



European Aviation Safety Agency

EASA

**TYPE-CERTIFICATE
DATA SHEET**

No. EASA.IM.A.009

**for
BD-700**

**Type Certificate Holder:
Bombardier Inc.**

P.O. Box 6087
Station Centre-Ville
Montreal, Quebec
Canada H3C 3G9

For Models:	BD-700-1A10	(Global Express and Global 6000)
	BD-700-1A11	(Global 5000 and Global 5000 featuring the Global Vision Flight Deck)
	BD-700-2A12	(Global 7500)

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SECTION 1: GENERAL (ALL MODELS)

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|----|--------------------------|--|
| 1. | Data Sheet No: | IM.A.009 |
| 2. | Airworthiness Category: | Large Aeroplanes |
| 3. | Performance Category: | A |
| 4. | Certifying Authority: | TCCA |
| 5. | Type Certificate Holder: | Bombardier Inc.
P.O. Box 6087
Station Centre-Ville
Montreal, Quebec
Canada H3C 3G9 |

SECTION 2: BD-700-1A10 and BD-700-1A11

I. General

- | | | |
|----|--|--|
| 1. | Aeroplane: | BD-700 Series |
| 2. | Reference Application Date for EASA Certification: | |
| | BD-700-1A10 | 10 March 1994 |
| | BD-700-1A11 | 15 February 2002 |
| 3. | EASA Certification Date: | |
| | BD-700-1A10 | 26 May 1999* (JAA recommendation 7 May 1999) |
| | BD-700-1A11 | 15 July 2004 |
- *Date of first TC issuance within EU MS, by LBA Germany.

II. Certification Basis

- | | | |
|----|--|-----------------|
| 1. | Reference Application Date for TCCA Certification: | |
| | BD-700-1A10 | 27 January 1994 |
| | BD-700-1A11 | 17 October 2001 |
| 2. | TCCA Certification Date: | |
| | BD-700-1A10 | 31 July 1998 |
| | BD-700-1A11 | 12 March 2004 |
| 3. | TCCA Certification Basis: | |
| | Refer to Transport Canada TCDS A-177. | |
| 4. | EASA Certification Basis: | |
| | JAR 25 Large Aeroplanes Change 14, 27 May 1994
Amendment (OP) 96/1, 19 April 1996 | |

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

5. Special Conditions:

SC GX/B-04	Accelerate - Stop Distances and Related Performance
SC GX/D-01	Worn Brakes
SC GX/D-02	Operation to 51,000 ft.
SC GX/D-04	Vibration, Buffet and Aerolastic Stability
SC GX/F-01	Protection from external High Intensity Radiated Fields (HIRF).
SC GX/F-02	Lightning Protection, Direct Effects
SC GX/F-03	Lightning Protection, Indirect Effects
SC GX/K-01	All Weather Operations
SC GX/K-03	Category 2 Operations with Head Up Display

6. Equivalent Safety Findings:

JAR 25.933	Thrust Reversers
JAR 25.1435(b) (1)	Hydraulic System Proof Pressure Testing

7. Operational Suitability Data (OSD) certification basis (all models)

7.1. Master Minimum Equipment List (MMEL)

For EASA MMEL: JAR-MMEL/MEL Amendment 1, Section 1.

7.2. Flight Crew Data (FCD)

Certification Specifications for Operational Suitability Data (OSD) Flight Crew Data CS-FCD Initial Issue (Book 1), dated 31st January 2014

8. Environmental Standards:

Noise:	ICAO Annex 16, Volume 1, Third Edition.
Fuel Venting:	ICAO Annex 16, Volume 2, Second Edition.

9. Kinds of Operations:

Compliance with the following optional requirements has been established:

Ditching provisions of JAR 25.801 when the safety equipment requirements of JAR 25.1411 and the ditching equipment requirements of JAR 25.1415 are satisfied. Ice protection of JAR 25.1419.

The BD-700-1A10 and -1A11 Type Design has been shown to be operable in accordance with Appendix 1 to JAR-OPS 1.430(h), titled "Aerodrome Operating Minima – Conversion of Reported Meteorological Visibility to RVR" or Appendix 1 to EU OPS 1.430(h), titled "Aerodrome Operating Minima – Enhanced Vision Systems", with the incorporation of BA Service Bulletin 700-34-033 or 700-34-037 (as applicable for BD-700-1A10 aircraft), or BA Service Bulletin 700-1A11-34-005 (for BD-700-1A11 aircraft), in that it has been demonstrated to comply with the appropriate design and reliability requirements defined in JAA TGL-42 (CRI F-17). This however implies no operational approval. Operational approval must be sought from the Authority or Agency that is legally responsible for Operational Approvals in the country of registry of the individual aircraft.

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

10. Aircraft Equipped with the Global Vision Flight Deck (GVFD):

Aircraft incorporating Bombardier ModSums 700T901900 and 700T901901 (for BD-700-1A10 - Global 6000), or ModSums 700T901900 and 700T901902 (for BD700-1A11 - Global 5000 featuring the GVFD) - see Note 7 for description of GVFD areas of change as well as Notes 8 and 9 for definitions of Global 6000 and Global 5000 featuring the Global Vision Flight Deck.

For parts of the aircraft not changed or not affected by the modification: The Certification Basis is unchanged from the BD-700-1A10 and BD-700-1A11 defined in paragraphs 1 to 8 above.

For those parts of the aircraft corresponding to Global Vision Flight Deck areas of change and areas affected by change:

TCCA Certification Basis:
Refer to Transport Canada TCDS A-177

EASA Certification Basis:
CS-25 for Large Aeroplanes, Amendment 1, 12 December 2005
CS-AWO for All Weather Operations, Initial Issue, 17 October 2003

Special Conditions:

CRI F-12-GVFD HIRF Protection
CRI F-23-GVFD LCD Head-Up Display
CRI F-27-GVFD Data Link Single European Sky
 (for GVFD V4.9 configuration design changes or later versions,
 as per Bombardier applicable ModSums)

CRI F-28-GVFD Flight Recorders including Data Link Recording
 (for GVFD V4.9 configuration design changes or later versions,
 as per Bombardier applicable ModSums)

Equivalent Safety Findings:

CRI F-24-GVFD Synthetic Vision Head-Up Display

Kinds of Operations:

BD-700-1A10 and -1A11 aircraft featuring the “Global Vision Flight Deck” have been shown to be operable in accordance with Appendix 1 to JAR-OPS 1.430(h), titled “Aerodrome Operating Minima – Conversion of Reported Meteorological Visibility to RVR” or Appendix 1 to EU OPS 1.430(h), titled “Aerodrome Operating Minima – Enhanced Vision Systems”. This however implies no operational approval. Operational approval must be sought from the Authority or Agency that is legally responsible for Operational Approvals in the country of registry of the individual aircraft.

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

III. Technical Characteristics and Operational Limitations

1. Global Express BD-700-1A10

1.1 Technical Description:

The BD-700-1A10, Global Express (GX) is a long range, high altitude, high speed business/corporate aircraft. With a range of 6700nm at 0.80M and a 51,000 ft maximum operating altitude, the aircraft has been designed for mission duration up to 14 hours. The airframe is of a semi monocoque design, using lightweight aluminum alloys and composite materials. It has a low, high sweep super-critical airfoil, T-tail with trimmable horizontal stabiliser, tri-cycle landing gear and fuselage-mounted engines.

1.2 Fluids (Fuel/Additives):

See AFM CSP 700-1, CSP 700-1A or CSP 700-1V for the appropriate configuration, for Approved Fluids.

1.3 Oil: Engine, APU:

Refer to Aircraft Maintenance manual, Bombardier Publication BD 700 AMM, Chapter 51 or GL 6000 AMM, Chapter 51 for the appropriate configuration.

1.4 Fuel quantity:

	Load		Weight	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2223	8415	15005	6805
1 Center Tank	1645	6227	11105	5036
1 Aft Tank	337	1276	2275	1032
Total	6428	24333	43390	19678
* Unusable (drainable)	30	114	203	92
* Undrainable	14.8	56.0	100	45.4

* See Note 1(b)

For Aircraft incorporating Service Bulletin 700-28-029 (Modsum 700T01614)

	Load		Weight	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2229	8435	15045	6824
1 Center Tank	1655	6265	11170	5068
1 Aft Tank	337	1276	2275	1032
Total	6450	24416	43538	19753
* Unusable (drainable)	10.2	38.6	69	31.2
* Undrainable	14.8	56.0	100	45.4

* See Note 1(b)

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

For Aircraft incorporating Service Bulletin 700-28-040 (Modsum 700T804402)

	Load		Weight	
	U.S. Gal.	liters	lb.	Kg
Usable				
2 main tanks (each)	2229	8435	15045	6824
1 Center Tank	1879	7111	12683	5753
1 Aft Tank	337	1276	2275	1032
Total	6674	25256	45050	20433
* Unusable (drainable)	10.6	40.1	72	32.4
* Undrainable	14.8	56.0	100	45.4

* See Note 1(b)

1.5 Maximum Weights

Max. Taxi and ramp	45,246 kg*	(99,750 lb)*
Max. Take-off	45,132 kg*	(99,500 lb)*
Max. Landing	35,652 kg	(78,600 lb)
Max. Zero fuel	26,308 kg*	(58,000 lb)*

*See AFM, as listed in Approved Publications, for other weight limitations and aircraft eligibility.

1.6 Centre of Gravity Range:

Refer to EASA approved AFM, Bombardier Publication Number CSP-700-1, CSP-700-1A or CSP-700-1V with Document Identification Number GL 700 AFM-1, GL 700 AFM-1A or GL 6000 AFM respectively for the appropriate configuration and approved revisions.

1.7 Datum:

FS 0.0 located at 144 in. Fwd of the aircraft nose

1.8 Operating and Service Instructions:

Airplane Flight Manual, Bombardier Publication No.: CSP 700-1, CSP 700-1A or CSP 700-1V with Document Identification Number GL 700 AFM-1, GL 700 AFM-1A or GL 6000 AFM respectively, for the appropriate configuration and approved revisions.

Flight Crew Operating Manual: CSP-700-6 with Document Identification Number GL 700 FCOM (for BD-700-1A10) and GL 6000 FCOM with same Document Identification Number (for BD-700-1A10 equipped with the “Global Vision Flight Deck”)

BD-700 Weight and Balance Manual: BD-700 WBM with Document Identification Number GL 700 WBM or BD-700 XRS WBM with Document Identification Number GL XRS WBM (for BD-700-1A10) and GL 6000 WBM with same Document Identification Number (for BD-700-1A10 equipped with the “Global Vision Flight Deck”)

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

The Instructions for Continued Airworthiness consist of the following Publications:

BD-700-1A10 – Global Express

Aircraft Maintenance Manual: BD-700 AMM or BD-700 XRS AMM with Document Identification Number GL 700 AMM or GL XRS AMM respectively.

Time Limits/Maintenance Checks Manual: BD-700 TLMC or BD-700 XRS TLMC with Document Identification Number GL 700TLMC or GL XRS TLMC respectively.

Structural Repair Manual: BD-700 SRM or BD-700 XRS SRM with Document Identification Number GL 700 SRM or GL XRS SRM respectively.

Non-Destructive Testing Manual: BD-700 NDTM or BD-700 XRS NDTM with Document Identification Number GL 700 NDTM or GL XRS NDTM respectively.

BD-700-1A10 – Global 6000

Aircraft Maintenance Manual: Publication Number GL 6000 AMM with same Document Identification Number.

Time Limits/Maintenance Checks Manual: Publication Number GL 6000 TLMC with same Document Identification Number.

Structural Repair Manual: Publication Number GL 6000 SRM with same Document Identification Number.

Non-Destructive Testing Manual: Publication Number GL 6000 NDTM with same Document Identification Number.

2. Global 5000 BD-700-1A11

2.1 Technical Description:

The Global 5000 aircraft is a derivative of the Global Express, with a 32 inch forward fuselage reduction, reduction in fuel capacity and removal of aft fuel tank as well as a new above floor avionics rack with associated relocation of a number of LRUs. The Global 5000 has a range of 4800nm at 0.85M and a 51,000 ft maximum operating altitude.

2.2 Fluids (Fuel/Additives):

See AFM CSP 700-5000-1 or CSP 700-5000-1V for the appropriate configuration, for Approved Fluids.

2.3 Oil: Engine, APU:

Refer to Aircraft Maintenance manual, Bombardier Publication BD-700-1A11 AMM, Chapter 51 or GL 5000 GVFD AMM, Chapter 51 for the appropriate configuration.

2.4 Fuel quantity:

	Load		Weight	
	U.S. Gal.	liters	lb.	kg
Usable				
2 main tanks (each)	2229	8438	15046	6824
1 Center Tank	903	3418	6095	2765
Total	5361	20294	36187	16413
* Unusable (drainable)	10	37.9	67.5	30.6
* Undrainable	14.8	56.0	100	45.4

*See Note 1(b)

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

For Aircraft incorporating Service Bulletin 700-1A11-11-008 (Modsum 700T97424) or 700-11-5000 (Modsum 700T97425) or aircraft incorporating Modsum 700T900765.

Usable	Load		Weight	
	U.S. Gal.	liters	lb.	kg
2 main tanks (each)	2229	8438	15046	6824
1 Center Tank	1357	5140	9158	4158
Total	5815	22012	39250	17806
* Unusable (drainable)	10	37.9	67.5	30.6
* Undrainable	14.8	56.0	100	45.4

*See Note 1(b)

2.5 Maximum Weights:

Max. Taxi and ramp	42,071 kg*	(92,750 lb.)*
Max. Take-off	41,957 kg*	(92,500 lb.)*
Max. Landing	35,652 kg	(78,600 lb.)
Max. Zero fuel	26,308 kg*	(58,000 lb.)*

*See AFM, as listed in Approved Publications, for other weight limitations and aircraft eligibility.

2.6 Centre of Gravity Range:

Refer to EASA approved AFM, Bombardier Publication Number CSP 700-5000-1 or CSP 700 5000-1V with Document Identification Number GL 5000 AFM or GL 5000 GVFD AFM respectively for the appropriate configuration and approved revisions.

2.7 Datum:

FS 0.0 located at 144 in. +32 in. Fwd of the aircraft nose

2.8 Operating and Service Instructions:

Airplane Flight Manual, Bombardier Publication No.: CSP 700-5000-1 or CSP 700-5000-1V with Document Identification Number GL 5000 AFM or GL 5000 GVFD AFM respectively, for the appropriate configuration and approved revisions.

Flight Crew Operating Manual: CSP 700-5000-6 with Document Identification Number GL 5000 FCOM (for BD-700-1A11) and GL 5000 GVFD FCOM with same Document Identification Number (for BD-700-1A11 equipped with the "Global Vision Flight Deck")

BD-700 Weight and Balance Manual: BD-700-1A11 WBM with Document Identification Number GL 5000 WBM (for BD-700-1A11) and GL 5000 GVFD WBM with the same Document Identification Number (for BD-700-1A11 equipped with the "Global Vision Flight Deck")

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

The Instructions for Continued Airworthiness consist of the following Publications:

BD-700-1A11 – Global 5000

Aircraft Maintenance Manual: BD-700AMM with Document Identification Number GL 5000 AMM

Time Limits/Maintenance Checks: BD-700TLMC with Document Identification Number GL 5000 TLMC

Structural Repair Manual: BD-700SRM with Document Identification Number GL 5000 SRM

Non-Destructive Testing Manual: BD-700NDTM with Document Identification Number GL 5000 NDTM

BD-700-1A11 – Global 5000 featuring the Global Vision Flight Deck

Aircraft Maintenance Manual: GL 5000 GVFD AMM with Document Identification Number GL 5000 GVFD AMM

Time Limits / Maintenance Checks Manual: GL 5000 GVFD TLMC with Document Identification Number GL 5000 GVFD TLMC

Structural Repair Manual: GL 5000 GVFD SRM with Document Identification Number GL 5000 GVFD SRM

Non-Destructive Testing Manual: GL 5000 GVFD NDTM with Document Identification Number GL 5000 GVFD NDTM

3. Data pertinent to BD-700-1A10 and BD-700-1A11 models

3.1 Type Certificate Design Definition:

Reference CRI A-6 JAA Build Standard Definition, RAZ-C700-114.

3.2 Engines:

Two BMW Rolls Royce BR700-710A2-20. EASA Type Certificate E.018 and associated Type Certificate Data Sheet.

3.3 Engine Limits:

	SL Static Thrust		Fan RPM	Core RPM	ITT		Time Limit
	lbf	kN	N1%	N2%	°C	°F	
Max. Take-off, AEO	14750**	65.6**	102.0	99.6	900	1652	5 min.
Max. Take-off, OEI	14750**	65.6**	102.0	99.6	900	1652	10 min.
Max. Continuous	14450	64.3	102.0	98.9	860	1580	-
Idle Range	-	-	-	58 min.	860 max.	1580 max.	-
Max. Overspeed/ Over-temperature	-	-	102.5	99.8	905	1661	20 sec.
Reverse Thrust	-	-	*	-	-	-	-
Starting on ground	-	-	N/A	N/A	700	1292	-
Starting in air	-	-	N/A	N/A	850	1562	-

* For reverse thrust, FADEC controls the fan rpm (N1) to 70.0% for 30 seconds.

** For aircraft incorporating SBs 700-72-6002 & 700-72-6003 or aircraft incorporating SB 700-72-5002, increased thrust limits are available for London City Airport (EGLC).

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

- 3.4 Auxiliary Power Unit Options (APU):
Allied Signal RE-220 GX.
Approved to TSO C-77(A) and JAR-APU.
Appropriate National Authority Type Certificate and TCDS.

APU Limits:

Maximum RPM:	106%	
Maximum EGT:	°C	°F
Starting	657-1020	1215-1868
Running	594-714	1101-1317

- 3.5 Oil Capacity:

	Load		Weight	
	U.S. Gal.	liters	lb.	kg.
2 Engines (each) (Incl. oil repl. lines)	2.6	9.9	20.0	9.1
1 Oil Repl. Tank	1.7	6.4	13	5.9
Total	6.9	26.2	53.0	24.1
Usable	1.01	3.83	7.8	3.55

- 3.6 Air Speeds:
Refer to approved Airplane Flight Manual.
- 3.7 Maximum Operating Altitude:
Maximum Operating Altitude - 15,545 m (51,000 ft.)
Take off and Landing - 13,700 ft (4,175 m)
- 3.8 Equipment:
The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) and defined in the Type Certificate Type Design Definition, (see above) must be installed in the airplane for certification.
- 3.9 All Weather Capabilities:
Aircraft type design is approved for Cat 2 precision approach.

- 3.10 Exits:

Location:	Number:	Type:	Size:
R/H	1	III	0.93 x 0.51 m (20.1 x 36.6 in)
L/H	1	I	0.74 x 1.70 m (29 x 67 in.)

- 3.11 Baggage/Cargo Compartments:
The green aircraft does not include baggage/cargo compartments.

- 3.12 Wheels and Tires:

Tire	Size
Dual (Single Chine) Nose Wheel and Tire	21 x 7.25 - 10, 12 ply
Dual Main Wheels and Tires (L/H & R/H)	H38 x 12 - 19, 20 ply

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

3.13 Minimum Flight Crew:
Two (2): Pilot and Co-pilot

3.14 Maximum Passenger Seating Capacity:
19 (See Note 2)

3.15 Notes:

1. a) Current weight and balance report, loading instructions (when necessary), and the list of equipment included in the certificated empty weight must be provided for each aircraft at the time of original certification.

b) The amount of fuel required to fill the system plumbing and tanks to the undrainable level plus unusable fuel in the fuel tanks as defined in the Fuel Capacity section must be included in the empty weight.
2. The green aircraft type design configuration does not include passenger provisions. Carriage of persons in the cabin is permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Type Certificate Basis and Bombardier report RAZ-C700-110.
3. Approved Airplane Flight Manual: The airplane must be operated according to the appropriate Approved Airplane Flight Manual.
4. BD-700-1A10 and BD-700-1A11 - Global Express and Global 5000
Placards must be installed in accordance with Bombardier Drawings GC 789-0001, GD 972-0001, GM 972-0010, GS 782-0001 (BD-700-1A10 only), GS 782-5001 (BD-700-1A11 only) and GC 789-5000 (BD-700-1A11 only).

BD-700-1A10 and BD-700-1A11 - Global 6000 and Global 5000 featuring the GVFD
Placards must be installed in accordance with Bombardier Drawings GC 789-7000, GC 789-7001, GD 972-0001, GM 972-0010, GS 782-0001 (BD-700-1A10 only), GS 782-5001 (BD-700-1A11 only), GC 789-7500 (BD-700-1A11 only).
5. Approved Airworthiness limitations for mandatory compliance retirement life or inspection are included in Time Limits/Maintenance Checks Manual, BD-700-TLMC (for Global Express), GL 6000 TLMC (for Global 6000), BD-700-1A11-TLMC (for Global 5000) and GL 5000 GVFD TLMC (for Global 5000 featuring the Global Vision Flight Deck).
6. Certification Maintenance Requirements (CMRs) are found in Time Limits/Maintenance Checks Manual, BD-700-TLMC (for Global Express), GL 6000 TLMC (for Global 6000), BD-700-1A11-TLMC (for Global 5000) and GL 5000 GVFD TLMC (for BD-700-1A11 featuring the Global Vision Flight Deck).
7. BD-700-1A10 and BD-700-1A11 “Global Vision Flight Deck” Definition

The Global Vision Flight Deck designation for the BD-700-1A10 and BD-700-1A11 does not correspond to a model designation. This is only a commercial designation for airplanes on which Modsums 700T001900 and 700T901901 (for BD-700-1A10), or Modsums 700T901900 and 700T901902 (for BD-700-1A11) have been embodied.

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

Major Change Modification numbers 700T901900 and 700T901901 (for BD-700-1A10), and 700T901900 and 700T901902 (for BD-700-1A11) installs the Rockwell Collins ProLine Fusion avionics suite. This system architecture is mainly built around 4 Integrated Processing Cabinets (IPC), 2 Data Concentration Unit Module Cabinets (DMC), 2 Radio Interface Units (RIU), 2 Audio Control Panels (ACP), 2 Reversion Switch Panels (RSP) and 4 14.1 inch Liquid Crystal Displays. The pilots have access to the system using the 2 Cursor Control Devices (CCDs) and 2 Control Tuning Panels (CTP).

Global Vision Flight Deck areas of change and areas affected by change correspond to the following systems, associated LRU components, flight crew interfaces and aircraft performance interfaces:

- Automatic Flight Guidance System
 - Flight Director
 - Autopilot (including aileron/elevator servos)
 - Yaw damper (including rudder linear actuator)
 - Autothrottle (including Throttle Quadrant Assembly)
 - Automatic Pitch Trim
- Navigation Systems
 - VHF Navigation (including VOR/ILS/Marker Beacon/ADF)
 - Distance Measuring Equipment (DME)
 - Global Positioning System (GPS)
 - Radio Altimeter
- Radio Management System
 - Radio Tuning
 - Aural Warning
- Digital Audio System
- VHF Communication System
- Electronic Flight Instrument System (EFIS)
 - PFD and Multi-Functional Window (MFW) displays
 - Flight Control Panel (FCP)
 - Reversion Switch Panel (RSP)
 - Cursor Control Panel (CCP)
 - Multi-function Keyboard Panel (MKP)
 - Lamp Driver Unit (LDU)
 - Integrated Flight Information System (IFIS)
 - Integrated Flight Management System (FMS)
 - Engine Indication and Crew Alerting System (EICAS)
 - Integrated Electronic Checklists (ECL)
 - Graphical Flight Planning
 - Graphical Radio Tuning
 - Synthetic Vision System (SVS)
- Head-Up Display (HUD)
- Traffic Surveillance System (TSS) / Traffic Collision Avoidance System (TCAS)
- Terrain Awareness and Warning System (TAWS)
- Multiscan Weather Radar
- Lightning Detection System (LDS)
- Information Management System (IMS)
- Onboard Maintenance System (OMS)
- Air Data Computers (ADC)

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

- Inertial Reference Units (IRU)
- Cockpit Voice Recorder (CVR)
- Flight Data Recorder (FDR)
- Interior Styling Changes
 - Interior Trim Panels
 - Pilot/Co-Pilot Seat Upholstery & Trim
 - Emergency Equipment
 - Sun Visor System
 - Placards & Markings

ModSums 700T901900 and 700T901901 are baseline on all BD-700-1A10 aircraft, serial number 9313, 9381, 9432 and subsequent, excluding 9998.

ModSums 700T901900 and 700T901902 are baseline on all BD-700-1A11 aircraft, serial number 9386, 9401, 9445 and subsequent, excluding 9998.

The LCD HUD is separately installed via Modsums 700T97369 (BD-700-1A10) and 700T97578 (BD-700-1A11).

All parameters listed in the preceding Section 2, Part III, for the BD-700-1A10 and BD-700-1A11 remain valid for aircraft which incorporate ModSums 700T901900 and 700T901901 (for BD-700-1A10), or ModSums 700T901900 and 700T901902 (for BD-700-1A11).

Reference Application Date for TCCA Certification:	June 19, 2006
TCCA Certification Date:	June 03, 2011
EASA Validation Application Date:	February 14, 2007
EASA Certification Date:	February 20, 2012

8. The “Global 6000” is a marketing designation for BD-700-1A10 equipped with the Global Vision Flight Deck, corresponding to aircraft serial numbers 9313, 9381, 9432 and subsequent, excluding 9998.
9. The Global 5000 featuring the Global Vision Flight Deck (Global 5000 ft. GVFD) is a marketing designation for BD-700-1A11 equipped with the Global Vision Flight Deck, corresponding to aircraft serial numbers 9386, 9401, 9445 and subsequent, excluding 9998.
10. The “Global Express XRS” is a marketing designation for BD-700-1A10 aircraft serial numbers 9159 to 9429 (9159 and subsequent up to the introduction of the Global 6000).
11. All variants of the BD-700-1A10 and BD-700-1A11 are compliant with RVSM airworthiness requirements through basic equipment. However, operational approval to fly in RVSM airspace must still be granted by the Authority or Agency that is legally responsible for Operational Approvals in the country of registry of the individual aircraft.
12. All variants of BD-700-1A10 and BD-700-1A11 are compliant with aircraft design requirements for RNP RNAV operations through basic equipment. Refer to the EASA approved Flight Manual (AFM) for variant specific capabilities. However, operational approval to conduct such kind of operations must still be granted by the Authority or Agency that is legally responsible for operational approvals in the country of registry of the individual aircraft.

SECTION 2: BD-700-1A10 and BD-700-1A11 – Continued

13. In accordance with the Bombardier document RBR-C700-180 Rev. B (or later revisions), all variants of BD-700-1A10 and BD-700-1A11 are compliant with the aircraft design requirements for “180 minutes Extended Diversion Time Operation (EDTO) from an adequate aerodrome for two engine aeroplanes without an ETOPS approval”, as per Air-Ops CAT.OP.MPA.140(a)(2) requirements (Commission Regulation EU No. 965/2012). However, operational approval to conduct such kind of operations must still be granted by the Authority or Agency that is legally responsible for Operational Approvals in the country of registry of the individual aircraft.
14. Certification Specifications addressed by the Global Vision Flight Deck modification and surpassing the Certification Basis defined in Section II, paragraphs 1 to 8 corresponds to the following (see Note 7):

Requirement	CS 25 / JAR 25
25.101(c)	CS-25 Amdt 1
25.105(a)(b)(c)(d)	CS-25 Amdt 1
25.111(a)(b)(c)(d)	CS-25 Amdt 1
25.113	CS-25 Amdt 1
25.143(b3)	CS-25 Amdt 1
25.251(a)(b)(c)(d)	CS-25 Amdt 1
25.305(a)(b)(c)	CS-25 Amdt 1
25.307(a)	CS-25 Amdt 1
25.365(e)(f)	CS-25 Amdt 1
25.397(a)(b)(c)	CS-25 Amdt 1
25.405	CS-25 Amdt 1
25.561	CS-25 Amdt 1
25.562(a)(b)(c3-5)	CS-25 Amdt 1
25.571(b)	CS-25 Amdt 1
25.581(a)(b)(c)	CS-25 Amdt 1
25.601	CS-25 Amdt 1
25.607	CS-25 Amdt 1
25.611	CS-25 Amdt 1
25.629(b1)(b2)(d10)	CS-25 Amdt 1
25.631	CS-25 Amdt 1
25.671(a)(b)(c1)(c2)(c3)	CS-25 Amdt 1
25.672	CS-25 Amdt 1
25.677(a)(b)	CS-25 Amdt 1
25.683(a)(b)(c)	CS-25 Amdt 1
25.685(a)(b)(c)(d)	CS-25 Amdt 1
25.689	CS-25 Amdt 1
25.693	CS-25 Amdt 1
25.697(b)	CS-25 Amdt 1
25.699(a)(b)(c)	CS-25 Amdt 1
25.703 (a)(b)(c)	CS-25 Amdt 1
25.703(a3)	CS-25 Amdt 1
25.729(c)(d)(e1-e6)	CS-25 Amdt 1
25.729(e7)(f3)	CS-25 Amdt 1
25.771(a)(c)(e)	CS-25 Amdt 1
25.773(a1)(a2)	CS-25 Amdt 1
25.777(a-g)	CS-25 Amdt 1
25.779	CS-25 Amdt 1
25.781	CS-25 Amdt 1
25.783(e)	CS-25 Amdt 1

Requirement	CS 25 / JAR 25
25.785(g)	CS-25 Amdt 1
25.787 (a)(b)	CS-25 Amdt 1
25.789(a)	CS-25 Amdt 1
25.793	CS-25 Amdt 1
25.812(f2)	CS-25 Amdt 1
25.831(a)(b)(c)(d)(e)(f)(g)	CS-25 Amdt 1
25.841(a)(b1-b8)	CS-25 Amdt 1
25.851(a2)	CS-25 Amdt 1
25.853(a)	CS-25 Amdt 1
25.856(a)	CS-25 Amdt 1
25.863	CS-25 Amdt 1
25.869(c)	CS-25 Amdt 1
25.899(a)(b)	CS-25 Amdt 1
25.901(c)	CS-25 Amdt 1
25.903(b)(d1)	CS-25 Amdt 1
25.933(a)	CS-25 Amdt 1
25.1141(a)(c)(d)(f1-f2)	CS-25 Amdt 1
25.1142	CS-25 Amdt 1
25.1143(a)(b)(c)	CS-25 Amdt 1
25.1155	CS-25 Amdt 1
25.1199(c)	CS-25 Amdt 1
25.1203(b2-b3)(d)	CS-25 Amdt 1
25.1301(a)(b)(c)(d)	CS-25 Amdt 1
25.1303	CS-25 Amdt 1
25.1305(a)(c)(d)	CS-25 Amdt 1
25J1305	CS-25 Amdt 1
25.1307(d)(e)	CS-25 Amdt 1
25.1309	CS-25 Amdt 1
25.1316	CS-25 Amdt 1
25.1321(a)(b)(c)(d)(e)	CS-25 Amdt 1
25.1322(a)(b)(c)(d)	CS-25 Amdt 1
25.1326(a)(b)	CS-25 Amdt 1
25.1327(a)(b)	CS-25 Amdt 1
25.1327(c)	CS-25 Amdt 1
25.1329	CS-25 Amdt 1 and FAR 25.1329 at Amdt 119
25.1331(a1-a3)	CS-25 Amdt 1
25.1333(a)(b)(c)	CS-25 Amdt 1
25.1337(b)(d)	CS-25 Amdt 1
25.1351(a)(b6)(d)	CS-25 Amdt 1
25.1353(a)(b)	CS-25 Amdt 1
25.1357(a)(d)	CS-25 Amdt 1
25.1381	CS-25 Amdt 1
25.1411(a)(b1)	CS-25 Amdt 1
25.1419(a)(c)	CS-25 Amdt 1
25.1431(a)(c)(d)	CS-25 Amdt 1
25.1435(b1)	CS-25 Amdt 1
25.1439(a)(b)	CS-25 Amdt 1
25.1441(c)	CS-25 Amdt 1
25.1453(a)	CS-25 Amdt 1
25.1457	CS-25 Amdt 1
25.1459	CS-25 Amdt 1
25.1461(a)(c)	CS-25 Amdt 1
25.1501	CS-25 Amdt 1

Requirement	CS 25 / JAR 25
25.1523	CS-25 Amdt 1
25.1525	CS-25 Amdt 1
25.1527	CS-25 Amdt 1
25.1529	CS-25 Amdt 1
25.1541(a)(b)	CS-25 Amdt 1
25.1543(b)	CS-25 Amdt 1
25.1545	CS-25 Amdt 1
25.1549(a)(b)(c)(d)	CS-25 Amdt 1
25.1551	CS-25 Amdt 1
25.1555(a)(b)(d)	CS-25 Amdt 1
25.1561(a)(b)	CS-25 Amdt 1
25.1563	CS-25 Amdt 1
25.1581	CS-25 Amdt 1
25.1583	CS-25 Amdt 1
25.1585	CS-25 Amdt 1
25.1591	CS-25 Amdt 1
AWO 208	CS-AWO, Initial Issue
AWO 215	CS-AWO, Initial Issue
AWO 216	CS-AWO, Initial Issue
AWO 221	CS-AWO, Initial Issue
AWO 236	CS-AWO, Initial Issue
AWO 251	CS-AWO, Initial Issue
AWO 252	CS-AWO, Initial Issue
AWO 263	CS-AWO, Initial Issue
AWO 268	CS-AWO, Initial Issue
AWO 269	CS-AWO, Initial Issue
AWO 281	CS-AWO, Initial Issue

IV. Operational Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.009 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

I. Master Minimum Equipment List (MMEL)

The Master Minimum Equipment List has been approved in accordance with the defined Operational Suitability Data certification basis and as documented in the European Aviation Safety Agency Master Minimum Equipment List, Bombardier Global Express BD-700-1A10 and Global 5000 BD-700-1A11, Revision 1 dated 28th June 2013, or later EASA approved revisions.

II. Flight Crew Data

The Flight Crew Data have been approved in accordance with the defined Operational Suitability Data certification basis and as documented in "Operational Suitability Data (OSD) Flight Crew BD-700-1A10/-1A11" Original issue dated 11th February 2015, or later EASA approved revisions.

SECTION 3: BD-700-2A12

I. General

1. Aeroplane: BD-700 Series
2. Reference Application Date for EASA Certification:
BD-700-2A12 13 June 2012
3. EASA Certification Date:
BD-700-2A12 06 February 2019

II. Certification Basis

1. Reference Application Date for TCCA Certification:
BD-700-2A12 30 May 2012 (Initial)
BD-700-2A12 10 December 2013 (Deferred)
2. TCCA Certification Date:
BD-700-2A12 27 September 2018
3. TCCA Certification Basis:
Refer to Transport Canada TCDS A-177.
4. EASA Certification Basis:
CS-25 Amendment 13, effective on 10 June 2013, except:
 - CS 25.1322 Amendment 1 for the Primary Flight Displays (PFD) of the Proline Fusion Avionics Suite.
5. Special Conditions:

SC CRI	Title
B-02	Flight Envelope Protection Design
B-03	Flight in Icing Conditions
B-04	Stalling and Scheduled Operating Speeds
B-09	Static Directional, Lateral and Longitudinal Stability and Low Energy Awareness
C-11	Automatic Braking System Structural Loads
D-03	In-Flight Fire – Composite and Unusual Construction
D-09	Control Surface Position Awareness / Electronic Flight Control Systems
D-13	High Altitude Operation / High Cabin Heat Load

D-21*	Side Facing Seats and Inflatable Passenger Restraints
E-05	Water / Ice in Fuel System
E-11	Airworthiness Standard for Aircraft Operations Under Falling and Blowing Snow
F-04	Airborne Systems and Network Security
F-05	HIRF Protection
F-06	Flight Instrument External Probes – Qualification in Icing Conditions
F-08	Flight Recorders, Data Link Recording
F-21	Data Link Services for the Single European Sky
F-25	Rechargeable Lithium battery installations
F-26	Non-Rechargeable Lithium battery installations
F-30	Synthetic Vision on Head Up Display
F-31	Enhanced Flight Vision System with Operational Credit
F-41*	Therapeutic Oxygen System

* These Special Conditions, applicable to the Interiors Installation STC, form part of the certification basis for approved interiors of the BD-700-2A12.

6. Equivalent Safety Findings:

ESF CRI	Title
B-12	Out of Trim
D-06	Pilot Compartment View – Hydrophobic Coatings
D-22	APU Access Door
D-23	Access Panel Doors
D-24	Flight Control System Failure Criteria
D-27*	Class B Baggage Compartment
D-28*	Lavatory Ashtray
D-29*	No Smoking Placards
E-18	Fuel Filter Location
E-19	Thrust Reverser Actuation System (TRAS) Zone Adjacent to Designated Fire Zone
E-21	Powerplants Fire Extinguishing System Bottle Sharing
F-34	Non-Magnetic Standby Compass
F-38*	Minimum Mass Flow of Supplemental Oxygen
F-40	Maximum Allowable Overlapping Intensities on Position Lights
G-02	Green Arc for Powerplant Instrument

* These Equivalent Safety Findings, applicable to the Interiors Installation STC, form part of the certification basis for approved interiors of the BD-700-2A12.

SECTION 3: BD-700-2A12 – Continued

7. Deviations

Not applicable

8. Operational Suitability Data (OSD) certification basis (all models)

- 8.1. Master Minimum Equipment List (MMEL)
Certification Specifications for Master Minimum Equipment List (CS-MMEL) Initial Issue, 31 January 2014
- 8.2. Flight Crew Data (FCD)
Certification Specifications for Operational Suitability Data (OSD), Flight Crew Data (CS-FCD), Initial Issue, 31 January 2014
- 8.3. Simulator Data
Not applicable.
- 8.4. Cabin Crew Data
Not applicable.
- 8.5. Maintenance Certifying Staff Data
Not applicable.

9. Environmental Standards

Noise: ICAO Annex 16, Volume 1, Amendment 10.
Fuel Venting: ICAO Annex 16, Volume 2, Amendment 7.

III. Technical Characteristics and Operational Limitations

1. Technical Description:

The BD-700-2A12 augments the existing BD-700 family of aircraft. It is an ultra-long-range, executive interior business jet with a maximum certified passenger capacity of 19.

The BD-700-2A12 will be assembled “green” in Toronto, Ontario. Like the existing BD-700 family members, the BD-700-2A12 custom passenger interiors and aircraft delivery will be provided from Montreal, Quebec via STC.

Principal Design Features:

- Two new “GE Passport 20” aft-mounted engines
- New high-speed transonic wing
- Fly-by-Wire control system with side sticks
- Proline Fusion Avionics Suite

2. Fluids (Fuel/Additives):

See applicable AFM as listed in Operating and Service Instructions.

3. Oil, Engine, APU:

See applicable AMP as listed in Operating and Service Instructions.

4. Fuel Quantity:

See applicable AFM as listed in Operating and Service Instructions.

SECTION 3: BD-700-2A12 – Continued

5. Maximum Weights:

Max. Ramp Weight	52,208 kg (115,100 lb)
Max. Take Off Weight	52,095 kg (114,850 lb)
Max. Landing Weight	39,735 kg (87,600 lb)
Max. Zero Fuel Weight	30,617 kg (67,500 lb)

*See applicable AFM as listed in Operating and Service Instructions, for other weight limitations and aircraft eligibility.

6. Centre of Gravity Range:

See applicable AFM as listed in Operating and Service Instructions.

7. Datum:

FS 0.0 is located at 397.5 inches forward of the weighing datum. The weighing datum is marked on a plate forward of the wing fairing on the bottom of the fuselage on the aircraft center-line at FS 397.5.

8. Operating and Service Instructions:

Approved Publications

- a) Aircraft Flight Manual (AFM), Bombardier Publication Number CSP 700-7000-1 Rev. BASIC with Document Identification Number GL 7500 AFM and subsequent approved revisions.
- b) Airworthiness Limitations Publication, Bombardier Publication BD700-3AB48-11400-01 Rev. 001 with Document Identification Number GL 7500 AWL and subsequent approved revisions.

Instructions for Continued Airworthiness

The Instructions for Continued Airworthiness consist of Publications listed in the Aircraft Maintenance Publication (AMP) BD700-3AB48-10200-00 (see Instructions for Continued Airworthiness – List of Applicable Specifications and Documentation, Data Module BD700-A-J00-00-00AAA-00VA-A) with Document Identification Number GL 7500 AMP.

9. Type Certificate Design Definition:

The approved type design is defined in the document RAO-BA700-049 Rev. D or later approved revisions.

10. Engines:

Two General Electric Passport 20-19BB1A

11. Engine Limits:

See applicable AFM as listed in Operating and Service Instructions.

12. APU:

Safran SPU300[BA]

13. Oil Capacity:

See applicable AFM as listed in Operating and Service Instructions.

14. Air Speeds:

See applicable AFM as listed in Operating and Service Instructions.

SECTION 3: BD-700-2A12 – Continued

15. Maximum Operating Altitude:
See applicable AFM as listed in Operating and Service Instructions.

16. Equipment:
The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) and defined in the Type Certificate Type Design Definition, (see above) must be installed in the airplane for certification. See Note 4.

17. All Weather Capabilities:
Aircraft type design is approved for Cat 1 precision approach.

18. Exits:

Location:	Number:	Type:	Size:
R/H	1	III	0.51 x 0.92 m (20.1 x 36.4 in)
L/H	1	I	0.71 x 1.62 m (27.9 x 63.8 in.)

19. Baggage/Cargo Departments:
The green aircraft does not include baggage/cargo compartments. See Note 4.

20. Wheels and Tires:

Tire	Size
Dual Nose Wheel and Chine Tires	21 x 7.25 R10, 14 Ply
Dual Main Wheels and Tires (L/H & R/H)	H39 x 12.0 R19, Load Rated

21. Minimum Flight Crew:
2 (Pilot and Co-Pilot)

22. Maximum Passenger Seating Capacity:
19 (See Note 1 and Note 4)

SECTION 3: BD-700-2A12 – Continued

23. Notes

- 1 The green aircraft type design configuration does not include passenger provisions. Carriage of persons in the cabin is permitted when an approved seating arrangement and related required passenger provisions are incorporated in accordance with the Certification Basis.
- 2 Current weight and balance report including the list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.
- 3 The amount of fuel required to fill the system plumbing and tanks to the undrainable level plus unusable fuel in the fuel tanks as defined in the Fuel Capacity section must be included in the empty weight.
- 4 BA report RAO-BA700-048 (Completion Compliance Checklist) provides guidance to completion centers regarding compliance with the certification basis for the BD-700-2A12 with a completed interior. This guidance includes a Compliance Checklist, noting any applicable conditions or considerations, confirming if:
 - Compliance has been demonstrated for the green aircraft.
 - Compliance with a requirement is limited for the green aircraft.
 - Compliance must be addressed by the Completion Centre (N/A to the green aircraft type design).
- 5 Global 7500 (previously known as Global 7000) is a marketing designation for the BD-700-2A12 aircraft serial numbers 70001 and subsequent.

IV. Operational Suitability Data (OSD)

At time of approval of this change to type certificate, the approval of affected parts of Operational Suitability Data (OSD) were still pending for the following OSD constituents:

- Flight Crew Data (FCD)
- Master Minimum Equipment List (MMEL)

SECTION 4: CHANGE RECORD

TCDS Issue No.	TCDS Date	TCDS Changes	TC Date
05	21/04/2010	<p>Page 4 Section 2.II Paragraph 8</p> <ul style="list-style-type: none"> - Addition of note regarding demonstration to comply with requirements in JAA TGL – 42 (CRI F-17), with incorporation of applicable Bombardier Service Bulletins. <p>Page 7 Section 2.III Paragraph 2.4</p> <ul style="list-style-type: none"> - Fuel Quantity – corrects usable load (liters) for 2 main tanks (was 8435) and total (was 20288). - Inserts Fuel Quantity table for a/c incorporating service bulletin 700-1A11-11-008. <p>Page 7 Section 2.III Paragraph 2.5</p> <ul style="list-style-type: none"> - Maximum Weights – increases Max. Taxi and Ramp (was 89,950 lbs) and Max. Takeoff (was 89,700 lbs) as per modification 700T97424. - Corrects Max. Landing weight from 35,655 kg to 35,652 kg. 	15/07/2004
06	20/02/2012	<p>Pages: All</p> <ul style="list-style-type: none"> - Addition of the Global Vision Flight Deck Avionics Modification 	<p>TC: Not applicable (15/07/2004)</p> <p>Modification approval: 20/02/2012</p>
07	17/12/2015	<p>Page 5: Subparagraphs added to define OSD Certification Basis for MMEL and Flight Crew Data.</p> <p>Page 8: Correction of typo mistake in one AFM designation in paragraph 2.2</p> <p>Page 15: Additional NOTE added concerning design requirements for 180 minutes extended diversion time operation.</p> <p>Page 18 New Section 3 for Operational Suitability Data.</p> <p>Page 19: Former Section 3 Change record renumbered Section 4.</p>	No change
08	21/03/2018	<p>Page 5: Paragraph 9 text updated to include reference to EU OPS 1.430(h).</p> <p>Page 6: Paragraph 10 text updated to include references to CRI's F-27-GVFD and F-28-GVFD and update of the mention to OPS 1.430(h) capabilities.</p> <p>Pages 8 and 9: some figures updated in Table 1.5 Maximum Weights; updated references to Bombardier documents in paragraphs 1.6 and 1.8.</p> <p>Pages 10 and 11: references to applicable Bombardier ModSums added in table 2.4 fuel quantity; updated references to Bombardier documents in paragraphs 2.6 and 2.8; reference to EASA TC for engine added in paragraph 3.2; reference to Bombardier Service Bulletins added in 3.3 engine limits table.</p> <p>Page 15: Note 10 updated to better reflect aircraft serial number applicability; note 12 updated concerning AFM and operational capabilities.</p>	No change

09	06/02/2019	Section 3 created to incorporate the BD-700-2A12 (Global 7500) derivative.	TC: Not applicable (15/07/2004)
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