



# Large Jets

Honeywell forecasts delivery of more than 1,300 large business jets over the next ten years with deliveries expected to peak in 2007 at just over 100 aircraft, then decline slightly to a stable level of around 95 aircraft per year until stepping up again in 2012 and beyond. OEMs are working at upgrading or downsizing to meet the range and size requirements to suit the fractional operators.

■ Dassault's Falcon 2000 is fostering two derivatives the 2000EX and the 2000DX giving optimum short range trips with large cabin comfort.

Artist Tim Hall.

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**IN  
DEVELOPMENT**

## BOMBARDIER CHALLENGER 605



### SPECIFICATION

Length	68' 5"	20.85m
Wingspan	64' 4"	19.61m
Height	20' 8"	6.30m
Cabin Length	28' 5"	8.66m
Cabin Width	8' 2"	2.49m
Cabin Height	6' 1"	1.85m
Max Range (5)	4,045nm	7,491km
Max Seating	3 + 12	
Typical Seating	3 + 9	
Avionics	Rockwell Collins Pro Line 21	
Powerplant	2x GE CF34-3B	8,729lb / 38.84 kN
Max Cruise Speed	M 0.82	470 KTAS / 870 km/h
Max Ceiling	41,000ft	12,497m
Rate of Climb	1,681fpm	512mpm
Take off Distance	5,480ft	1,780m
Landing Distance	2,777ft	846m
MTOW	48,200lb	21,863kg
Max Landing Weight	38,000lb	17,237kg
Useful load	21,215lb	9,623kg
Payload with full fuel	4,915lb	2,229kg
Price	\$26.7m	€20.83m

**Large Jets**

**BOMBARDIER** listened to its customers with the redesign of the best-selling large business jet which has become the Challenger 605.

A 14% increase in window size over the original 604 has given more than 30% increase in cabin light and a better line of sight for passengers.

The 605 has altogether a much lighter and improved feel with changes to the cabin electronic system, to the galley and to the lavatory.

First customer delivery is due in the third quarter of 2007.

The new Challenger was launched in November 2005 with first flight in January 2006.

The aircraft's capacity for three crew and 12 passengers makes it a promising option for the corporate market.

The 605 is fitted with the Rockwell Collins Pro Line 21 avionics.

The Canadian manufacturer delivered the last 604 with the PrecisionPlus upgrade of its Pro Line 4 avionic suite in mid 2006.



### HERITAGE

A successor to the Challenger 604 – which itself is part of the Challenger 600 series with first flight in November 1978. More than 700 aircraft of the series have been manufactured since. Continual improvements with the 601-1A, 601-3A, 601-3R through to the 604 have seen range and payload growth.

### SPOTTER'S GUIDE



Although only two inches (5cm) bigger than the 604 windows, the Challenger 605 windows look much larger. A good identifier for the Challengers is the arced mounting for the engines. The low swept wing with winglets give this aircraft a fine look. The new Challenger tailcone has an angular finish, not flush like that of the 604.

**IN  
DEVELOPMENT**

## DASSAULT FALCON 2000DX



### SPOTTER'S GUIDE

As a straight derivative of the 2000EX there is no external difference. Like the 2000 it features 10 windows, a low swept wing, a tall swept tail fin with mid-mounted swept tailplane and a Pratt and Whitney Canada PW308C engine on either side of the rear fuselage.

### SPECIFICATION

Length	66' 4"	20.21m
Wingspan	63' 5"	19.33m
Height	23' 2"	7.06m
Cabin Length	26' 2"	7.98m
Cabin Width	7' 8"	2.34m
Cabin Height	6' 2"	1.88m
Cabin Volume	1,024 cu.ft	28.99m <sup>3</sup>
Max Range (6)	3,250nm	6,019km
Max Seating	2 + 19	
Typical Seating	2 + 18	
Powerplant	2x P&W PW308C	7,000lb / xkN each
Max Cruise Speed	476ktas	882km/h
Max Ceiling	47,000ft	14,326m
Rate of Climb	2,412fpm	735mpm
Take off Distance	4,800ft	1,463m
Landing Distance		
MTOW	41,000lbs	18,598kg
Max Landing Weight	39,300lbs	17,826kg
Useful load	18,010lbs	8,169kg
Payload with full fuel	3,410lbs	1,547kg
Price	\$25.55m	€19.93m

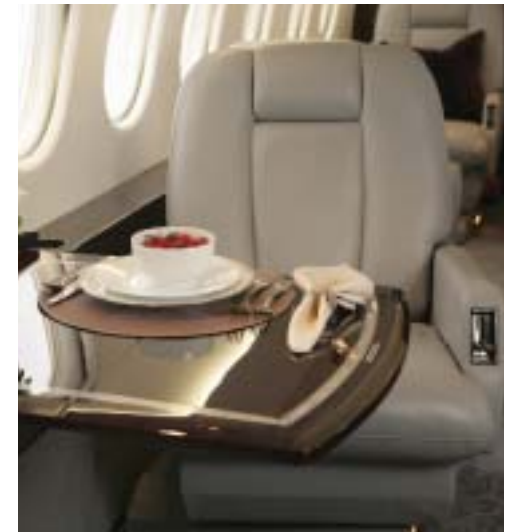
## Large Jets



**DASSAULT** has listened to its customers who want to operate shorter range trips but want the comfort and performance of a large-cabin aircraft.

The company has come up with the Falcon 2000DX which is based on the design of the 2000EX, but the range has been reduced by 550 nautical miles to 3,250nm (6,010km) – still some 250nm (460km) more than the original Falcon 2000 which it will replace.

Among its capabilities, the 2000DX will be able to climb directly to 41,000ft in 17 minutes. It will also feature an EASy cockpit.



### HERITAGE

The Dassault Falcon 2000DX is a direct replacement for the Falcon 2000 and a shorter range version of the 2000 EX, achieved by taking 2,000lb (900kg) of fuel capacity out of the 2000EX. First flight is planned for June 2007 and certification and first deliveries at the end of the year. The Falcon 2000 was announced at the Paris Air Show of 1989 (as Falcon X) and first flew in March 1993 with first delivery in February 2005.

## DASSAULT FALCON 2000EX



### HERITAGE

The Falcon 2000, on whose platform the 2000EX is based, was originally designed for U.S. transcontinental travel; easily able to cover 3000 nm at Mach 0.80 with NBAA IFR reserves. The popularity of the plane introduced the need for a longer-range model, and ten years after the 2000's launch, the 2000EX was born. The EX offers a higher performing engine, a 30% increase in fuel capacity and an almost 800 nm gain over its sibling. The programme was launched in October 1999 and had first flight in October 2001 followed by joint FAA and JAA certification in March 2003, with first deliveries two months later. EASy flight deck was introduced during 2004.

### SPECIFICATION

Length	66' 4"	20.21m
Wingspan	63' 5"	19.33m
Height	23' 2"	7.06m
Cabin Length	26' 2"	7.98m
Cabin Width	7' 8"	2.34m
Cabin Height	6' 2"	1.88m
Cabin Volume	1,024 cu.ft	28.99m <sup>3</sup>
Max Range (6)	3,800nm	7,037km
Max Seating	2 + 19	
Typical Seating	2 + 8	
Powerplant	2x P&W PW308C	7,000lb / xkN each
Max Cruise Speed	480ktas	889km/h
Max Ceiling	47,000ft	14,326m
Rate of Climb	1,952fpm	595mpm
Take off Distance	5,374ft	1,638m
Landing Distance	5,839ft	1,780m
MTOW	42,200lbs	19,142kg
Max Landing Weight	39,300lbs	17,826kg
Useful load	18,110lbs	8,215kg
Payload with full fuel	1,450lbs	658kg
Price	\$27.2m	€21.22m

## Large Jets

**EUROPE'S** business jet manufacturing industry is led by Dassault and the French company has made its name worldwide with its Falcon 2000 family.

The cabin can accommodate up to 19 passengers. The forward part of the passenger cabin is arranged as a four-seat lounge.

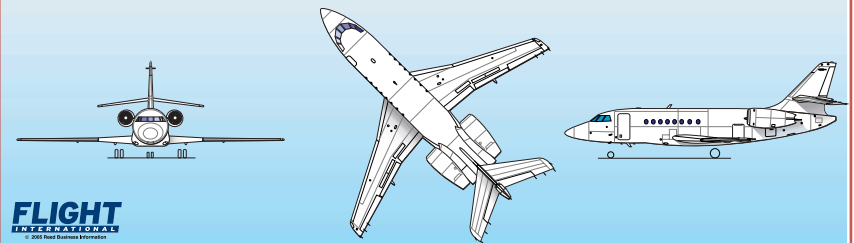
The rear part of the cabin is set out with a two-seat sofa and four seats. The cabin is 1.88m high, 2.34m wide and the cabin floor has a length of 7.98m.

The flight deck was initially equipped with the ProLine IV, but is now supplied fitted with the Honeywell EASy Enhanced Avionics System, as on the Falcon 900EX. EASy is based on the Primus Epic system with improved safety and information management features (See Falcon 7X, p202).

The 3.79m-pressurised baggage compartment is externally loaded, internally accessible and stows up to 725kg.



### SPOTTER'S GUIDE



The Falcon 2000 is a direct descendent of the Falcon 900 – but without the third engine. The P&WC 308C engines are mounted on the sides of the rear fuselage. There are only nine windows compared to the F900's 12, but there is a similar tall swept tail fin and mid mounted swept tailplane.



## GULFSTREAM G350



### SPECIFICATION

Length	89' 4"	27.23m
Wingspan	77' 10"	23.72m
Height	25' 2"	7.67m
Cabin Length	45' 1"	13.74m
Cabin Width	7' 4"	2.24m
Cabin Height	6' 2"	1.88m
Max Range (8)	3,800nm (M 0.80)	7,042km
Max Seating	3 + 19	
Typical Seating	3 + 12-16	
Powerplant	2x Rolls-Royce Tay Mk 611-8C	13,850lb/61.6kN each
Avionics	Honeywell Primus Epic	
Max Cruise Speed	M 0.80	459KTAS/850km/h
Max Ceiling	45,000ft	13,716m
Rate of Climb	3,960fpm	1,207mpm
Take off Distance	5,050ft	1,539m
Landing Distance	3,260ft	994m
MTOW	70,900lbs	32,160kg
Max Landing Weight	66,000lbs	29,937kg
Useful load	28,200lbs	12,790kg
Payload with full fuel	2,600lbs	1,179kg
Price	\$29.5m	€23.02m

## Large Jets



**THE** Gulfstream G350 is a sister to the G450, built on the same fuselage but with very different missions in mind. The 350 was planned to take in the sector that the Gulfstream III had dominated with mid range but large cabin.

It was developed specifically for customers who require ample seating and cargo space, but who don't need long- or ultra-long-range capability. The aircraft features a huge array of standard equipment items, including Gulfstream's PlaneView cockpit, based on Honeywell's Primus Epic.

Also available as optional equipment are the next-generation Visual Guidance System, Honeywell Head-Up Display (HUD) and the exclusive Gulfstream Enhanced Vision System. (EVS). Many customers have also opted for the Broadband Multi-Link (BBML) system, enabling high-speed Internet access.

Two Rolls-Royce Tay 611-8C engines provide the motion, enabling cruise altitudes up to FL450 and speeds up to Mach .88. The G350 typically seats 12 to 16 passengers in a cabin pressurised to 6,000ft when flying at its maximum altitude.

### HERITAGE

The G350 has found its way as replacement for the Gulfstream III via a brief incarnation as the G300. However, in comparison with the G300, the G350 features an additional range of 200nm (370km), a roomier cabin and cockpit and baggage area, an advanced technology flight deck and an upgraded cabin environmental control system.

The G350 business jet was first announced on February 23, 2004, at the Asian Aerospace show in Singapore. On November 1, 2004, it was certified by the FAA and, on March 30, 2005, it received validation from the European Aviation Safety Agency.

It is similar in design to its sister ship, the large-cabin, long-range G450. While the G450 can fly 550nm (1,019km) farther than the G350, both aircraft feature the same spacious cabin. The first aircraft was delivered in July 2005.

### SPOTTER'S GUIDE

The G350 and the G450 are virtually identical and impossible to tell apart on the ramp.