、气象雷达信息综合显示系统”改变了以往雷雨期间气象服务模式，将分屏显示的飞行器和积雨云回波位置信息进行融合，实时同步显示到一个系统平台，直观清楚地显示了飞行器同积雨云的相对位置，为管制员在雷雨天气条件下的管制指挥提供了更加便捷和先进的辅助手段。试运行期间，系统运行稳定，显示飞行器同积雨云回波的相对位置客观准确，测距功能保证了管制员对飞行器绕飞距离的监控，并提供了雷雨回波动画显示功能，为管制员预判天气、合理安排航班提供了直接的帮助。

China Granted Approval to Both Beech Baron G58 and Regal G36

比奇男爵G58和富豪G36获中国型号认证

CAAC granted Validation of Type Certificate (VTC) for both Hawker Beechcraft Corporation's aircrafts, Beech Baron G58 and Regal G36 Piston Aircraft, symbolizing that these two single and twin-engine piston aircrafts could enter the China market and serve its clients.

In accordance with China Civil Aviation Regulation #34 and China-US Bilateral Airworthiness Agreements, on May 2008, Hawker Beechcraft Corporation, recommended by FAA, had applied for VTC of G36 and G58 aircraft. After 18 months of inspection and verification, CAAC decided to grant Hawker Beechcraft Corporation the VTC for G36 and G58 aircrafts.

At the award ceremony, Yin Shijun, Director General of CAAC-AAD had delivered the VTC to Liu Ziqiang, Sales Director of Hawker Beechcraft Corporation Northern Asia, whom thanked its customers in China and the CAAC's acceptance of the aircrafts.

As reported, there were 6 models of Hawker Beechcraft's aircraft that had obtained VTC in China. At present, it has 12 commercial aircrafts that are registered in China's market, a 20% of the total business aircraft market in China.

Mr. Patrick Power, a representative for the FAA, also witnessed the moment and said "this approval has witnessed yet another landmark of cooperation between China-US aviation industry and FAA-CAAC, moved one step further in strengthening the relationship of the FAA, CAAC and US aviation manufacturing business, and proved from another view the development of general aviation in China. FAA greatly supports China civil aviation to accomplish the goal of general aviation to develop continuously in China through this type of aircraft validation, raising air-space capacities and usage efficiency."

Beechcraft series aircraft also included King Air, in which King Air 350 and B200 turboprop aircraft have been widely used for flight inspection, and C90GTi turboprop aircraft is used for flight training.

民航局为豪客比奇公司的型比奇男爵G58和富豪G36活塞式飞机颁发了中国型号认可证，标志着这两款单双发活塞式飞机可以进入中国市场，服务于中国的客户

根据中国民用航空法第34条规定，并按照中美双边适航协议，2008年5月，经美国联邦航空局推荐，豪客比奇公司向民航局提出了G36和G58两型飞机的型号认可申请。申请受理后，按照工作程序，经过1年半时间的审查工作。民航局决定向美国豪客比奇颁发G36和G58型飞机型号认可证。

在颁发仪式上，民航局局航空器适航审定司副司长殷时军为豪客比奇公司颁发了G58/G36的中国型号认可证（VTC）。豪客比奇公司北亚地区销售总监刘自强先生从殷时军手里接过了证书，并对中国民航局对豪客比奇飞机的认定、豪客比奇用户表示了感谢。

据悉，截至比奇男爵G58和富豪G36在中国取得型号认证，豪客比奇公司在中国取得型号认证的飞机已经达到6款。目前，豪客比奇在中国市场注册的公务飞机共有12架，占据了中国公务机市场的1/5。

来自FAA的代表鲍盼麒先生（Patrick Power）也见证了这一时刻，他说："此次认证见证了美中两国航空合作及FAA和CAAC之间合作的又一里程碑，进一步加强了FAA与CAAC以及和美国航空制造业的关系，并从另一个侧面印证了通用航空在中国的发展。FAA致力于支持中国民航通过类似于此次的飞机认证，以及提高空域容量及使用效率来协助完成通用航空在中国持续发展的目标。"

比奇系列飞机还包括空中国王系列，其中空中国王350、B200涡桨飞机在中国广泛用于飞行校验。而空中国王C90GTi涡桨飞机则在中国用于飞行培训。

70% of Flight Delays in Guangzhou Area was Due to Air Traffic Control

广州地区航班延误原因七成因为空中交通管制

The flight regularity rate of Pearl River Delta area was lower than the national average for a long time. At the recently held Pan-Pearl River Delta Airport Cooperation and Development Forum, Zhang Jian, Director of Air Traffic Control Bureau of the CAAC Central and Southern Regional Administration, said that as aviation industry entered a new speedy developing period, the current air-space capacities of the central and southern areas were almost saturated and became a bottle-neck limiting the capacity of air traffic control system, thus difficult to fulfill the demand of flow growth in the next ten years.

As understood, the Pearl River Delta region was the flight routes rendezvous point of Beijing-Guangdong and Shanghai-Guangdong; flights from Beijing and Shanghai to Guangzhou always experienced flow control affected by flight capacities. The flight regularity rate was 77.8% for Guangzhou Airport in 2009; 32668 flights were delayed due to flow control, three times the delays compared to 2004. Because of the constriction of aircraft flow, the flight regularity rate of Pearl River Delta region was lower than the national average for a long time. In 2009, the flow control carried out in Guangzhou area involving air-space was 71% of the total, while 20% were due to weather conditions.

For this, Zhang Jian said, "air-space is the key element in applying flow control." At present, he said, central and southern region had established 22 temporary flight routes, an air-spacing structure initially capable of flexible usage of air-space, but the closely related regulations, mechanisms and information systems were not yet perfected, so as to cause the relative deficiencies in air-space coordination and management ability, limiting the effectiveness of flexible air-space usage.

珠三角地区航班正常率长期低于全国平均水平。在日前举办的泛珠三角机场合作与发展论坛上，民航中南地区空中交通管理局局长张建表示，"随着航空业进入一个新的飞速发展时期，中南地区现有的空域容量已经趋于饱和，成为制约空中交通管制系统容量的'瓶颈'，难以满足未来10年流量增长的需要。"

据了解，珠三角地区是京广、沪广航路汇聚点，受航路容量的影响，京广、沪广航路经常发生流量控制。2009年广州机场航班正常率为77.8%，由于流量控制导致延误的航班为32668班，航班延误架次约为2004年的3倍。而由于飞机流量的拥堵，珠三角地区航班正常率长期低于全国平均水平，2009年广州地区涉及到空域原因而实施的流量控制占总流量控制量的71%，因为天气原因进行的流量控制仅为20%。

对此，民航中南地区空中交通管理局局长张建表示，"空域是制约流量控制的关键要素。"他说，目前，中南地区共划设了22条临时航线，初步具备了空域灵活使用的空域结构，但与空域灵活使用密切相关的规章、机制和信息系统尚未健全，导致空域协调和管理能力相对不足，制约了空域灵活使用效能发挥。

Li Jiaxiang Met with US Ambassador in China

李家祥会见美国驻华大使

July 22, 2010, Li Jiaxiang, Minister of CAAC, met upon invitation with Ambassador Jon Huntsman Jr., US Ambassador in China, and conducted exchange on US-China civil aviation relationship and cooperation.

Li extended his welcome to the visiting Ambassador Huntsman Jr., and emphasized China valued the Sino-US relationship very much. For many years, China civil aviation had maintained a very good cooperating relationship with various departments of the US government, including the FAA, US aircraft manufacturers and equipment suppliers. Li pointed out specifically the progress on aviation safety management that China civil aviation had accomplished at recent years was largely benefited from the effective cooperation with US FAA. Li pointed out during his summary introduction of the present developing situation that China civil aviation, even with its great progress, was still a great distance apart compared to US civil aviation industry, and needed to learn from US in many aspects. He also explained simply the existing hardships and problems that China civil aviation faced. Due to the limitation on aviation space resources, major hub airports in Beijing, Shanghai and Guangzhou etc. had serious congestion problem; the demand for swift growth on domestic and foreign aviation industry could not be fulfilled effectively. As conditions became better, Li believed, some of the problems could be solved in the future. Aspects such as aircraft manufacturing, aviation management equipment and personnel training had a huge cooperating space for China and US. China civil aviation would continue to apply the optimistic and open policies to strengthen the exchange-communication and cooperation of China and foreign countries, including US, in the civil aviation arena, and welcomed as well as supported foreign aviation enterprises to operate and develop civil aviation business.

To facilitate the traveling of personnel between China and US, and develop Sino-US aviation transportation relationship, Li hoped US would improve the policies and agendas toward US Visa for Chinese, so as to provide convenience for more China citizens touring US or doing business.

Ambassador Huntsman Jr. expressed that US-Sino relationship, he strongly believed, was one of the most important One-on-One relation. About US-Sino civil aviation relationship, he believed firstly the US-Sino civil aviation had a boundless potential on cooperation because of the huge demand of air transportation between US-China. Secondly, he congratulated China civil aviation for its prominent raising of standards on security management and service in recent years. Thirdly, China civil aviation and FAA as well as US aviation industry had maintained an excellent cooperation for many years, yet the future would be bright with commercial cooperation opportunities such as the ARJ21 and C919 aircrafts. Lastly, he hoped both sides cooperated more effectively, through equality to solve some existing problems on US-China aviation transportation such as the differences on operation between Federal Express and China Southern Airlines.

Li Jiangmin, Director and Han Jun, Deputy Director of the International Department, and Shi Boli, Deputy Director of Transportation Department, attended the meeting.

2010年7月22日，李家祥局长应约会见了美国驻华大使洪博培（Ambassador Jon Huntsman Jr.）大使。双方就中美民航关系和合作进行了交流。

李家祥局长对洪博培大使来访表示欢迎。他表示，中方非常重视中美关系。中国民航多年来与包括美国联邦航空局在内的美国政府部门、美国飞机制造商和设备提供商保持着很好的合作关系。李局长特别指出，中国民航近些年来在航空安全管理上的进步很大程度上得益于与美国联邦航空局的有效合作。李局长在简要介绍了中国民航发展现状的同时指出，中国民航尽管取得了很大进步，但与美国民航业相比仍然有很大的差距，在很多方面都需要向美国学习。他还着重就中国民航发展中存在的困难和问题简要进行了说明。他指出，由于航空空域资源有限，北京、上海、广州等主要枢纽机场存在严重的拥堵问题，不能有效满足中外航空企业迅速增长的需求。相信随着条件的改善，有些问题在未来可以得到缓解和解决。李局长表示，中美民航业在飞机制造、空管设备、人员培训等方面的合作空间很大。中国民航将继续致力于采取积极和开放的政策，加强中国与包括美国在内的外国在民航领域的交流与合作，也欢迎和支持外国航空企业在中国经营和发展民航业务。

此外，李局长特别指出，为便利中美两国之间的人员往来和发展中美航空运输关系，希望美方在对华签证政策和措施等方面予以改进，为更多的中国公民赴美旅游或从事商务活动提供便利。

洪博培大使首先表示，美中关系是世界上最重要的双边关系之一，他对此坚信不疑。关于美中民航关系，他表示愿意阐述四点意见。首先，美中之间航空运输需求巨大，美中民航合作潜力无限。第二，他对中国民航近些年在安全管理和服务水平上的显著提高表示祝贺。第三，中国民航与美国联邦航空局和美国航空业界多年来保持了十分良好的合作，相信双方未来的合作前景很好，商业合作机会巨大，如在ARJ21和C919飞机上的合作。最后，他希望双方更加有效地合作，通过对等的方式解决美中航空运输关系中存在的一些问题，比如美国联邦快递公司和中国南方航空公司在运营中存在的分歧。

国际司李江民司长、韩钧副司长和运输司史博利副司长参加了会见。

Boeing Shanghai was Awarded Repair-Maintenance Permit of EASA

上海波音获颁欧洲航空安全局维修许可证

July 15, 2010, Boeing Shanghai Aviation Services Co. Ltd. announced that the company was granted the repair-maintenance permit by European Aviation Safety Authority (EASA). Being a global enterprise, this awarded permit greatly raised Boeing Shanghai's developing potential and marked as an important landmark of its rapid development in aviation maintenance market.

As understood, EASA's repair-maintenance permit included the regular maintenance of Boeing's 737NG and 767-200/300 series aircrafts as well as preservation of the flight routes. Boeing Shanghai

中国民航报　中国民航新闻信息网　记者　柏蓓　通讯员汪阳报道：7月15日，上海波音航空改装维修工程有限公司（上海波音）宣布喜获欧洲航空安全局(EASA)颁发的维修许可证。作为一个全球企业，这一新维修许可的获得极大地提高了上海波音的航空维修市场发展潜力，也是上海波音在航空维修市场中快速发展的重要里程碑。

据了解，EASA维修许可包括波音下一代737NG系列，波音767－200/300型飞机的定检维修和航线维护。

held repair-maintenance permit granted by Airworthiness Authority of China, USA, Europe, Korea, Thailand, Bengali and Bermuda. Furthermore, the EASA permit allowed European customers to choose a maintenance service company that was closely related to the aircraft manufacturing company.

Boeing Shanghai was a joint venture enterprise setup by the Boeing Company, Shanghai Airport Authority and Shanghai Airlines in June, 2006. It provided high quality maintenance services including alteration, regular and overall maintenance mainly for international, regional and China domestic aviation companies.

上海波音持有中国、美国、欧洲、韩国、泰国、孟加拉和百慕大适航当局提供的维修许可证。而此次获颁EASA维修许可证，也让欧洲客户有机会选择上海波音这样一家与飞机制造商有着紧密联系的航空维修公司所提供的维修服务。

上海波音航空改装维修工程有限公司是2006年6月由波音公司、上海机场（集团）有限公司和上海航空股份有限公司共同出资组建的合资企业。上海波音将主要对国际性，地区性以及中国国内航空公司提供高质量的改装、维修和大修服务。

Students from Nine Asian and African Countries Trained at Civil Aviation University of China 2nd Radar Management of Approaching Aircraft Training Class for Developing Countries will be Held

亚非九个国家学员受训中航大 第二期发展中国家进近雷达管制培训班举办

The 2nd Radar Management of Approaching Aircrafts training class, a program of International Civil Aviation Organization (ICAO) for developing countries was opened at Civil Aviation University of China (CAUC). Ten students from nine Asian and African countries including Bangladesh, Cambodia, Burma, Nepal, North Korea, Ethiopia, Tunisia, Mauritius, and Zimbabwe attended the four-week air traffic management officer training.

During the training, students would learn radar theory, operation procedure and technique, as well as management skills to get hold of basic knowledge, commonly used deployment method and skill of radar management, and through on-site internship to obtain the radar management license.

CAAC and ICAO signed the memorandum of understanding agreeing on CAAC's relevant training organization to provide training for civil aviation management officers of developing countries. According to the agreement, CAAC and Department of Commerce initiated jointly, ICAO sent out the enrollment information to developing countries of Asia, Africa and Latin America, and then CAAC and ICAO would select trainees from over 30 countries.

On March 2009, CAUC had successfully held the 1st Radar Management of Approaching Aircrafts Training for 12 Asian, African and Latin-American developing countries. This was the 2nd training held jointly by ICAO and China.

8月2日，中国－国际民航组织发展中国家培训项目第二期进近雷达管制培训班在中国民航大学开办。来自亚洲、非洲的孟加拉、柬埔寨、缅甸、尼泊尔、朝鲜、埃塞俄比亚、突尼斯、毛里求斯、津巴布韦等9个国家的10名学员参加为期4周的空中交通管制员培训。

培训期间，学员通过包括雷达原理、雷达操作程序与技巧和雷达管制技能培训内容的学习，掌握雷达管制的基础知识、常用调配方法、调配技能，并经过岗位见习获得雷达管制执照。

中国民航局与国际民航组织于2007年签署谅解备忘录，同意由中国民航有关培训机构为发展中国家民航管理人员提供培训。根据该协议，由中国民航局与商务部共同发起，国际民航组织向亚非拉的发展中国家发出招收学员信息，中国民航局和国际民航组织从30余个国家选定培训班学员。

2009年3月，中国民航大学已为亚非拉12个国家的管制学员成功举办了首期发展中国家进近雷达管制培训班。本次培训是我国与国际民航组织再度携手举办发展中国家培训班。

（文／空管学院 刘永欣，摄／庞杰）

Chengdu-Lhasa Flight Route Monitoring Project Lhasa Air Control Automation System Passed Factory Acceptance Test

成都-拉萨航线监视工程拉萨空管自动化系统通过工厂验收

The Chengdu-Lhasa Flight Route Monitoring Project Lhasa Air Control Automation System manufactured by The Second Research Institute of CAAC had recently passed the Factory Acceptance Test successfully.

The Acceptance Test Group of CAAC Southwestern Regional Air Traffic Control Bureau had conducted a seriously strict over-all functional test, performance tests, free test and system stability test, and believed the system had fulfilled all the demands of user-clients.

Due to Lhasa's special geological environment, all flight routes had no radar coverage, and the implemented program management caused a huge limitation on flight activities and flow rate. After the successful establishment of Chengdu-Lhasa flight route monitoring project, the Lhasa air control automation system, the present situation of "no air control automation system" of Tibet High Altitude Region would end, and would provide strong technical support for civil aviation air traffic control protection of Tibet.

民航二所承制的成都—拉萨航线监视工程拉萨空管自动化系统近日顺利通过工厂验收。

民航西南地区空管局组织的验收测试组对成都—拉萨航线监视工程拉萨空管自动化系统进行了严格认真的全面功能测试、性能测试、自由测试和系统稳定性测试。认为系统满足了用户的全部要求。

拉萨由于其特殊的地理环境，所有航线均无雷达覆盖，一直实施程序管制，导致飞行活动和流量受到很大限制。成都—拉萨航线监视工程拉萨空管自动化系统建设项目成功实施后将结束西藏高原地区无空管自动化系统的现状，为西藏地区民航空管保障提供有力的技术支持。

Western China's Civil Aviation Development Enters Speedy Phase

中国西部民航大开发进入加速发展阶段

CAAC enhanced the strength of many policies to encourage the development on Western civil aviation industry in the latter half of year.

Reporter learned on July 14 from CAAC that in order to enhance the support of airport construction of the economic under-developed areas of western China, relevant policies were in the revising process. As revealed, policies were leaning mainly toward the medium-small, high-altitude, Tibetan and heavy-disaster area airports.

Besides, CAAC requested to speed up 23 airport projects including the phase III reconstruction-expansion of Chongqing Airport, reconstruction-expansion of Kashi Airport's terminal building, new Kunming Airport and others to ensure all projects of the western region would be finished on-time.

今年下半年中国民航局加大西部民航业发展力度，多项政策促西部民航业发展。

记者14日从中国民航局获悉，民航局加大对西部经济欠发达地区机场建设的支持力度，正在加紧修订《民航专项基金投资补助机场建设项目实施办法》。据透露，政策主要向中小机场以及高原机场、高高原机场、藏区、重灾区机场等倾斜。

此外，民航局要求加快重庆机场三期改(扩)建、喀什机场航站区改(扩)建、昆明新机场工程等23个在建机场项目的建设进度，确保西部地区民航"十一五"规划建设任务按期完成。

This 2nd half year, CAAC would encourage domestic and foreign airline companies to increase the international flights and flight routes of mid-western region, widen the approval of additional flights and chartered flights in mid-western regions for operating domestic and foreign companies, and continued to optimize the flight route network of the western region.

Simultaneously, CAAC focused highly on speeding up the civil aviation industry development of Xinjiang and Tibet that would open up or increase 19 one-on-one Xinjiang supportive provinces/cities to Xinjiang flight routes, and schedule flights more frequently. CAAC demanded relative organizations to do well the guaranteeing works on relevant information, fuel and aviation materials, to optimize a step further the living security of personnel supporting Tibet and Xinjiang.

今年下半年，民航局要鼓励中外航空公司增加中西部地区的国际航线航班，放宽中国及外国航空公司经营中西部加班、包机的审批。并继续完善西部地区航线网络。

同时，高度重视加快发展新疆和西藏民航事业。将开辟或增加19个对口援疆省(市)至新疆航线、加密至新疆和疆内航班。民航局要求有关机构做好相关信息、油料、航材等保障工作，进一步完善援藏援疆人员生活保障制度

Nanchang Deployed Aero-surveillance Solving Radar Blind Area of Air-space in Yangtze River Delta

南昌添民航千里眼　解决长三角空域雷达盲区

In order to raise fully the protection abilities of civil aviation air traffic control, solve effectively the conflict between air-space resource tension and swift development of aviation transportation, with approval of National Development and Reform Commission, the CAAC would build 4 air traffic control radar as well as the related control supplementary facilities at Nanchang, Nanjing, Lianyungang and Fuzhou of the Yangtze River Delta region within the next two years.

The total investment of the Yangtze River Delta radar control project was approximately RMB 171 million Yuan, and took 17 months to complete. Among the four sites, Nanchang Radar Station, under the authority of ATMB Jiangxi Branch of CAAC, had a budget of 30 million Yuan with one year completion time.

The newly built Nanchang 2nd Radar Station was situated at Shengmi Town, Xinjian County, and would be launched for service during the 1st six months next year. The new radar station and the radar of Nanchang Changbei International Airport became a complement and reservation to each other, which benefited the future where radar management would be used to ensure the safe, smooth arriving/departing flights of Nanchang Changbei Airport.

After the radar station went into service, it could provide radar signal links for Nanchang's high, medium, low altitude air traffic management zones, and Shanghai Area Control Centre of CAAC. It also provided security for the civil aviation radar management of the above areas, and could effectively solve the blind areas of the Yangtze River Delta's radar coverage, setting the safe protecting foundation for implementing radar management of the Yangtze River Delta area.

为全面提升民航空管保障能力，有效解决空域资源紧张与航空运输快速发展的矛盾，经国家发改委批复同意，民航近两年将在长三角地区建设南昌、南京、连云港、福州等4部航管雷达及相关管制配套工程。

长三角雷达管制工程总投资约1.7亿元人民币，总建设工期17个月。其中，中国民用航空江西空中交通管理分局（简称"民航江西空管分局"）所属南昌雷达站总预算约3000万元，计划建设工期为1年。

新建的南昌二次雷达站位于新建县生米镇，预计于明年上半年投产使用。建设该雷达站，与南昌昌北国际机场的雷达形成互补备份，有利于未来以雷达管制方式保障南昌昌北机场航班进离港的安全顺畅。

台站建成投产后，可为南昌高、中低空管制区，民航上海区域管制中心提供雷达信号的引接，为以上区域的民航雷达管制提供保障，能有效解决长江三角洲地区空域雷达覆盖的盲区，并为长三角地区实施雷达管制奠定安全保障基础。

Commercial Aviation News

Embraer China Aircraft Technical Services (ECA) Officially Established

巴航（中国）飞机技术服务有限公司正式成立

At the 10th anniversary of Embraer S.A. entering China's market, Embraer is opening its first wholly owned subsidiary company in China named Embraer China Aircraft Technical Services (ECA) Co. Ltd. ECA is based in Beijing with an estimated total investment of $18 million US.

In May 2000, Embraer S.A. had set up a representative office in Beijing as its first step into China. The Beijing office is mainly responsible for setting market strategies, providing client supports and services, promoting products and building industrial cooperation with pioneer enterprises of China aviation industry. Embraer S.A. and Aviation Industry Corporation of China had opened jointly the Harbin Embraer Aircraft Industry (HEAI) in Harbin, Northeast China, in 2003. The joint venture company produced commercial jets for China aviation industry and delivered its first aircraft in 2004.

Since the client list in China has increased steadily, Embraer S.A. decided to open ECA to strengthen the support capacities for current clients. The subsidiary's overview services are aircraft technical consultation, aircraft operation technical consultation, aviation supplies management and aircraft spare parts sale etc.

Guan Dongyuan, President of Embraer China and Chief Executive Officer of ECA said, "The establishment of ECA shows Embraer S.A.'s long-term commitment and confidence towards the new growing China aviation market. The continuous improvement on client supports is the key for Embraer S.A.'s success in the China business market. Presently, Embraer S.A. has received in China the confirmed purchase requests of 105 aircrafts total, in which more than 70 aircrafts are serving in China. The establishment of the new company definitely can satisfy the demands of current as well as potential clients."

值此巴西航空工业公司（Embraer S.A.）进入中国市场十周年之际，巴西航空工业公司在中国成立其首家全资子公司——巴航（中国）飞机技术服务有限公司（ECA）。子公司设于北京，总投资预期达1800万美元。

2000年5月，巴西航空工业公司在北京建立了代表处，这是公司进入中国的第一步举措。北京代表处主要负责制定市场战略、提供客户支援和服务、推广产品并与中国航空业的先锋企业建立工业合作。2003年，巴西航空工业公司与中国航空工业集团公司（Aviation Industry Corporation of China，简称"中航工业"）在中国东北城市哈尔滨合资成立了哈尔滨安博威飞机工业有限公司。该合资公司负责为中国航空企业生产商用喷气飞机，并于2004年交付了首架飞机。

鉴于公司在中国的客户数量稳步上升，公司决定成立巴航（中国）飞机技术服务有限公司，增强现有的客户支持能力。该子公司的营业范围涵盖飞机技术咨询服务、飞机操作技术咨询、航材管理服务和飞机零部件批发等。

"巴航（中国）飞机技术服务有限公司的成立，表明了巴西航空工业公司对新兴的中国航空市场的长期承诺和信心。"巴西航空工业公司大中华区总裁、巴航（中国）飞机技术服务有限公司总裁关东元说，"客户支持的不断完善是促使巴西航空工业公司在华业务取得最终成功的关键因素。目前，巴西航空工业公司在中国共接到了105架飞机的确认定单，其中有超过70架飞机在中国市场服役。新公司的成立肯定能够满足既有及潜在客户的需求。"

Linfen Airport Re-opening Reconstruction Project Receives Approval from National Development and Reform Commission

山西临汾机场复航改造工程获国家发改委批复

National Development and Reform Commission had approved officially the implementation of the re-opening reconstruction project of Shanxi Linfen Airport.

The approval stated: implementing Linfen Airport's reconstruction works is beneficial in reasonably utilizing the existing airport resources, improving the layouts of Shanxi Province's civil aviation airports and combined traffic transportation system, and enhancing regional economic development, mineral and tourist resources development.

The original Linfen Airport was approved to build in 1958, put into operation officially on January 1, 1960, and subsequently opened flight routes from Linfen to Taiyuan and Changzhi. Autumn, 1965, Linfen Airport closed its service due to the nationwide economic downturn and high vacancy rate. Until the early 70's, Linfen Airport was used only for general aviation flights such as agricultural and meteorological tasks.

As understood, after the reconstruction of Linfen Airport, the passenger throughput volume of the re-opened airport would reach 430 thousand and cargo-mail volume of 1500 tons in 2020. The total investment of the project was RMB 446 million.

Linfen Airport is located at Qiaoli Town, Yaodu District of Linfen, a 15 kilometers distance from Linfen City. There is Huohou First-class Highway on the west that links to various cities and counties for convenient routes; and Linfen Airport is 199 km away from Taiyuan Wusu Airport, 150 km from Yuncheng Guangong Airport, and 160 km from Changzhi Airport.

国家发展和改革委员会目前已正式批复实施山西临汾机场复航改造工程。

批复说：实施临汾机场复航改造工程有利于合理利用既有机场资源，完善山西省民航机场布局和综合交通运输体系，促进区域经济发展及矿产旅游资源开发。

原临汾机场于1958年经国家批准建设，1960年1月1日正式投入使用，先后开通过临汾至太原、长治等航班。1965年秋，因全国经济形势恶化、空载率高而停航。至上世纪70年代初仅用于通用航空飞行，执行农业、气象等飞行任务。

据了解，临汾机场复航改造后，到2020年，旅客吞吐量达到43万人次，货邮吞吐量1500吨，工程总投资4.46亿元。

临汾机场位于临汾市尧都区乔李镇，距临汾市市区15公里，西有霍侯一级公路与各县市相连，交通便利，距太原武宿机场199公里，距运城机场150公里，距长治机场160公里。

Air China Buys 20 Boeing 737-800

国航订购20架波音飞机

Air China announced on June 26 that Air China and AIE(Air China Import-Export Co. Ltd.)signed a Purchase Agreement with Boeing to buy 20 Boeing 737-800 airplanes. Being the daughter company totally financed by Air China, AIE acted as the importer representative for this deal.

The base price total of Boeing aircraft purchased for this transaction is 1.398 billion US dollars. Since Air China and Boeing have signed the credit memorandum, the actual purchasing price is lower than the previous mentioned base price.

中国国航今日公告，公司及国航进出口有限公司与波音公司签订飞机购买协议，向波音公司购买20架波音737—800飞机。其中，国航进出口有限公司作为中国国航的全资子公司，是本次交易的进口代理。

此次交易的波音飞机基本价格合计约为13.98亿美元。由于中国国航与波音公司签订过贷项备忘录，因此购买波音飞机的实际代价低于前述的飞机基本价格。

MTU Maintenance Zhuhai No 3. Facility Holds Opening Ceremony

珠海摩天宇三号厂房举行开业仪式正式投用

July 15, 2010, MTU Maintenance Zhuhai Co. Ltd. at Zhuhai Free Trade Zone held a simple yet grant opening ceremony for its newly constructed No. 3 Facility.

Being the first segment of phase II of a 60 million plus RMB investment project, MTU Zhuhai No. 3 Facility has a 3680 square meters construction area, which is mainly used for expanding the storage space and providing a more independent and comfortable environment for clients' on-site works. Besides, on October 21, 2009, MTU Zhuhai and GE signed a cooperation agreement to have 500 square meters of the No. 3 Facility set as GE's solely AOG aviation materials warehouse in China, and it will become effective as No. 3 Facility is open for business. After that, GE will store in the warehouse the first batch of assembly units of CFM56, CF34-10A, GEnx engines in MTU Zhuhai's No. 3 Facility where they will be managed continuously by MTU Zhuhai on a 24 hr/7 day basis. MTU Zhuhai hopes to gain cooperation with GE on consignment of aviation materials so that it can control effectively the maintenance period as well as the cost.

Simultaneously, the segment II of MTU Zhuhai's phase II expansion construction project, that is to expand the current main maintenance facility eastward 5780 square meters, has also finished its internal planning and environmental evaluation, signed a design contract with Beijing Aviation Design Institute, and currently at the documents reporting stage. Until the segment II project completes in 2012, the whole phase II construction finish, MTU Zhuhai's production capacity will have a big increase to better satisfy the demand of its business development from the current annual maintenance of 200 aviation engines to about 300 annually.

MTU Zhuhai had repaired and maintained 154 aviation engines in 2009 with the earnings of 2.42 billion Yuan. It has received 78 engines for repair and maintenance during the first half year, and the 2010 projected maintenance volume will be even as last year's.

2010年7月15日，珠海保税区摩天宇航空发动机维修有限公司为新建成的“三号厂房”举行了简单而隆重的开业仪式。

作为投资6000多万人民币的二期工程第一阶段项目，珠海摩天宇“三号厂房”的建筑面积为3680平方米，主要用于扩大存放空间，并为客户的现场办公提供更为独立和舒适的环境。此外，去年10月21日，珠海摩天宇和GE签订的将三号厂房中的500平方米作为GE在中国唯一的AOG航材仓库的合作协议，也将随着三号厂房的开业投入使用而生效。接下来，GE将把首批CFM56、CF34-10A、GEnx发动机的部件存放到珠海摩天宇三号厂房的仓库里，由珠海摩天宇进行一周七天每天二十四小时的不间断管理。珠海摩天宇希望借此可以争取与GE航材寄售方面的合作，从而有效控制维修周期和成本。

与此同时，珠海摩天宇二期扩建工程的第二阶段，即把现有的主维修厂房向东扩出5780平方米的扩建项目也已完成了内部规划和环境评估，与北京航空设计院签订了设计合同，目前进入报建阶段。待到 2012年第二阶段项目建成、整个二期工程完工后，珠海摩天宇的产能将有一个大的提升，从目前每年维修200台航空发动机增加到每年约300台，更好地满足公司业务发展的需要。

珠海摩天宇在2009年维修了154台航空发动机，实现营业收入24.2亿元。今年上半年公司已接受78台发动机入场维修，预计2010年全年维修量和去年持平。