# TIME MACHINE

WORLD BUSINESS JET GUIDE



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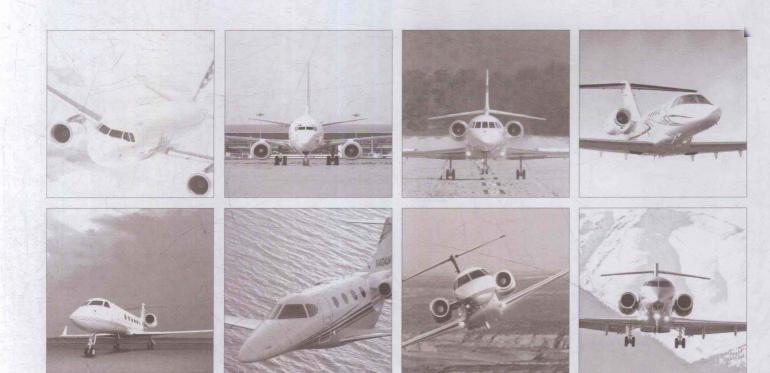
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# 时间机器

一世界公务机选购策略

廖学锋 主 编 宗苏宁 副主编

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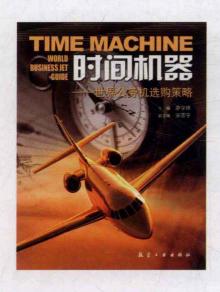
—世界公务机选购策略

Shijian Jiqi

---Shijie Gongwuji Xuangou Celue

#### 内容提要

本书介绍了有关公务机最基本的知识,涵盖公务机的特点、市场情况、使用方式、管理方式、购买程序等。同时,为了让读者直观了解公务机,书中收集、整理了各主要公务机厂商生产的50多款公务机型的图片和性能数据,供读者参考。



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本书主编 廖学锋先生

# 主编介绍

廖学锋,中国公务航空集团创始人、董事局主席兼首席执行官,中国公务航空业资深人士和专家。廖学锋先生从事公务航空数十年,售出公务机100余架,曾在庞巴迪公司、豪客比奇公司和美国雷神公司等世界顶级公务机制造企业担任中国地区的高层管理职务,并一直致力于推进中国公务航空的发展。廖学锋先生还是亚洲公务航空协会(ASBAA)的创始人之一,曾长期担任该协会副主席及主席职务。此外,廖学锋先生也是美国国家公务航空协会(NBAA)的亚洲首席代表。廖学锋先生曾在美国波音公司、Dee Howard公司及成都飞机工业(集团)有限责任公司供职。1982年,廖学锋先生毕业于南京航空航天大学飞机设计专业;1991年获美国伊

利诺伊大学工程硕士学位。

由于飞机购买过程复杂,法律事务繁琐,飞行员培训及后续维护专业性强,廖学锋先生带领中国公务航空集团为客户提供从飞机购买到使用的全过程"交钥匙"服务,包括飞机型号选择、购买合同谈判、飞机内饰及选装设备选择、飞机外部喷漆方案制定、飞机生产过程监控以及适航管理、飞机管理公司推荐、飞机管理合同谈判、融资需求咨询等一系列服务。作为独立的第三方销售咨询公司,中国公务航空集团始终站在客户的角度,以客户的利益为准则,帮助公务机购买者选购合适的飞机及飞机生产商。

Mr. Jason Liao is a 15-year China business aviation expert and is the founder, Chairman and CEO of China Business Aviation Group (CBA). He has held a number of senior positions with Bombardier, Hawker Beechcraft, and Raytheon Aircraft in China and has sold over 100 business aircrafts. Liao was one of the founders of the Asian Business Aviation Association and served as its Chairman and Vice-Chairman for nearly 10 years. He currently serves the National Business Aviation Association (NBAA, USA) as its Chief Representative for Asia, actively promoting business aviation in China and the Asia-Pacific region. Earlier in his career, Liao was also with the Boeing Company and the Dee Howard Company in the USA, and with the Chengdu Aircraft Company in China. Liao graduated from the University of Illinois with a Master

of Science degree and from the Nanjing University of Aeronautics and Astronautics, where he majored in aircraft design.

Buying aircraft is a very challenging process for someone not familiar with business aviation, especially in China, with its complicated aviation regulations and laws. Under Liao's leadership, CBA provides a complete package of solutions for aircraft buyers, including the selection of the right aircraft, the purchase and negotiation of the aircraft, interior design, choice of optional equipment, exterior paint design, aircraft production supervision, leasing and finance options, and the right choice of aircraft management companies. CBA is an independent third-party consulting company, and is well-equipped to protect the buyers' best interests.

在世界发达国家和地区,公务机的使用范围很广,而在中国,这一产业才刚刚兴起,相对落后,甚至落后于一些发展中国家(如巴西、印度等)。但是,中国人正在努力追赶世界的步伐,中国政府近些年来陆续出台了一系列有利政策,促使中国公务航空焕发出了勃勃生机。

我非常有幸能赶上中国公务航空大发展的浪潮,也非常 有幸能有机会将自己的经验与广大读者分享,从而帮助更多 人了解和认识公务航空以及公务机。

2010年,在中航出版传媒有限责任公司的邀请下,我开始尝试编写本书,目的是向读者介绍有关公务机的选购策略。在图书编写过程中,我们得到了空中客车公司、庞巴迪公司、波音公司、赛斯纳飞机公司、达索猎鹰商务机公司、巴西航空工业公司、湾流宇航公司、豪客比奇公司的支持和帮助。他们为本书提供了丰富的图片和文字资料。此外,还得到了美国航空周刊集团Business & Commercial Aviation杂志的帮助,他们为本书提供了大量的公务机性能数据。

《时间机器——世界公务机选购策略》为读者介绍了有 关公务机的最基本的知识,涵盖公务机的特点、市场情况、 使用方式、管理方式、购买程序等。同时,为了让读者直观 了解公务机,我们收集、整理了各主要公务机厂商生产的50 多款公务机的图片和性能数据,供读者参考。

在本书成书过程中,中航出版传媒有限责任公司总经理

刘鑫先生、图书副总编辑刘宁先生给予了大力支持。他们始终关注本书的进展,并在我们遇到困难的时候,提供了理想的解决方案。

本书副主编宗苏宁先生在书稿编写过程中付出了大量心血,他具体协调和处理了资料的收集、整理、翻译、编排工作,图书设计工作,以及其他繁琐事务。宗苏宁先生是《公务与通用航空》杂志的创始人之一,目前负责该杂志的筹办,该杂志即将于2011年7月底上市,可作为读者深入了解本书所涉及内容的最佳的参考读物。

此外,感谢迈巴赫公司为本书提供的赞助。

感谢我的同事陈思、赵娟、赵晋女士在我工作繁忙之际给予的理解和帮助,她们的支持和任劳任怨使我最终顺利完成了本书。对于以上所有为本书做出贡献的人们,谨表以最诚挚的谢意!

在这里,我也深深地感谢各位读者,谢谢你们的信任和支持。

由于时间和水平所限,书中一定存在许多不足之处,恳请广大读者批评指正。

廖学锋于2011年6月

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Business aircraft have been widely used in developed markets for several decades. The evolution of business aviation in China lags behind developed markets and behind developing countries like Brazil, India, etc. Chinese business aviation is emerging very quickly however, and is supported by a number of favorable policies initiated by the Chinese government in recent years.

I am very lucky to be involved in Chinese business aviation at a time that this market is developing so rapidly. It is my pleasure to share with you some of the knowledge that I have gained over the past 15 years in the business aviation industry.

At the invitation of China Aviation Publishing & Media Co., I started writing this book late last year. Its purpose is to help the reader recognize different aircraft types and their capabilities, while learning about the aircraft purchasing process and the various ways to own and operate aircraft in China. I am grateful to Airbus, Boeing, Bombardier, Cessna, Dassault Falcon, Embraer, and Hawker Beechcraft for their help in providing aircraft photographs and company information. A special thanks is extended to Aviation Week Group and its Business & Commercial Aviation magazine for granting us the right to use their business aircraft pricing information, performance data and aircraft specification data.

"Time Machine-World Business Jet Guide" is a comprehensive business aviation manual for the new Chinese owner. It covers many different aspects of business aviation, including "What is Business Aviation", "The Safety Aspects of Business Aircraft", "The Advantages of Business Aircraft", "The Business Aviation Market", "How to Use Business Aircraft",

"How to Manage Business Aircraft", "The Procedures of Buying New and Pre-owned Business Aircraft", "The Cost of Managing Business Aircraft", and "A Detailed Introduction of Business Aircraft Manufactured by the 8 Major Companies".

I want to thank Mr. Xin Liu, President, and Mr. Ning Liu, Deputy General Editor of China Aviation Publishing and Media Co. for their strong support. They were always available when I needed help.

A special thanks goes to Mr. Suning Zong, Associate Editor-in-Chief of this book. Suning was responsible for collecting, translating and editing all the aircraft information, and has been invaluable with the other many aspects of getting the book published. Suning is one of the founders of "Business and General Aviation Magazine", which will be published by July 2011.

I want to thank Maybach for their financial support of this book. I am a big fan of their products. I want to also thank my colleagues at CBA for their help and support; Ms. Lisa Chen, Ms. Candy Zhao, and Ms. Jin Zhao. I am very fortunate to have many friends and colleagues who have provided me with their guidance and support over the years.

My deepest appreciation goes to my customers. I thank them for their trust and friendship.

I very much welcome and appreciate your comments and suggestions to make this book better. Thank you!

Jason Liao 2011.6

# 来自国际公务航空委员会的评述

当前,全球公务航空界的领袖们都在关注中国,他们把中国看做是下一个增长潜力巨大的公务航空市场。虽然这个市场刚刚兴起,但幸运的是,它已经拥有一支经验丰富的本土专业团队。这支团队由廖学锋先生领导,他们有能力在巨大的中国市场上引领公务航空快捷、高效地发展。从2004年起,我开始与廖学锋先生共事,当时他正协助组建亚洲公务航空协会(ASBAA)。自协会成立后,他一直担任该协会的领导职务。廖学锋先生拥有出色的沟通和协调技巧,能够妥善处理政府部门、服务商、制造商、运营商之间的关系,具备领导一个产业逐步发展,并跻身国际领先行列的能力。

事实上,公务航空并不是一个新鲜事物,早在20世纪30年代,从事商业运输的飞机就已出现。最初,这一产业的发展主要集中在北美,但近些年来,世界其他地区的公务航空产业开始快速发展。2010年,全球销售的新飞机中,北美以外地区所占的比例首次超过50%。随着欧洲、中东和亚洲各国飞机拥有量逐年增长,过去的10年中,北美地区拥有的飞机数量占全球总量的比例已从72%跌至66%。

目前,全球约有17000家公司运营着30000余架涡轮发动机飞机,很多亚洲人听说这个规模时都很惊讶。众所周知,公务航空是提高商业效率的一种有效工具,其发展与一国经济状况密不可分。但除此之外,还有很多其他因素决定公务航空的发展。如果我们考察一下全球最大的4个公务机市场——美国、加拿大、墨西哥和巴西,我们就会发现这些国家均有广阔的国土面积、大量的资源性产业和到达偏远地区的

需求。这些特征不正是和中国的情况非常类似吗?

中国有举世瞩目的经济发展成就,对工业生产效率越来越关注。此外,中国有广袤的国土面积,基础设施建设力度惊人,且越来越注重自身的国际领导力。鉴于此,公务航空将非常有可能被中国各界日益看重,并成为中国人实现国际领导力梦想的工具。

有些国家和地区公务航空发展较快,其关键在于这些国家和地区的航空文化氛围很好,无论是在政治层面,还是在社会层面,他们的政府机构或民众都被鼓励发展公务航空,并为自身航空产业的发展而兴奋。他们会出台各种政策推动而不是打击公务航空的发展,因为他们知道公务航空能够带来经济效益和发展效率。而地方当局也都会力争在本地建设一座机场,因为他们知道飞机能够带来商机,而公务机则意味着繁荣。

毫无疑问,如果能够营造良好的航空文化氛围,中国将很快进入公务航空发达国家之列。中国的代表性企业以及行业领导者如廖学锋先生等也已经做好准备,他们有能力帮助实现这一转变。廖学锋先生编写的新书——《时间机器——世界公务机选购策略》,就是一个非常好的开始。

唐纳德·斯普斯顿 国际公务航空委员会(IBAC)总裁

## Commentary from the International Business Aviation Council

The eyes of global business aviation leaders are focused on China as the next potential significant growth market for the industry sector. Business aviation is fortunate to have an experienced professional located in China to help facilitate growth; Jason Liao provides business aviation leadership needed to facilitate effective growth of the fledgling industry in the large potential market. I have worked with Jason since 2004, when he was instrumental in the formation of the Asian Business Aviation Association [AsBAA], an organization in which he has continued to provide leadership and continuity since its formation. Jason has the skills to provide communication, coordination and facilitation between governments, service providers, manufactures and operators, needed to take the industry from an embryonic phase to global leadership.

Business aviation is not new as business use of aircraft dates to the 1930s. Early growth of the industry focused on North America, but lately the sector is experiencing growth in other parts of the world; new aircraft sales last year outside of North America exceeded 50% for the first time. North America's share of the global fleet has gone from 72% to 66% in the last 10 years, with significant growth experienced in Europe, the Middle-East and Asia.

Many Asians are surprised to learn of the very significant size of the global business aviation fleet. The sector consists of approximately 30,000 turbine aircraft operated by 17,000 companies. Since business aviation is recognized as a "productivity tool" for business, it is not surprising that growth has been linked to economical health. However, there are many other factors that influence business aviation. If we

look at the four largest business aviation market USA, Canada, Mexico and Brazil all have large geographic areas, many resource industries and remote access needs. Does this sound like China?

With China's spectacular economic growth, new attention to industrial productivity, the immense geographic area, phenomenal new infrastructure development and increasing interest in global leadership, it is probable that business aviation will increasingly be recognized as the tool to help realize leadership dreams.

A critically important presence in high growth countries and regions has been the "aviation friendly" culture within political and societal arenas. Government bodies and populations in countries where business aviation has seen healthy growth all encouraged and have been excited by their aviation industries. Policies were primed to promote rather than discourage. Economic and productivity benefits of business aviation were understood. Municipalities fought to have an airport and they knew that aircraft brought business. They knew that business aircraft meant prosperity.

There is little doubt that if China adopts an "aviation friendly" philosophy, China can soon become one of the leading business aviation nations of the world. Business aviation representative bodies, with leadership from people like Jason Liao, are ready and able to facilitate the transition. Jason's book is a good start.

#### **Donald Spruston**

Director General, International Business Aviation Council

# 序二

# 来自美国公务航空协会的评述

公务航空成为世界上最重要的产业之一有很多原因:

第一,公务航空能够提供很多优质的工作机会——包括制造、维护、服务、金融、保险和出版等。

第二,公务航空能够加速经济的发展,尤其是对于发展 中国家。

第三,公务航空能帮助企业把飞行时间转变为高效的工作时间,从而使企业在全球商业领域更具竞争力。

第四,公务航空推动了人道主义的实施,公务机随时可以进行自然灾害的救援工作或将患者和伤者送去就医。

正是由于有这么多好处,公务航空才能在世界范围内迅猛发展,在亚洲的发展更是显而易见。幸运的是,亚洲公务航空业的领军人物之——廖学锋先生,编写了一本中文的关于如何购买公务机的书籍,这本书无疑会成为所有对公务航空巨大利益感兴趣的人的最有价值的资源。

**爱德华·博伦** 美国公务航空协会总裁兼首席执行官

爱德华·博伦先生2004年9月担任美国公务航空协会总裁及首席执行官,之前他曾就职于通用航空制造商协会(GAMA)8年,并担任首席执行官。

# Commentary from National Business Aviation Association

Business Aviation is one of the world's greatest industries for a variety of reasons. First, business aviation generates jobs-good jobs in manufacturing, maintenance, service, finance, insurance, publishing, and more. Second, business aviation facilitates economic development, especially in those communities that are not major hubs. Third, business aviation helps companies compete in the global marketplace by helping to turn travel time into productive work time. And fourth, business aviation fosters humanitarian relief operations. Whether responding to natural disasters or bringing sick or injured patients to treatment, business aviation airplanes are ready and available.

Because of the benefits of business aviation, the industry is growing throughout the world and nowhere is that growth more evident than in Asia. Fortunately, Jason Liao, one of the leading figures in business aviation Asia has written a comprehensive book on purchasing business aircraft. This information will undoubtedly be a most valuable resource for everyone in Asia interested in the remarkable benefits of business aviation.

#### **Ed Bolen**

The President and CEO of NBAA

Ed Bolen became the president and CEO of the National Business Aviation Association in Washington, DC, on September 7, 2004. Prior to joining NBAA, Bolen was president and CEO of the General Aviation Manufacturers Association (GAMA) for eight years.

# 来自亚洲公务航空协会的评述

廖学锋先生邀请我为他的新书——《时间机器——世界公务机选购策略》作序,我感到非常荣幸。

当前,越来越多的企业和个人开始涉足私人飞行,这是为什么呢?因为选择私人飞行可以提高商业效率,进出机场不再需要航空公司的服务,拥有安全而私密的空间,可以提升个人或企业的形象。目前,中国乃至亚洲的私人飞机拥有量为数不多。在过去的数十年时间,这一地区的人们一直在探索如何最好地使用私人飞机。直至最近几年,中国经济的发展才开始带动私人飞机的消费,这一现状正在迅速地发展。

对于中国读者来说,《时间机器——世界公务机选购策略》是一本非常好的介绍公务航空的图书。通过阅读本书,读者将会了解到各种私人飞机的性能数据,这些信息将帮助那些希望拥有私人飞机的人从型号繁多的飞机中挑选到其钟情的一款,并通过最好的渠道购买到它们。此外,本书还介绍了如何选择一家专业的公司来管理客户购买的飞机。中国正引领着亚洲私人飞机市场,尤其是喷气式飞机的市场。中

国民用航空局正推出切实可行的规章制度推动着中国私人航空的发展,它是亚洲其他国家相关政府部门的榜样。

2002年,我第一次遇见廖学锋先生,当时他正在发起一项倡议——重启亚洲公务航空协会。亚洲公务航空协会是一个由公务航空公司和相关人士组成的会员制团体。在廖学锋先生的领导下,目前亚洲公务航空协会的会员已经增长到50多个,该协会的主要工作是向亚洲各国政府宣传公务机带来的好处。我曾经供职于澳门Jet Asia有限责任公司,廖学锋先生在该公司也有很大的影响力。2006年,他向Jet Asia有限责任公司售出了6架豪客中型公务机,扩大了该公司的机队规模,同时也为中国澳门及其博彩事业的发展做出了贡献。在我看来,廖学锋先生是中国私人飞机销售领域经验最丰富的专家,他能够帮助客户买到最适合的飞机,并帮助他们选择最好的公司管理这些飞机。

查克·伍兹

亚洲公务航空协会主席

查克·伍兹先生长期担任亚洲公务航空协会主席。他 曾在Jet Asia有限责任公司担任首席执行官9年。Jet Asia 有限责任公司是澳门一家管理和租赁私人飞机的公司, 由何鸿燊拥有。查克·伍兹先生之前曾是一名运输航线飞 行员,1971年起开始涉足商业、军事和公务航空。

# Commentary from Asian Business Aviation Association

I was honored when Jason Liao asked me to write a few words of introduction to his new book-Time Machine-World Business Jet Guide.

Why do companies and individuals become involved in private aviation? The benefits include higher corporate productivity, access to airports not served by airlines, security and privacy, and enhanced personal and corporate image. The number of private aircraft in China and in Asia overall is not very large. It has taken decades for individuals and companies in this region to understand how best to use private aircraft. The development of China's economy only recently supported the ownership of private aircraft, but that picture is changing rapidly.

Time Machine-World Business Jet Guide is an important introduction to business aviation in China. In this volume, the reader will learn the capabilities of various private aircraft. The information includes what the owner can expect from different aircraft models and how best to achieve those expectations. It also explains how best to select a professional company to manage the asset after purchase. China is leading all other Asian countries in the acquisition of private aircraft, mostly jets.

The Civil Aviation Administration of China is an example for other Asian governments, because of its practical approach to the regulations necessary to support private aviation.

I first met Jason in 2002 when he led an initiative to restart the Asian Business Aviation Association, a member-based group of business aviation companies and individuals. Under his leadership, AsBAA grew to more than fifty companies, working with Asian governments to better understand the benefits of operating business aircraft. Jason also had a big impact on my former company, Jet Asia Limited in Macau. In 2006, he sold six Hawker midsize jets for the company's fleet expansion; aircraft intended to support the growth of Macau and its gaming market. In my opinion, Jason Liao is the most experienced business aircraft professional in China, helping his clients purchase the correct aircraft, and helping them select the best company to manage those aircraft.

#### **Woods Chuck**

Chairman of the AsBAA

Mr. Woods Chuck has been chairman of the Asian Business Aviation Association for many years. He served for nine years as chief executive officer of Jet Asia Limited, a Macau private jet management and charter company, owned by Stanley Ho Hung-sun. Chuck is an airline transport rated pilot and has been involved in commercial, military and business aviation since 1971.

