The major aircraft manufacturers at a glance

by Matt Thurber

BOMBARDIER
bombardier.com

Headquarters: Montreal, Canada

Sales (business aircraft): 2014–204 units, $47 billion

Aircraft in production: Learjet 70, 75; Challenger 350, 650; Global 5000, 6000

Bombardier started out as a snowmobile manufacturer in 1942 and has grown into one of the world's largest producers of business jets and regional airliners. In the last two decades, Bombardier has introduced several business jets, including the Learjet 40/45 and 70/75, Challenger 300, 350, 605, 650 and Global 5000 and 6000. Bombardier plans to offer the "new-engine option" (neo) for the smaller ACJs beginning in 2018. For government and other customers requiring the ultimate in space and long-distance capability, the manufacturer also produces executive versions of its A330, A340, A350 and A380 widebody jetliners.

BEECHCRAFT/TEXTRON AVIATION
beechcraft.com

Headquarters: Wichita, Kansas

Sales (business aircraft): 2014–199 units, $937 million

Aircraft in production: King Air C90GTx, 250, 350i/ER

Beechcraft Corporation traces its roots back to 1932 with the Model 17 “Staggerwing,” which saw military service in China. In 1937, Walter Beech introduced the Model 18, arguably the first cabin-class, twin-engine business airplane. That effort morphed in 1964 into the twin-turboelectric King Air, which has since undergone multiple upgrades and remains in production. Raytheon bought Beech in 1980, adding the Hawker business jet brand, and the company became Hawker Beechcraft. It emerged from Chapter 11 bankruptcy in 2013 as the Beechcraft Corporation, which no longer produces business jets and instead focuses exclusively on its turboprop line. In 2014, Textron acquired Beechcraft, merging it with Cessna to create Textron Aviation, which is retaining the Beechcraft and Cessna brands.

BOEING BUSINESS JETS
boeing.com/commercial/bbj

Headquarters: Seattle, Washington

Sales (business aircraft): 2014–10 units, $325 million

Aircraft in production: BBJ, BBJ2, BBJ3 plus VVIP widebodies

The BBJ combines components of the 737-700 series airframe and the larger 737-800 series wing, landing gear and center fuselage section. A stretched version called the BBJ2 boasts 25 percent more cabin capacity and the even larger BBJ3 is based on the 737-900ER. Starting in 2018, the BBJ1, BBJ2 and BBJ3 will be transitioning into the Max platform, with 12 percent improved fuel burn offered by the upgrade to the CFM International Leap-1B engine. All Boeing jets from the 737 to the company's largest and newest 747-8 and the 787 are available in VVIP versions (747VIP, 777VIP, 787VIP).

AIRBUS
airbus.com

Headquarters: Toulouse, France

Sales (business aircraft): 2014–five units, $447 million

Aircraft in production: ACJ318, ACJ319, ACJ320, ACJ321 plus VVIP widebodies

Airbus entered the bizliner market in 1997 with the Airbus Corporate Jet (ACJ), an executive version of its A319 airliner. The company's single-aisle bizliner family includes the ACJ318, ACJ319, ACJ320 and ACJ321. Airbus plans to offer the "new-engine option" (neo) for the smaller ACJs beginning in 2018. For government and other customers requiring the ultimate in space and long-distance capability, the manufacturer also produces executive versions of its A330, A340, A350 and A380 widebody jetliners.
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**CESSNA AIRCRAFT/TEXTRON AVIATION**

**cessna.com**

**Headquarters:** Wichita, Kansas

**Sales (business aircraft):** 2014–473 units, $1.986 billion (totals include 220 piston aircraft)

**Aircraft in production:** Caravan; Citation Mustang, M2, CJ2+, CJ3+, CJ4, XLS+, Sovereign+ and X+

Cessna built its first airplane in 1927 and has since rolled out more than 190,000. The company has produced about a third of the roughly 16,000 business jets in operation worldwide. Its business jets range from the Mustang very light jet to the new Citation X+, which is the world’s fastest civil airplane with a top speed of Mach 0.935. Other offerings include the new M2, CJ2+, CJ3+ and upgraded Sovereign+. The new flat-floor Latitude and Longitude join the in-service fleet in the third quarter of this year and in 2017, respectively. To serve the growing Asian market, Cessna is producing Caravans and XLS+ models in China.

**DAHER**

**tmb.aero**

**Headquarters:** Tarbes, France

**Sales (business aircraft):** 2014–514 units, $189 million

**Aircraft in production:** TBM 900

Daher’s speedy single-engine turboprop TBM 900 cruises at 330 knots at 28,000 feet while carrying up to six occupants. Range at top speed is more than 1,400 nautical miles with reserves or 1,730 nautical miles at the 252-knot long-range cruise speed, yet the TBM 900 can land on runways as short as 2,500 feet. Industrial conglomerate Daher, which celebrated its 150th anniversary in 2013, purchased Socata in 2009. The company introduced the TBM 900, an upgrade of the 850, last March.

**EMBRAER**

**embraer.com**

**Headquarters:** São Paulo, Brazil

**Sales (business aircraft):** 2014–116 units, $1.47 billion

**Aircraft in production:** Phenom 100, 300; Legacy 500, 600, 650; Lineage 1000

Embraer’s ERJ 135/145 airframe served as the foundation for the company’s first business jet, the Legacy 600, which was introduced in 1999. In the past decade, Embraer has made a strong push into the business jet market by developing the Phenom 100 and 300 small-cabin jets, the midsize Legacy 450 and 500, the Lineage 1000 bizliner and the longer-range Legacy 650. The Legacy 450 and 500 models feature fly-by-wire flight controls and sidesticks; the latter was certified last year and the former will be certified this year.

**OTHER BUSINESS AIRCRAFT MANUFACTURERS**

**Cirrus Aircraft**

Duluth, Minnesota

cirrusaircraft.com

**Epic Aircraft**

Bend, Oregon

epicaircraft.com

**Extra Business Aircraft**

Luxembourg

extrabusinessaircraft.com

**Piper Aircraft**

Vero Beach, Florida

piper.com

**Quest Aircraft**

Sandpoint, Idaho

questaircraft.com

Eclipse Aerospace resumed production of its iconic very light jet, now dubbed the Eclipse 550, in 2013. The jet is aerodynamically the same as its predecessor, the 500, with the same Pratt & Whitney Canada PW610F turbofan engines, but sports a more sophisticated flight deck, the Avio Integrated Flight Management System, as well as autothrottles and anti-skid brakes.

Dassault Industries, Airbus Group and a group of private investors own Dassault Aviation, whose marketing and support subsidiary in the U.S. is Dassault Falcon Jet. The company builds airframes at its factory in southwest France. Dassault offers the Falcon 900 and 2000 family of business jets, as well as the Falcon 7X trijet, featuring the latest in fly-by-wire flight-control technology and fighter-jet-style sidesticks in the cockpit. Dassault introduced the Falcon 8X in May 2014 and unveiled it the following December. A stretched variation on the 7X, it offers an increased range of 6,450 nautical miles. The company expects it to enter service by the end of 2016. The fly-by-wire Falcon 5X twin-engine widebody jet will enter service in 2017.
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**GULFSTREAM AEROSPACE**
gulfstream.com

**Headquarters:** Savannah, Georgia

**Sales (business aircraft):** 2014–150 units, $7.781 billion

**Aircraft in production:** G150, G280, G450, G500, G550, G650, G650ER

In late 2012, two Gulfstream jets received certification from the FAA, the super-midsize G280, built in Israel by partner IAI, and the ultra-long-range, large-cabin G650. The G280 replaces the G200. The flagship G650 has a larger and wider cabin and larger windows than the G550, the manufacturer’s previous top model, and can fly 7,000 nautical miles unrefueled. The G650 has a maximum operating speed of Mach 0.925. The G650ER (extended range), which entered service last year, can fly 7,500 nautical miles. Gulfstream’s next models, the fly-by-wire G500 and G600, launch a new aircraft family. With range of 5,000 and 6,200 nautical miles, respectively, the new jets offer wider cabins than the G450 and G550 and are due to enter service in 2018 and 2019.

**PILATUS BUSINESS AIRCRAFT**
pilatus-aircraft.com

**Headquarters:** Stans, Switzerland

**Sales (business aircraft):** 2014–76 units, $319 million (totals include 10 PC-6 Porter utility aircraft)

**Aircraft in production:** PC-12NG

Pilatus is the world’s largest manufacturer of single-engine turboprops. The company’s PC-12 was certified in 1994 and became an instant hit with buyers, who appreciated its ruggedness, spacious cabin and performance. Today, more than 1,200 PC-12s are in service. The newest version, the PC-12NG, features a more powerful engine and Honeywell Primus Apex avionics. Pilatus is developing the PC-24, a twin-engine light jet with a midsize cabin that is due for entry into service in 2017.

**HONDA AIRCRAFT**
hondajet.com

**Headquarters:** Greensboro, North Carolina

**Sales (business aircraft):** not applicable (FAA certification due 2015)

**Aircraft in production:** HondaJet

Honda Aircraft has begun production of the HA-420 HondaJet and expects to receive full certification from the U.S. FAA this year. The light jet carries up to six passengers and features over-the-wing engine mounting, which frees up space in the composite fuselage and allows for a fully enclosed, externally serviced lavatory, unique in this size aircraft. Top cruise speed is 420 knots and range with four occupants is 1,180 nautical miles.

**SYBERJET AIRCRAFT**
sj30jet.com

**Headquarters:** Cedar City, Utah

**Sales (business aircraft):** N/A (production expected to resume late 2015)

**Aircraft in production:** N/A (production expected to resume production late 2015)

SyberJet Aircraft broke ground on a completion and delivery center in 2014 at Cedar City (Utah) Regional Airport, where its SJ30 light jets will be finished and turned over to customers. SyberJet owner MSC Aerospace also owns the adjacent Metalcraft Technologies, a long-time manufacturer of metal aircraft and turbine engine components, including about 70 percent of the SJ30’s airframe structure. SyberJet was formed by MSC in 2011 and purchased the SJ30 assets from bankrupt Emivest Aerospace. The company plans to deliver the SJ30i—the newest version, which is equipped with a Honeywell Primus Epic-based SyberVision cockpit and Jason Castriota Design interior—next year. It will be followed in 2017 by the SJ30x, which will feature more powerful and efficient Williams FJ44-3A engines and offer about 200 nautical miles of added range.

**PIAGGIO AERO INDUSTRIES**
piaggioaero.com

**Headquarters:** Genoa, Italy

**Sales (business aircraft):** 2014–two units, $14 million

**Aircraft in production:** Avanti EVO

The sleek, pusher-turboprop Piaggio Avanti was developed in response to the energy crisis of the 1970s. Piaggio delivered the first Avanti in 1990. In 2005, the company updated the aircraft with the Rockwell Collins Pro Line 21 avionics system, gave it slightly more powerful Pratt & Whitney Canada engines and branded it the Avanti II. In May 2014, Piaggio announced an upgraded version of the original P.180 Avanti, called the Avanti EVO, which received European certification late last year. The EVO’s aerodynamic improvements boost cruise speed to 405 knots and maximum cruise range to 1,770 nautical miles. Climb rate to its maximum altitude of 41,000 feet is 10 percent higher and takeoff and landing distances are lower.

**HELICOPTER MANUFACTURERS**

- AgustaWestland
  Cascina Costa di Samarate, Italy
  agustawestland.com

- Airbus Helicopters
  Marignane, France
  airbushelicopters.com

- Bell Helicopter
  Hurst, Texas
  bellhelicopter.com

- Enstrom Helicopter
  Menominee, Michigan
  enstromhelicopter.com

- MD Helicopters
  Mesa, Arizona
  mdhelicopters.com

- Robinson Helicopter
  Torrance, California
  robinsonhelicopter.com

- Sikorsky Aircraft
  Stratford, Connecticut
  sikorsky.com