



空客 Airbus ACJ318

飞行宫殿

如果天空中有一样东西能够成为我们自己的家和办公室，那一定是这些飞机

A Flying Mansion

When the only thing that will suffice is your own home and office in the sky, these jets can deliver.

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对于有些人而言，传统的大型公务机达不到这个要求。这些挑剔的旅行者需要的是像空军一号的飞机，机上得有足够大的房间，能让人舒展身躯，能够四处走动，甚至还能锻炼身体。他们要求工作和睡眠的私密性，心血来潮时，还得能办派对。幸运的是，空中客车、波音公司和巴西航空工业公司在公务机的基础上，为最富有的环球旅行者们制造了特别的豪华机型。

南加州一家大公司的CEO乘坐的是一架客舱容积为5390立方英尺的波音公务机（BBJ），上面有19个座位。机长说老板“喜欢在机上工作，工作之后回到自己的客舱休息，这里如家中一般自在。他可以在自己的床上舒舒服服地睡一觉，当飞机抵达中东之时，他已经完全休息好了，可以立即投入工作。”

拥有专属空间意味着我们可以自在地工作或休息，不用操心那些飞机上必须将就的事，那些事真是又累又烦，比如说在“传统”公务机上，我们不得不把座位变成床。在这些“传统”公务机中，体积最大的是湾流 G650和庞巴迪环球快车，其客舱容积也不过2200立方英尺。空客公务机（ACJ）在单过道班机的基础上做了大幅改动，四种机型的客舱容积达到了5300立方英尺到8547立方英尺。波音公务机也有同类的单过道机型，三种机型的客舱容积为5390立方英尺到7290立方英尺。

准备好听价格了吗？这些大型公务机价格高达7000万至1.1亿美元，它们深受美国亿万富翁、中东石油大亨和中国新贵的青睐。大约60%的飞机卖给了

FOR SOME, A TRADITIONAL LARGE BUSINESS JET just won't do. These demanding travelers require something more like Air Force One, with room to stretch out, walk around and even exercise. They want privacy for working and sleeping and, if the mood strikes, the proper environs for a party. Luckily, Airbus, Boeing and Embraer make such “bizliners,” special models based on commercial airliners and built for the wealthiest globetrotters.

A chief pilot of a major company based in Southern California flies his CEO boss in a 5,390-cubic-foot Boeing Business Jet (BBJ), which seats around 19. The pilot says his boss “likes to do his work and then retire to his cabin where he feels like he’s at home. He can sleep in comfort in his own bed and arrive in the Middle East fully rested and ready to do business.”

Having a layout with dedicated sections means you can work or relax without having to worry about a disruptive and exhausting in-flight conversion—such as, say, turning seats into beds, as you have to do in a “traditional” business jet. The largest of those jets—the Gulfstream G650 and Bombardier Global Express—provide about 2,200 cubic feet of cabin volume. The Airbus Corporate Jet (ACJ) models, built from single-aisle airliners, ramp things up considerably, with 5,300 to 8,547 cubic feet over their four models. Similarly, the cabins of three models of single-aisle Boeing Business Jets deliver 5,390 to 7,290 cubic feet.

Buckled up for the price? Such bizliners cost \$70 million to \$110 million fully fitted and largely appeal to U.S. billionaires, Middle East oil sheiks and Chinese high-fliers. Private individuals account for about 60 percent of sales, with multinationals making up the rest. Airbus says it has sold about 170 such large corporate jets, about half of them in the Middle East, but with China coming on strong. Meanwhile, Boeing Business Jets has sold 208 bizliners, primarily in North America, naturally, but it is now seeing the most activity in the Middle East and Eastern Europe. Last year, the two companies delivered 21 bizliners of varying sizes, up from 13 in 2005 but down from 27 in 2010.

大型公务机 Big Business Jets

| | | 巴西航空工业公司 “世袭” 1000 Embraer Lineage 1000 | 空客 ACJ319-113 Airbus ACJ319-113 | 波音 BBJ 737-700IGW Boeing BBJ 737-700IGW |
|---------------|-------------------------------|---|---------------------------------------|---|
| 客舱容积（立方英尺） | Cabin volume (cu ft) | 4,085 | 5,900 | 5,390 |
| 最大载客量 | Maximum passengers | 6 | 8 | 23 |
| 最大起飞重量（磅） | Maximum takeoff weight (lbs) | 120,152 | 168,650 | 171,000 |
| 航程（海里） | Range (nm) | 4,487 | 6,332 | 6,072 |
| 正常巡航速度（节） | Normal cruise speed (kts) | 450 | 461 | 461 |
| 带内部装修价格（百万美元） | Price with completed interior | \$53M | \$87M | \$71M |
| 可变成本/小时 | Variable cost/hour | \$6,432 | \$7,526 | \$7,588 |
| 年固定成本（百万） | Annual fixed cost (millions) | \$0.958 | \$1.054 | \$1.043 |
| 已建成或已交付架数 | Number built or delivered | 7 | 71 | 114 |

注：所有机型均配备所有可用的备用油箱。最大载客量基于满油（所有备用油箱均满油）时的载重量，除以200磅并四舍五入。航程的计算基于远程巡航速度、最大油量（包括所有备用油箱）、两名飞行员、八名乘客、最佳巡航高度（ISA）、NBAA IFR规定的备用油量（200海里）。正常巡航速度基于3万5千英尺的巡航高度，由马赫转换而来。带内部装修价格常有变动，这里给出的是最佳估计值。
资料来源：Conklin & de Decker, Orleans, Mass.
Note: All models configured with all available optional fuel tanks. Maximum passengers based on payload with full fuel (all optional tanks full) divided by 200 pounds and rounded down. Range based on long-range cruise speed and maximum fuel with all optional fuel tanks, two pilots, a minimum of eight passengers, optimum altitude (ISA) and the NBAA IFR alternate fuel-reserve (200 nautical miles) calculation. Normal cruise speed is at 35,000 feet and converted from Mach. Cost of completed interior is highly variable; best estimate given.
Source: Conklin & de Decker, Orleans, Mass.

私人客户，余下的客户均为跨国公司。空客声称已售出170架大型公务机，约有一半卖给了中东客户，但中国客户的购买力正在后起直追。波音公务机卖出了208架大型公务机，它的主要市场自然是北美，但现在中东市场和东欧市场也蒸蒸日上。去年这两家公司共交付了21架各种型号的大型公务机，2005年这两家的总销量仅为13架，但去年销量较之2010年的27架有所减少。

这些翱翔于空中的豪华坐骑还有更小或更大的型号。巴西航空工业公司的“世袭”（Lineage）客舱容积将近4100立方英尺，加上装修总费用为5300万美元（参见表格）。空客双过道飞机A380和波音747-8可以提供更多的活动空间，在被改造成私人飞机之前，它们各有525和467个座位。这些超大型公务机的客户群很小，主要是一些皇室和国家首领，因为这些客户出行时总是前呼后拥。比如说，美国总统的坐骑是两架经过高度改装的波音747-200B，改装前的机型可以搭载366个乘客，拥有三层甲板。

ACJ和BBJ还拥有容积超过5300立方英尺的机型，它们可以为8-19位乘客提供更充足的活动空间。人们常用“高贵”、“典雅”来形容ACJ和BBJ的机舱。这些飞机通常都会包括一个会议室/餐厅、一个头等舱/



Smaller and larger versions of these airborne stretch limos are also available. Embraer’s Lineage, at almost 4,100 cubic feet, costs about \$53 million fully decked out (see table). For more walk-about space, the Airbus twin-aisle A380 and Boeing 747-8 offer enough room for 525 and 467 seats respectively, before being converted to private use. These jumbo bizliners appeal to an even tinier customer base, primarily a few royal families and heads of state trailing large retinues. The U.S. President, for example, travels on one of two highly modified Boeing 747-200Bs, a model that carries 366 passengers in a three-class configuration.

Still, the cabins of the ACJ and BBJ models, at 5,300-plus cubic feet, provide more than sufficient room for eight to 19 or so passengers. “Elegant” and “classy” are common descriptions of ACJ and BBJ interiors. Typically, they include a meeting/dining area, a stateroom/bedroom with a master lavatory and maybe a shower, a full galley, another lav for other passengers and crew and an enclosed, closet-size crew rest seat.

One BBJ interior we saw had a galley with a center island, a high-definition entertainment system with 46-inch and 42-inch monitors and a stateroom



在巴西航空工业公司的“世袭”1000（见左图）和波音BBJ3上面，有充足的活动空间。There’s plenty of room to stretch out in an Embraer Lineage 1000 (at left) and a Boeing BBJ3.



这架BBJ飞机的卧室带有卫生间和淋浴，可使人在4万1千英尺的高空之上尽享舒适。

This BBJ bedroom and lavatory with shower offer all the comforts of home at 41,000 feet.

卧室，卧室带有主人专用的卫生间，甚至还可能会有淋浴，此外还有厨房、供其它乘客和空乘人员使用的卫生间和一个储藏室大小的封闭性的空乘人员休息座位。

在一个BBJ公务机的机舱内，我们可以看到一个带有岛台的厨房、一套带有46×42英寸显示器的高清娱乐系统，及一个带有特大号床、专用卫生间和沐浴设施的特等舱。还要求古典家具和艺术品？完全没有问题，绝对让您登上飞机就如同回到家中一般。

“我们雇佣了越来越多的知名设计师，只为给机舱添加独一无二色彩，”逸华航空集团CEO Richard Gaona说，这家航空公司从事数个大型公务机的运营。为客人量身定制的细部改动有很多，比如大幅降低噪声水平，从水晶酒瓶到抱枕再到主人名表专用藏柜的整体设计。

公务机的空乘人员通常包括两名飞行员（飞国际长途需要三名飞行员）和一两乘务人员。据我们所知，有一架大型波音公务机有19个座位，但多数时间只载四名乘客，机上没有乘务人员。“他们喜欢自己动手，”这架飞机的机长这么说。还有一架公务机载有两名飞机机械师，他们也扮演着乘务人员的角色。

航空客机每年可飞3500至4200小时，但公务机通常每年只飞350-400个小时。空客和波音提升了飞机的可靠性，随之提升的还有原本较低的飞机零部件的成本，它们还增进了寻找飞机维修点的能力，不管飞到哪里，几乎都能找到维修点。一位机长肯定地说，自他开始驾驶这架BBJ飞机，在过去6年的飞行中从未遇到过机械故障，他还说客户们通常是从湾流G550或庞巴迪环球快车升级来的。“客户宁愿牺牲掉一些速度与高度能力，也要换取更大的生活空间，”机长说，“他们也甘愿多花25-30%的费用。”

不利的一面？从飞机下单到交付，再到完成内部装修，几乎需要等上两年时间。波音公务机总裁Steve Taylor说单是内部装修就要花上2000-3000万美元。如果您嫌等得太久，可以考虑二手波音公务机或空客公务机，现有公务机阵容中通常约有10%等待出售。想为二手公务机换个新的内部装修吗？您仍然需要排队，因为二手飞机销售商跟新飞机销售商是同一家，他们正忙着造新飞机呢！

with a king-size bed, private lavatory and shower. Returning home with antique furniture and art? No problem.

And “more and more prestigious designers are hired to give a unique touch to the cabin,” says Richard Gaona, CEO of Comlux The Aviation Group, a firm that operates several bizliners. Bespoke tweaks might include greatly reduced noise levels, coordinated designs from crystal decanters to throw pillows and dedicated storage for the owner’s watch collection.

Bizliner crews typically consist of two pilots (three for long international flights) and one or two flight attendants. One of the Boeing bizliners we know is fitted with 19 seats, but mostly carries only four passengers in the cabin and no flight attendant. “They are people who like to take care of themselves,” the airplane’s chief pilot says. Another carries along two aircraft mechanics who double as flight attendants.

Airliners are built to fly 3,500 to 4,200 hours per year; a business jet typically flies about 350 to 400 hours per year. Airbus and Boeing promote their airplanes’ reliability and lower cost of parts, and the ability to find a maintenance facility almost anywhere. One of the chief pilots we spoke with confirms he has never had a mechanical problem with his BBJ on a trip during the six years he has been flying it, and claims clients are typically moving up from a Gulfstream G550 or a Bombardier Global Express. The buyer “would have to be willing to trade some speed and altitude capability for more living space,” he says. “He would also have to accept about a 25 to 30 percent increase in the cost structure.”

Downside? Almost two years can pass from the order of an aircraft to delivery and completion of the interior, which Steve Taylor, president of Boeing Business Jets, says can cost “\$20 million to \$30 million.” If that’s too long a wait for your flying residence, consider one of the preowned BBJs and ACJs for sale, usually about 10 percent of the existing fleet. Want a new interior for a preowned bizliner? You will still have to get in line. They are fitted by the same companies busy finishing the new jets.