

# BOMBARDIER

## BACKGROUNDER

### CHALLENGER 850

**Background:** Building on the reputation of the *Challenger* business jet and *CRJ* airliner families for outstanding reliability, dependability, comfort and value, the *Challenger 850* aircraft has established a unique niche, offering unparalleled flexibility in customized configurations for corporate and government operators. Market interest in the particular performance characteristics of the 50-passenger *CRJ* airliner led to its introduction into the business jet environment. In 1995, the Canadair Special Edition and Corporate Jetliner were launched and renamed as the *Challenger 850* aircraft in 2005.

**Description:** The *Challenger 850* aircraft, offered in a baseline 14-seat configuration, combines the proven performance and value of the *Challenger* business jet with the outstanding dependability of a *CRJ200* airliner. The *Challenger 850* aircraft is a unique solution for executive requirements offering unparalleled flexibility and comfort, taking advantage of the widebody cabin, intercontinental performance, reliability and maintainability of its airliner heritage.

*Challenger 850* aircraft operators also benefit from Bombardier's business aircraft warranty program and worldwide support, including a growing team of field service representatives, factory-owned service centers, authorized service facilities and parts distribution networks.

The *Challenger 850* aircraft has the largest cabin in its category, providing the space, flexibility and exceptional comfort similar in size to the *Global Express* jet. The *Challenger 850* aircraft has a maximum takeoff weight of 53,000 pounds (24,041 kg), a high-speed cruise of Mach 0.80 (528 mph; 850 km/hr) and a maximum operational ceiling of 41,000 feet (12,497 m). The auxiliary fuel tanks can accommodate an additional 4,000 pounds (1,814 kg) of fuel for a maximum fuel weight of 18,274 pounds (8,289 kg). The *Challenger 850* aircraft has a non-stop range of 2,811 nautical miles (5,206 km) with eight passengers and can fly non-stop New York-Dublin, London-Jeddah, Singapore-Shanghai and other key city pairs\*.

Powered by twin General Electric CF34-3B1 turbofan engines, the *Challenger 850* aircraft offers the same dispatch reliability, fuel efficiency and outstanding exterior noise characteristics as the *CRJ* – 78.8 Effective Perceived Noise decibels (EPNdB) at takeoff, a sideline rating of 82.4 EPNdB, and a landing rating of 92.1 EPNdB, all well within U.S. FAA Stage 3 and Stage 4 noise restrictions.

Aircraft systems incorporate safety features and redundancy levels to meet transport category requirements. The Rockwell Collins Pro Line 4 avionic suite was ergonomically designed for intuitive operation, providing superior situational awareness, while reducing pilot workload. With over 2,000 systems in service, it has earned an enviable reputation for dependability and reliability.

**Highlights\*\*:**

Max. cruise speed:	Mach 0.80 (528 mph; 850 km/hr)
850 max. range (8 Passengers):	2,811 nm (5,206 km)
Max. altitude:	41,000 feet (12,497 m)
Passengers:	14
Introduced:	May 2005
Certification (as <i>CRJ200</i> ):	July 31, 1992 Transport Canada Jan. 15, 1993 European JAA Jan. 21, 1993 U.S. FAA
First delivery:	November 8, 2006
Aircraft manufactured:	61 (as of April 30, 2010)

\*Theoretical range ( $\pm 3\%$ ) with 8 pax / 2 crew, standard BOW, NBAA IFR 200 NM reserves, ISA and maximum allowable fuel.

\*\*Aircraft manufactured include all *Challenger 850* and Bombardier Canadair Special Edition aircraft manufactured by Bombardier Aerospace that have received their Certificate of Airworthiness.

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