

# 我们现在为您介绍即将上市的商务喷气机

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未来几年上市的商务喷气机将更快、更舒适，拥有更多创新。

## Here come tomorrow's BUSINESS JETS

*Models set to enter service in the next few years will be faster, more comfortable and loaded with innovations.*

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**一方面欧美经济快速复苏**，一方面商务喷气机制造商预测新兴市场，比如中国、拉美、俄罗斯的喷气机需求将持续增长。

许多制造商都投资于新型飞机的开发、现有机型的升级，这些制造商在新兴市场的销售都不错，给制造商带来不错的回报。第一批开发出来的新机型中差不多有近20款，预计在2016年前服役。

以下简要介绍几款制造商投资开发，目前正处于研发阶段的机型。

**W**hile an economic recovery sputters in the U.S. and Europe, business jet manufacturers foresee continued growth in such emerging markets as China, Latin America and Russia.

Many of these manufacturers have invested in new airplanes and in major upgrades of current models and are already being rewarded by sales in those emerging markets. The first of these new airplanes—nearly 20 of them—are expected to enter service between now and 2016.

What follows is a capsule look at business jets that have been funded and are in the development pipeline.



**空中客车：**大机舱飞机ACJ350是名符其实的巨大，其占地面积达到270平方米。它能以0.85马赫的速度从北京直飞至纽约、里约热内卢，飞行航程超过18,600公里。

空中客车暂未发布这款机型的订单信息，但该公司宣称已经接到了超过580份订单，想要预订具有巨型客机配置功能的飞机。A350-900将成为首款下线生产的机型，空中客车预计该机型将于2014年下半年服役。

该公司尚未宣布ACJ飞机的价格，但据报道，A350-800系列飞机的价格将在2亿4550万美元左右。

**Airbus:** The widebody ACJ350 is truly a giant, offering 270 square meters of floor space. A range of more than 18,600 kilometers ensures nonstop flight from Beijing to cities as far away as New York and Rio de Janeiro, Brazil, at speeds up to Mach 0.85.

Airbus is not yet releasing information about orders for the Airbus Corporate Jet variant but the company claims to already have more than 580 orders for the airliner configuration. The A350-900 will be the first model to come off the production line and Airbus expects it to enter airline service in the second half of 2014.

The company has not announced pricing for the ACJ, but the cost of the A350-800 airliner version will reportedly be in the \$245.5 million range.

波音 787 梦想飞机 BOEING 787 DREAMLINER



**波音：** 这个制造业巨头的787梦幻飞机（Dreamliner）航线版本由于电池的问题截至记者发稿时停飞了。第一架用于商务服务的喷气机原定今年12月到达独立的竣工中心，然而电池的问题可能会造成项目的延期。

波音商务喷气机公司（Boeing Business Jets）声称已获得12张商务喷气机版本的订单。该种客机可以携带75名乘客、不间断航程18,105公里，最大巡航速度可达0.85马赫。其航线机型售价大约为1.2亿美元。与此同时，737 Max客机的研发工作也在持续进行，这是自1960年代晚期以来一系列成功的737机型中最新的一个。公司尚未决定是否要提供737Max的波音商务喷气机机型。

**Boeing:** The airline version of this manufacturing giant's 787 Dreamliner was grounded at press time due to a battery problem. The first one destined for service as a business jet was scheduled to arrive at an independent completion center this December, but the battery issue could delay that project.

Boeing Business Jets now claims 12 firm orders for the business jet version. It expects that the airplane will carry 75 passengers 18,105 kilometers nonstop at a maximum cruise speed of Mach 0.85. The airline variant sells for about \$120 million. In the meantime, development work continues on the 737 Max airliner, the latest in a long line of successful 737 models since the late 1960s. The company hasn't yet decided whether to offer a Boeing Business Jet variant of the 737 Max.



**庞巴迪：** 庞巴迪宇航公司总部设在加拿大魁北克，目前正在研发里尔喷气机85（Learjet 85），这款飞机将成为迄今体积最大、速度最快的里尔喷气机（Learjet）。庞巴迪公司预计这款售价1966万2000美元的双发动机喷气机将于今年晚些时候服役。庞巴迪公司承诺飞机的最大巡航速度将在0.82马赫，最大航程超过5,500公里，这样一来就可以直飞中国境内的任何地方。

本公司位于堪萨斯州Wichita的研发中心目前还在研发里尔喷气机70（Learjet 70）和里尔喷气机75（Learjet 75），这两款飞机的售价分别是1110万美元和1350万美元。这两款飞机分别是里尔喷气机40和里尔喷气机45的改进机型，预计今年服役。

本公司目前还在同时研发环球7000和环球8000，这两款飞机是环球6000的改进机型。环球7000具有四区机舱，预计售价是6891万4000美元，巡航速度0.85马赫，最大航程13,520公里。庞巴迪公司预计环球7000将在2016年服役。环球8000具有三区机舱，预计在2017年服役。环球8000的售价是6620万8000美元，巡航速度0.85马赫，最大航程14,631公里。

**Bombardier:** Bombardier Aerospace, which is based in Quebec, Canada, continues to move ahead with development of its Learjet 85, which will be the biggest and fastest Learjet to date. The manufacturer expects the \$19.662 million twinjet to enter service later this year. Bombardier promises a high-speed cruise rate of Mach 0.82 and range in excess of 5,500 kilometers, which will allow nonstop flights to anywhere in China.

Also in development at the company's U.S. facilities in Wichita, Kansas, are a Learjet 70 and a Learjet 75 which are expected to enter service this year. The former is an upgrade of the Learjet 40 and is priced at \$11.1 million; the latter, an enhanced version of the Learjet 45, sells for \$13.5 million.

Plans are also proceeding apace for the Global 7000 and Global 8000 follow-ons to the Global 6000. The 7000, with a four-zone cabin, will have a \$68.914 million price tag and travel at Mach 0.85 with a range of 13,520 kilometers. Bombardier expects it to enter service in 2016. The 8000, with a three-zone cabin, will enter service a year later. With a \$66.208 million price, it promises a range of 14,631 kilometers at Mach 0.85.



里尔喷气机85 LEARJET 85



庞巴迪环球 7000 BOMBARDIER GLOBAL 7000



**赛斯纳飞机公司：** 赛斯纳公司2011年宣布开始研发中型喷气机奖状纬度。这款飞机预计售价1495万美元，标准配置下，能载客8人，最大巡航速度每小时814公里。赛斯纳公司预计这款飞机的航程将达到7,408公里，2015年开始服役。

奖状M2填补了奖状野马和CJ系列飞机之间的空白。赛斯纳公司希望精巧的小翼可以让飞机的航程达到2,407公里左右。最大巡航速度预计在每小时740公里左右。这款轻型飞机可载客六人，售价419万5000美元，预计2013年二季度开始服役。

奖状纬度飞机的消息公布研发六个月后，赛斯纳公司宣布开始研发奖状经度飞机。人们认为奖状经度飞机是已经取消的奖状哥伦布飞机的改进机型。奖状哥伦布飞机是一款超中型喷气机，其机舱横断面积与奖状经度飞机一样，但是机身比奖状经度飞机长九英尺。奖状经度飞机的设计航程是7,408公里，最大巡航速度是0.86马赫。这款双引擎飞机的售价是2599万9000美元，2016年服役后，将是奖状系列飞机中机身最大的商务喷气机。

奖状X飞机可以载客八人，其改进机型售价2292万5000美元，在以下方面都有了改进：航程方面，增加到6,000公里；机舱长度增加了38.1厘米。此外，最大巡航速度增加到0.935马赫，这意味着奖状X飞机将重新成为世界上最快的商务喷气机，除非湾流公司改进G650机型，在其目前0.925马赫的速度上改进。



赛斯纳奖状纬度 CESSNA CITATION LATITUDE

**达索航空：** 这家法国飞机制造商目前正竭力开发猎鹰2000S，这是猎鹰2000系列中最新的机型，售价为2710万美元，则是整个系列中最为适中的。

达索公司预期这款飞机的航程能够达到6,204公里，巡航速度达到0.80马赫，载客六人。虽然猎鹰飞机不能很随意地设计机舱，不过，达索公司表示飞机的内饰由知名的BMW Group DesignworksUSA设计。新型的Pratt & Whitney P308C引擎比之前用的引擎更高效，并且达索公司表示，其氮氧化物排放量将减少40%。

猎鹰 2000LXS将综合较早的2000LX机型的航程、机内设施和2000S的短跑道起飞功能。达索公司预计这款售价3280万美元的飞机航程达到7,400公里，巡航速度达到0.80马赫。这款飞机预计今年上半年获得认证。

猎鹰系列飞机中最新的成员可能被命名为猎鹰SMS，有些人猜测这一缩写表示的是“超中型（super-midsize）”。人们认为这款飞机取代了已经停产的猎鹰50EX。这项研发计划已经获得内部审批，不过达索公司还没有正式宣布研发计划，也没有接受订单。

**Dassault Aviation:** The French manufacturer has been hard at work on its Falcon 2000S, the latest member of the Falcon 2000 family, and at \$27.1 million, the most moderately priced.

The manufacturer expects the airplane to have a range of 6,204 kilometers, cruising at Mach 0.80 with six passengers. While Dassault isn't offering a fully customizable cabin, the company points out that the interior boasts an all-new design by the prestigious BMW Group DesignworksUSA. The new Pratt & Whitney P308C engines are more efficient than their predecessor and, according to Dassault, will produce 40 percent less NOx emissions.

The Falcon 2000LXS will combine the range and amenities of the earlier 2000LX with the short-field performance of the 2000S. Dassault expects the \$32.8 million airplane to feature a 7,400-kilometer range at Mach 0.80 and to be certified in the first half of this year.

The latest proposed addition to the Falcon family is tentatively named the Falcon SMS, which some speculate stands for "super-midsize." The belief is that it will replace the out-of-production Falcon 50EX. The program has received internal approval but Dassault has yet to announce the formal launch or begin taking orders.

**Cessna Aircraft:** Cessna announced the launch of its Citation Latitude midsize jet in 2011. In its standard cabin configuration, the \$14.95 million airplane will carry eight passengers at a maximum cruise speed of 814 kilometers per hour. Cessna expects it to have a 7,408-kilometer range and to enter service in 2015.

The Citation M2 fills a gap between the Citation Mustang and CJ families. Cessna expects its subtle winglets to give it a range of approximately 2,407 kilometers. The maximum cruise speed is projected at 740 kilometers per hour. The six-passenger, \$4.195 million light jet is scheduled to enter service in the second quarter of 2013.

Six months after unveiling the Latitude, Cessna announced the Citation Longitude. It was perceived as a follow-on development of the now-cancelled Citation Columbus. The super-midsize jet has the same cabin cross-section as the Longitude but is nine feet longer. Cessna expects it to have a 7,408-kilometer range and a top cruise speed of Mach 0.86. It is anticipated that the \$25.999 million twinjet will be the largest business jet in the Citation line when it enters service in 2016.

The \$22.925 million upgrade of the eight-passenger Citation X evidences improvements in range, which has been bumped up to 6,000 kilometers; and cabin length, which has been increased by 38.1 centimeters. In addition, maximum cruise speed has been boosted to Mach 0.935—which means the Citation X will regain its title as the world's fastest business jet, unless Gulfstream revises the cruise speed of its G650 from the stated Mach 0.925.



达索猎鹰 2000S DASSAULT FALCON 2000S



巴西航空莱格赛 450 EMBRAER LEGACY 450

**巴西航空:** 巴西航空公司目前正在研发的新飞机是莱格赛450和莱格赛500。它们像兄弟姐妹一样有很多相似之处，但绝非双胞胎。两种机型共同的优点是：平整的地面，足以直立的净空、机舱压力相当于1,828米海拔高度，一间厨房以及8张俱乐部座椅。这8张座椅可完全平展开来变成4张睡床。

巴西航空期望售价1987万5000美元的中型莱格赛500于2014年初服役。标准配置下该飞机能载客8人，航程高达5,556公里，最高巡航速度达到0.82马赫。2012年11月进行了首次试飞，预计将于2014年初服役。

常规配置下，较短的莱格赛450能载客8人，最高巡航速度同样能达到0.82马赫，但其航程要短一些，为4,260公里。该飞机的价格稍低，为1647万美元。巴西航空预期该飞机将于2014年年末服役。

**Embraer:** New airplanes in the pipeline from the Brazilian manufacturer are the Legacy 450 and Legacy 500, which are siblings in many ways but certainly not twins. Shared amenities include a flat floor and standup headroom, cabin pressure equivalent to 1,828-meter altitude, a wet galley and eight club seats that will convert to four full-flat sleeping surfaces.

Embraer expects the \$19.875 million, midsize Legacy 500 to enter service in early 2014. It can carry eight passengers in standard configuration and has a range of 5,556 kilometers and a maximum cruise speed of Mach 0.82. It made its first flight in November 2012 and is expected to enter service in early 2014.

The shorter Legacy 450 accommodates eight passengers in typical configuration and has the same maximum cruise speed of Mach 0.82 but less range—4,260 kilometers. The price tag is lower—\$16.47 million—and Embraer anticipates it will enter service in late 2014.

**本田航空:** 任何一款商务机型的开发都普遍有延迟现象，本田喷气机也不例外。目前公司已有4款飞机服役，第5款飞机将于2013年初进行试飞。

2013年本田喷气机将获得认证并服役。这家总部位于美国的公司目前已经开始在北卡罗来那州的Greensboro制造该飞机，预计最多年产70台。2012年年中，制造商称本田喷气机的订单量已超过100。

这款载客5人的双引擎飞机的独特设计是其引擎用pylons粘附在每个机翼的上方，而不是常规的在机翼下方。制造商期望售价450万美元的本田喷气机航程在2,592公里左右，巡航速度达到778公里/小时。



本田喷气机 HONDAJET

**Honda Aircraft:** Following the sorts of delays that are typical in development of any business jet, Honda Aircraft now has four HondaJets flying, with a fifth expected to join the test-flight program in early 2013.

Anticipating certification and entry into service in 2013, the U.S.-based company has already begun production at its plant in Greensboro, North Carolina, and anticipates a maximum production rate of about 70 airplanes a year. As of mid-2012, the manufacturer claimed firm orders for more than 100 HondaJets.

The five-passenger twinjet's distinctive design features engines attached by pylons atop each wing rather than in the more common position below the wings. The manufacturer expects the \$4.5 million HondaJet to have a range of approximately 2,592 kilometers and a cruise speed of 778 kilometers per hour. ■