Bombardier Global Express XRS

RANGE
6,055 nm

SPEED
511 kts

PASSENGERS
13 people

Cost

ACQUISITION COST	ANNUAL COST	VARIABLE COST	FIXED COST
$21,500,000	**$3,211,621**	**$5,158/hr**	**$1,148,337**

MAX PAYLOAD	4,800 lb	ENGINES	2 Rolls Royce BR 710-A2-20
TOTAL CABIN AREA	2,002 cu ft	AVIONICS	Honeywell Primus 2000XP
WINGSPAN	94 ft	APU	Standard

Assumptions

This report uses custom assumptions that differ from Conklin & de Decker default values for Annual Utilization (Hours), Fuel Price (Jet A).

ANNUAL UTILIZATION (DISTANCE)	171,600 nm	FUEL PRICE (JET A)	$4.45/gal
ANNUAL UTILIZATION (HOURS)	400 hrs	LABOR COST	$136/hr
AVERAGE SPEED (STANDARD TRIP)	429 kts	ACQUISITION COST	$21,500,000

Bombardier Aerospace

Canadair, later acquired by Bombardier Aerospace, originated in 1911 as a subsidiary of the British shipbuilding company, Vickers, Sons and Maxim. They were initially known as Canadian Vickers and the company was established to contract with the Royal Canadian Navy to build large ships, including many that were used by the Canadian and British during World War I.

After World War I, Canadian Vickers began designing and manufacturing flying boats for the Royal Canadian Police to patrol the numerous lakes contained in Canada. The demand for these aircraft increased so rapidly, Vickers had to add an aircraft division to go with their shipbuilding division.

When the U.S. entered WWII, they contracted Canadian Vickers to design the amphibious aircraft known as the PBY-5. Because of the huge influx of contracts received to manufacture ships and the PBY-5s, Canadian Vickers informed the Canadian, British and American governments that it could not continue to manufacture ships and aircraft at the same time, and would stop manufacturing aircraft. All three governments could not lose the aircraft production, so a new company separate from Canadian Vickers was proposed. In October 1944, Canadair was formed.

In 1947, Canadair was purchased by the U.S. submarine manufacturer, Electric Boat Company. The two companies merged in 1952 and formed General Dynamics. During the 1950s, Canadair designed and manufactured the F-86 Sabre Jet, building close to 2,000 of these aircraft for the Canadian, British and American Air Forces during its 10-year production run.

In 1976, General Dynamics sold Canadair to the Canadian government following a slowdown in defense and military contracts. Canadair was eventually sold by the Canadian government to Bombardier in 1986. After acquiring Canadair, Bombardier acquired the Ireland-based Short Brothers aircraft manufacturing company in 1989. This was followed in 1990 by the acquisition of the Learjet Company and finally the de Havilland Aircraft Company in 1992.

Bombardier Global Express XRS

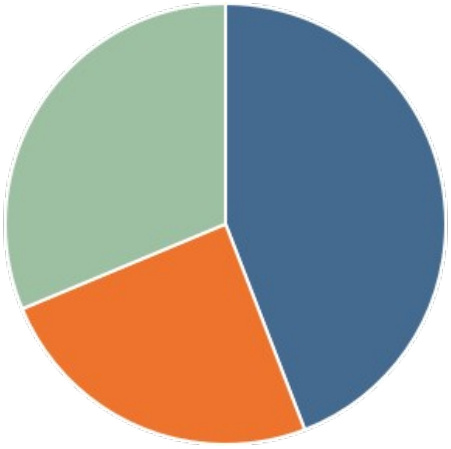
The Global Express is Bombardier's entry into the ultra-long-range jet category. Its cabin is 20 feet longer than its Challenger stablemate, providing a separate crew rest area and a roomier lavatory. Typical seating is for 14 and with all seats filled it has a maximum range of 6,250 nautical miles with NBAA IFR reserves.

The Global XRS was introduced in 2003 and has more range than the Global Express.

1. Cost

ACQUISITION COST	ANNUAL COST	VARIABLE COST	FIXED COST
$21,500,000	**$3,211,621**	**$5,158/hr**	**$1,148,337**

Total Annual Cost With Market Depreciation



$4,673,621

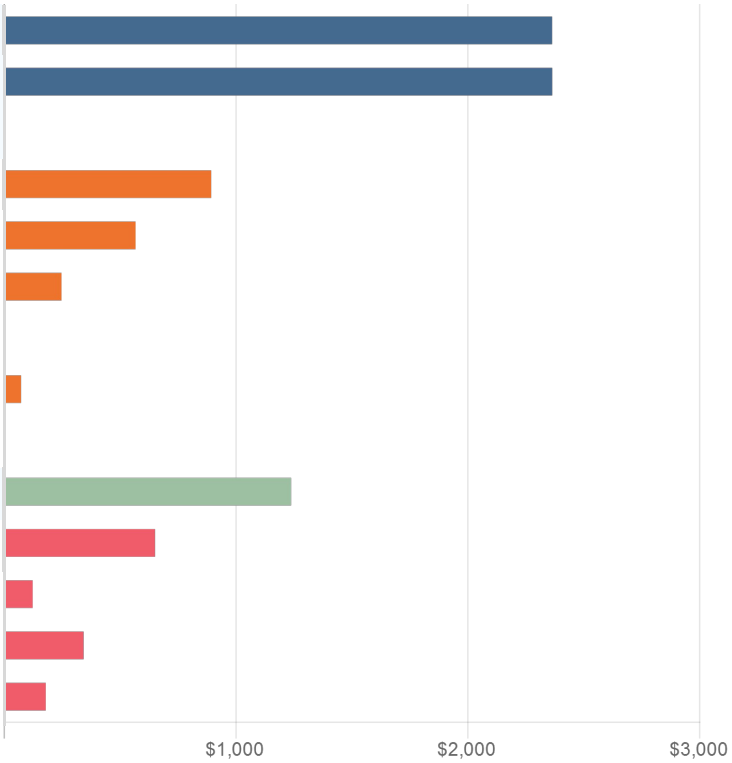
- 44% - Variable Cost - $2,063,284
- 25% - Fixed Cost - $1,148,337
- 31% - Market Depreciation - $1,462,000

Hourly Variable Cost

PER FLIGHT HOUR

$5,158/hr

Fuel [1]	**$2,367**
Fuel	$2,367
Additives	–
Maintenance	**$896**
Maintenance Labor [2]	$570
Parts Airframe/Engine/Avionics	$250
Thrust Reverser Allowance	–
APU Allowance	$76
Major Periodic Maintenance	–
Engine Reserves	$1,241
Miscellaneous Reserves	**$654**
Landing/Parking	$126
Crew Expenses	$346
Supplies/Catering	$182



1. Fuel is calculated using Fuel Cost x Fuel Burn + 15% - 532 gal/hr

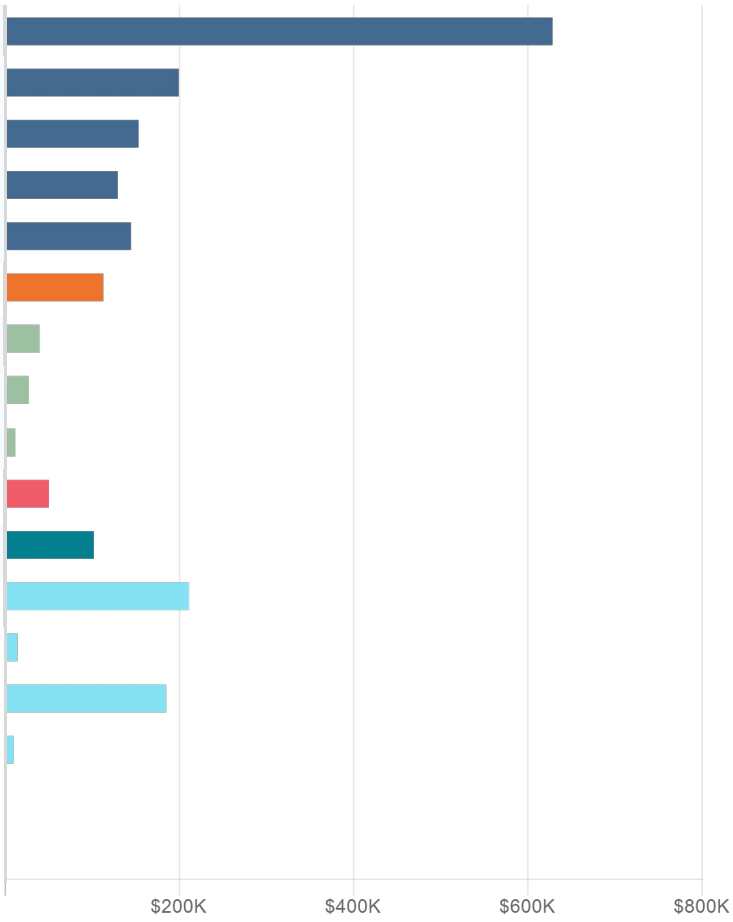
2. Maintenance Labor Cost is calculated using the ratio of Maintenance Labor Hours per Flight Hour and the Labor Rate: 4.19 labor-hr/Fhr @ $136/hr

Annual Fixed Cost

ANNUAL COST

$1,148,337

Crew	**$629,200**
Captain	$200,000
Copilot	$154,000
Flight Attendant	$130,000
Benefits	$145,200
Hangar	$113,400
Insurance	**$40,450**
Hull	$27,950
Single Limit Liability	$12,500
Aircraft Modernization	$51,000
Training	$102,600
Miscellaneous	**$211,687**
Navigation Chart Service	$14,847
Refurbish	$185,640
Computer Maintenance Program	$10,500
Weather Service	$700
Other	–



Costs are forward looking estimates based on Conklin & de Decker Research. For comparison purposes only.

Created on Aug 21, 2019, by Doug Strangfeld
Data Version: V 19.1

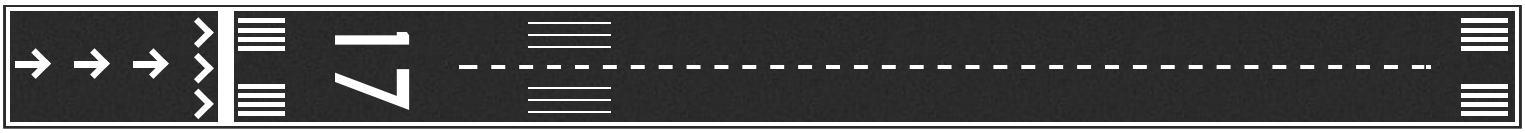
2. Performance

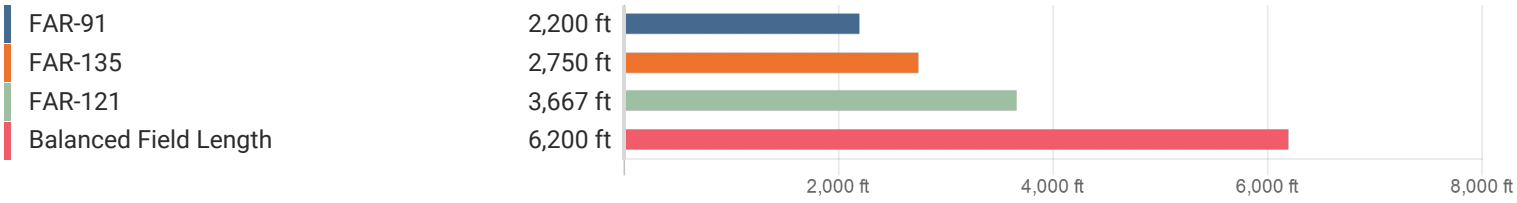
NORMAL CRUISE	LONG-RANGE CRUISE	MAXIMUM CRUISE
488 kts	**471 kts**	**511 kts**

RATE OF CLIMB	MAX CERT. ALTITUDE	INITIAL CRUISE ALTITUDE	TIME TO CRUISE ALTITUDE
3,300 ft/min	**51,000 ft**	**41,000 ft**	**26 min**

ENGINE OUT RATE OF CLIMB	ENGINE OUT CEILING
474 ft/min	**18,000 ft**

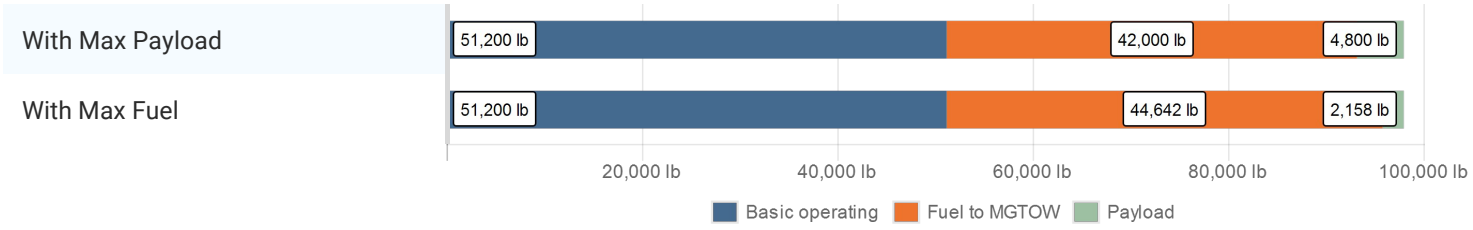
Field Length





3. Weight/Payload

Weight Breakdown



With Max Payload

MAXIMUM PAYLOAD	RANGE AT MAX PAYLOAD
4,800 lb	**6,013 nm**

With Max Fuel

AVAILABLE PAYLOAD	PASSENGER CAPACITY
2,408 lb	**12 people**

RAMP	98,250 lb
MAX LANDING	78,600 lb
BASIC OPERATING	51,200 lb
USEFUL LOAD	47,050 lb

MAX TAKEOFF	98,000 lb
ZERO FUEL	56,000 lb
USABLE FUEL	44,642 lb

4. Range

Long-Range Cruise

RANGE
6,390 nm

AVERAGE SPEED
470 kts

ENDURANCE
13.6 hrs

PASSENGERS
4 people

Maximum Cruise

RANGE
4,976 nm

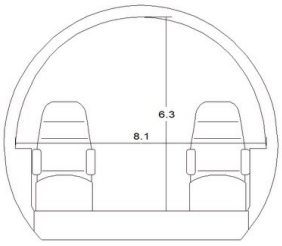
AVERAGE SPEED
505 kts

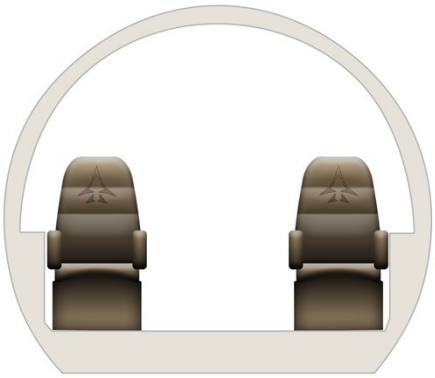
ENDURANCE
9.85 hrs

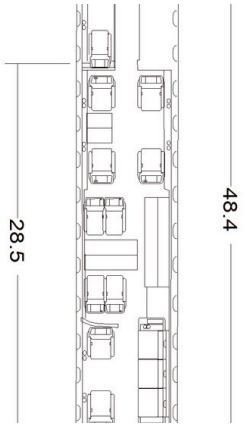
PASSENGERS
4 people

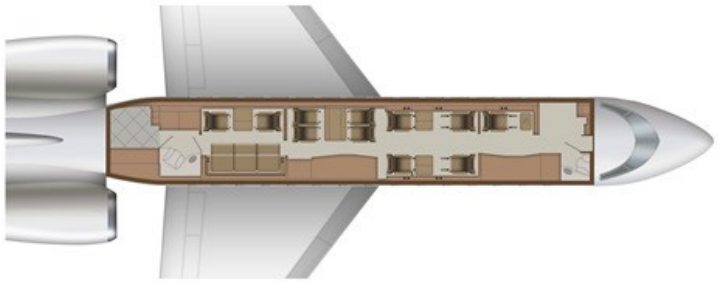
SEATS FULL RANGE	6,055 nm
FERRY RANGE	6,226 nm

5. Interior







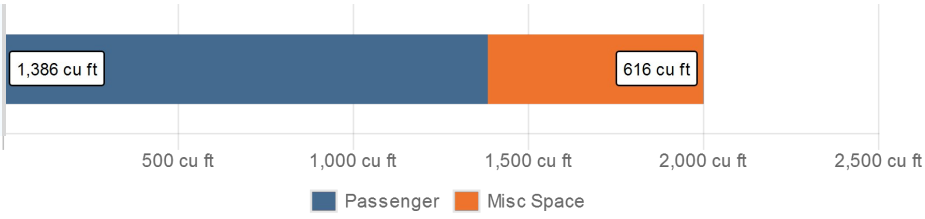


PASSENGERS
13 people

CREW
2 people

AREA PER PASSENGER
106.6 cu ft/person

CABIN VOLUME BREAKDOWN
2,002 cu ft



TOTAL CABIN AREA
2,002 cu ft

PASSENGER AREA
1,386 cu ft

MISC SPACE (GALLEY, LAV, ETC.)
616 cu ft

CABIN WIDTH
8.17 ft

CABIN LENGTH
48.35 ft

CABIN HEIGHT
6.25 ft

TOTAL BAGGAGE AREA
195 cu ft

INTERNAL
195 cu ft

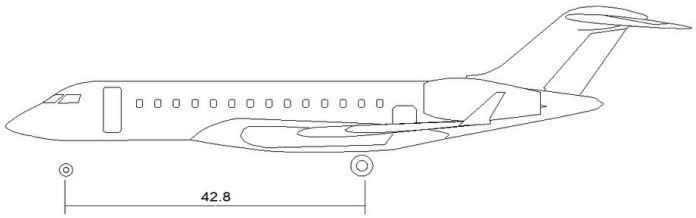
EXTERNAL
—

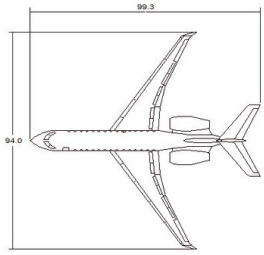
DOOR
18.51 sq ft

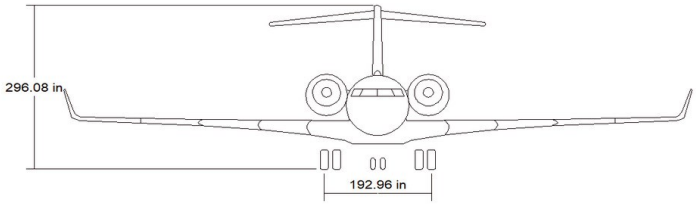
WIDTH (DOOR)
3 ft

LENGTH (DOOR)
6.17 ft

6. Exterior







WINGSPAN
94 ft

FUSELAGE
99.3 ft

POWERPLANT
2 Rolls Royce BR 710-A2-20

THRUST
14,750 lb

THRUST REVERSER
Standard

7. Equipment

AVIONICS

Honeywell Primus 2000XP

COCKPIT VOICE RECORDER	Standard
FLIGHT DATA RECORDER	Standard
EICAS	Standard
GROUND WARNING SYSTEM	EGPWS
TRAFFIC WARNING SYSTEM	TCAS II
MAINT DIAG SYS	CAIMS
VHF 8KHZ SPACING	Standard

AUXILIARY POWER UNIT

Standard

MEETS STAGE 3 NOISE LEVELS	Yes
REGULATORY CERTIFICATION	2005
IFR CERTIFIED	Yes
PRODUCTION	2005 - 2012
SINGLE POINT REFUEL	Standard
EXTERNAL LAV. SERVICE	Standard