Civil Aviation Authority
United Kingdom

TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00037

for

BD-700

Type Certificate Holder

Bombardier Inc.

400 Côte-Vertu Road West,
Dorval, Québec,
Canada, H4S 1Y9

Model(s):	BD-700-1A10 BD-700-1A11 BD-700-2A12
Issue:	5
Date of issue:	12 July 2024

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Section 1 General (All Models)

I. General

This Type-Certificate Data Sheet (TCDS) is the concise definition of the type-certificated product accepted and or approved by the CAA in the UK for the affected types and models.

This TCDS includes:

1. Details of the type design that affect the TCDS that have been approved or accepted by the CAA in the UK since 01 January 2021.
2. Details of the type design that affected the TCDS and were approved or accepted by EASA before 01 January 2021, and were incorporated into EASA TCDS EASA.IM.A.009 at Issue 11 dated 29 November 2019 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

1. Airworthiness Category

Large Aeroplanes

2. Performance Category

A

3. Certifying Authority

TCCA

4. Type Certificate Holder:

Bombardier Inc.

400 Côte-Vertu Road West,

Dorval, Québec,

Canada, H4S 1Y9

Section 2 BD-700-1A10 and BD-700-1A11

I. General

1. Type / Variant or Model

a) Type: BD-700 Series
b) Model: BD-700-1A10
BD-700-1A11

2. Reference Application Date for UK CAA Certification

BD-700-1A10:	10 March 1994
BD-700-1A11:	15 February 2002

3. UK CAA 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. UK CAA Certification Basis

JAR 25 Large Aeroplanes Change 14, 27 May 1994

Amendment (OP) 96/1, 19 April 1996

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 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 I

For details of the certified noise levels see TCDSN no. UK.TC.A.00037

Fuel Venting: ICAO Annex 16, Volume II, Second Edition, Part II, Chapter 2.

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 aircraft is capable of conducting Category I approaches and non-precision approaches with EVS Operational Credit down to 100 feet (see applicable AFM as listed in Operating and Service Instructions). EVS Operations may be conducted 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). 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.

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:

Certification Basis:

CS-25 for Large Aeroplanes, Amendment 1, 12 December 2005

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

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
EASA CRI F-44	Indication removal from Primary Flight Displays during ground phases

Kinds of Operations:

The BD-700-1A10 and -1A11 aircraft is capable of conducting Category I approaches and non-precision approaches with EVS Operational Credit down to 100 feet (see applicable AFM as listed in Operating and Service Instructions). 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.

10.1 Aircraft Equipped with Global Vision Flight Deck (GVFD) and Modifications defining the Global 6500/5500 commercial designation

Aircraft incorporating Bombardier ModSums 700T901901 and 700T03185 and 700T63572 and without 700T101134 (for BD-700-1A10 - Global 6500), or ModSums 700T901902 and 700T03185 and 700T63572 and without 700T101134 (for BD-700-1A11 - Global 5500) - see Note 14 for description, areas of change and definitions of the Global 6500 and Global 5500. The Global 6500 and Global 5500 are commercial marketing designations for BD-700-1A10 and BD-700-1A11 aircraft, respectively, equipped with the Global Vision Flight Deck and the above collection of Modsums.

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 the Global 6500 and Global 5500 change and areas affected by change:

Certification Basis:

JAR 25 Change 14 plus O 96/1, EASA CS 25 at Issue 1 and original Special Conditions and Equivalent level of safety findings as identified in paragraphs 1 to 8, plus:

Special Conditions:

SC CRI E-05 Water/ice in fuel system

SC CRI E-06 Uncontrollable High Thrust and its associated Means of Compliance

Equivalent Safety Findings:

EASA CRI F-44 Indication removal from Primary Flight Displays during ground phases

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

III. Technical Characteristic and Operating Limitations

1. BD-700-1A10

1.1 Technical Description

The BD-700-1A10 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 aluminium 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 applicable AFM as listed in Operating and Service Instructions.

1.3 Oil: Engine, APU

See applicable AMM as listed in Operating and Service Instructions.

1.4 Fuel Capacity

	Load		Weight	
Usable	U.S. Gal.	Litres	lb	kg
2 Main Tanks (Each)	2,223	8,415	15,005	6,805
1 Center Tank	1,645	6,227	11,105	5,036
1 Aft Tank	337	1,276	2,275	1,032
Total	6,428	24,333	43,390	19,678
* Unusable (Drainable)	30	114	203	92
* Undrainable	14.8	56.0	100	45.4

* See Note 1(b).

For aircraft incorporating Bombardier Service Bulletin 700-28-029 (or Modsum 700T01614).

	Load		Weight	
Usable	U.S. Gal.	Litres	lb	kg
2 Main Tanks (Each)	2,229	8,438	15,045	6,824
1 Center Tank	1,655	6,265	11,170	5,068
1 Aft Tank	337	1,276	2,275	1,032
Total	6,450	24,416	43,538	19,753
* 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

For aircraft incorporating Bombardier Service Bulletin 700-28-040 (or Modsum 700T804402).

		Load		Weight	
	Usable	**U.S. Gal.**	**Litres**	**lb**	**kg**
	2 Main Tanks (Each)	2,229	8,438	15,045	6,824
	1 Center Tank	1,879	7,111	12,683	5,753
	1 Aft Tank	337	1,276	2,275	1,032
	Total	6,674	25,256	45,050	20,433
*	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 applicable AFM, as listed in Operating and Service Instructions, for configuration specific weight limitations and aircraft eligibility.

1.6 Centre of Gravity Range

See applicable AFM as listed in Operating and Service Instructions.

1.7 Datum

FS 0.0 is located at 366 cm (144 in.) forward of the aircraft nose.

1.8 Operating and Servicing Instructions

a) Airplane Flight Manual:

Please refer to the table below for the appropriate configuration for approved AFM:

Marketing Designation	AFM Publication Number	AFM Document Identification Number
Global Express	CSP 700-1	GL 700 AFM-1
Global Express XRS	CSP 700-1A	GL 700 AFM-1A
Global 6000	CSP 700-1V	GL 6000 AFM
Global 6500	CSP 700-6500-1	GL 6500 AFM

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

b) Flight Crew Operating Manual:

Please refer to the table below for the appropriate configuration FCOM:

Marketing Designation	FCOM Publication Number	FCOM Document Identification Number
Global Express	CSP 700-6	GL 700 FCOM
Global Express XRS	CSP 700-6	GL 700 FCOM
Global 6000	GL 6000 FCOM	GL 6000 FCOM
Global 6500	CSP 700-6500-6	GL 6500 FCOM

Flight Crew Operating Manual: CSP-700-6 with Document Identification Number GL 700 FCOM (for BD700-1A10) and GL 6000 FCOM with same Document Identification Number (for BD-700-1A10 equipped with the “Global Vision Flight Deck”)

c) Weight and Balance Manual:

Please refer to the table below for the appropriate configuration WBM:

Marketing Designation	WBM Publication Number	WBM Document Identification Number
Global Express	BD-700 WBM	GL 700 WBM
Global Express XRS	BD-700 XRS WBM	GL XRS WBM
Global 6000	GL 6000 WBM	GL 6000 WBM
Global 6500	GL 6500 WBM	GL 6500 WBM

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”)

The Instructions for Continued Airworthiness consist of the following Publications and their associated later revisions:

a) Aircraft Maintenance Manual:

Marketing Designation	AMM Publication Number	AMM Document Identification Number
Global Express	BD-700 AMM	GL 700 AMM
Global Express XRS	BD-700 XRS AMM	GL XRS AMM
Global 6000	GL 6000 AMM	GL 6000 AMM
Global 6500	GL 6500 AMM	GL 6500 AMM

b) Time Limits/Maintenance Checks Manual:

Marketing Designation	TLMC Publication Number	TLMC Document Identification Number
Global Express	BD-700 TLMC	GL 700 TLMC
Global Express XRS	BD-700 XRS TLMC	GL XRS TLMC
Global 6000	GL 6000 TLMC	GL 6000 TLMC
Global 6500	GL 6500 TLMC	GL 6500 TLMC

c) Structural Repair Manual:

Marketing Designation	SRM Publication Number	SRM Document Identification Number
Global Express	BD-700 SRM	GL 700 SRM
Global Express XRS	BD-700 XRS SRM	GL XRS SRM
Global 6000	GL 6000 SRM	GL 6000 SRM
Global 6500	GL 6500 SRM	GL 6500 SRM

d) Non-Destructive Testing Manual:

Marketing Designation	NDTM Publication Number	NDTM Document Identification Number
Global Express	BD-700 NDTM	GL 700 NDTM
Global Express XRS	BD-700 XRS NDTM	GL XRS NDTM
Global 6000	GL 6000 NDTM	GL 6000 NDTM
Global 6500	GL 6500 NDTM	GL 6500 NDTM

2. BD-700-1A11

2.1 Technical Description

The BD-700-1A11 is a derivative of the BD-700-1A10, 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 applicable AFM as listed in Operating and Service Instructions.

2.3 Oil: Engine, APU

See applicable AMM as listed in Operating and Service Instructions.

2.4 Fuel Capacity

	Load		Weight	
Usable	**U.S. Gal.**	**Litres**	**lb**	**kg**
2 Main Tanks (Each)	2,229	8,438	15,046	6,824
1 Center Tank	903	3,418	6,095	2,765
Total	5,361	20,294	36,187	16,413
* 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

For aircraft incorporating Bombardier Service Bulletin 700-1A11-11-008 (Modsum 700T97424) or 70011-5004 (Modsum 700T97425) or aircraft incorporating Modsum 700T900765.

	Load		Weight	
Usable	**U.S. Gal.**	**Litres**	**lb**	**kg**
2 Main Tanks (Each)	2,229	8,438	15,046	6,824
1 Center Tank	1,357	5,136	9,158	4,158
Total	5,815	22,012	39,250	17,806
* 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 applicable AFM, as listed in Operating and Service Instructions, for configuration specific weight limitations and aircraft eligibility.

2.6 Centre of Gravity Range

See applicable AFM as listed in Operating and Service Instructions.

2.7 Datum

FS is 0.0 located at 366 cm + 81 cm (144 in. + 32 in.) forward of the aircraft nose.

2.8 Operating and Service Instructions

a) Airplane Flight Manual:

Please refer to the table below for the appropriate configuration approved AFM:

Marketing Designation	AFM Publication Number	AFM Document Identification Number
Global 5000	CSP 700-5000-1	GL 5000 AFM
Global 5000 ft. GVFD	CSP 700-5000-1V	GL 5000 GVFD AFM
Global 5500	CSP 700-5500-1	GL 5500 AFM

b) Flight Crew Operating Manual:

Please refer to the table below for the appropriate configuration FCOM:

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

Marketing Designation	FCOM Publication Number	FCOM Document Identification Number
Global 5000	CSP 700-5000-6	GL 5000 FCOM
Global 5000 ft. GVFD	GL 5000 GVFD FCOM	GL 5000 GVFD FCOM
Global 5500	GL 5500 FCOM	GL 5500 FCOM

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”)

c) Weight and Balance Manual:

Please refer to the table below for the appropriate configuration WBM:

Marketing Designation	WBM Publication Number	WBM Document Identification Number
Global 5000	BD-700-1A11 WBM	GL 5000 WBM
Global 5000 ft. GVFD	GL 5000 GVFD WBM	GL 5000 GVFD WBM
Global 5500	GL 5500 WBM	GL 5500 WBM

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”)

The Instructions for Continued Airworthiness consist of the following Publications and their associated later revisions:

a) Aircraft Maintenance Manual:

Marketing Designation	AMM Publication Number	AMM Document Identification Number
Global 5000	BD-700 AMM	GL 5000 AMM
Global 5000 ft. GVFD	GL 5000 GVFD AMM	GL 5000 GVFD AMM
Global 5500	GL 5500 AMM	GL 5500 AMM

b) Time Limits/Maintenance Checks Manual:

Marketing Designation	TLMC Publication Number	TLMC Document Identification Number
Global 5000	BD-700 TLMC	GL 5000 TLMC
Global 5000 ft. GVFD	GL 5000 GVFD TLMC	GL 5000 GVFD TLMC
Global 5500	GL 5500 TLMC	GL 5500 TLMC

c) Structural Repair Manual:

Marketing Designation	SRM Publication Number	SRM Document Identification Number
Global 5000	BD-700 SRM	GL 5000 SRM
Global 5000 ft. GVFD	GL 5000 GVFD SRM	GL 5000 GVFD SRM
Global 5500	GL 5500 SRM	GL 5500 SRM

d) Non-Destructive Testing Manual:

Marketing Designation	NDTM Publication Number	NDTM Document Identification Number
Global 5000	BD-700 NDTM	GL 5000 NDTM
Global 5000 ft. GVFD	GL 5000 GVFD NDTM	GL 5000 GVFD NDTM
Global 5500	GL 5500 NDTM	GL 5500 NDTM

3. Data Pertinent to all BD-700-1A10 & BD-700-1A11 commercial designations EXCEPT Global 6500/5500 (For Global 6500/5500 definition - See Note 14)

3.1 Engines

Two Rolls Royce Deutschland Ltd & Co KG BR700-710A2-20. UK CAA Type Certificate E.018 and associated Type Certificate Data Sheet E.018, Issue 14 dated 05 December 2015, as accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

3.2 Engine Limits

	SL Static Thrust		Fan RPM	Core RPM	ITT		Time Limit
	lbf	kN	N1%	N2%	°C	°F	
Max. Take-off, AEO	14,750**	65.6**	102.0	99.6	900	1,652	5 min.
Max. Take-off, OEI	14,750**	65.6**	102.0	99.6	900	1,652	10 min.
Max. Continuous	14,450	64.3	102.0	98.9	860	1,580	-
Idle Range	-	-	-	58 min.	860 max.	1,580 max.	-
Max. Overspeed/ Over-temperature	-	-	102.5	99.8	905	1,661	20 sec.
Reverse Thrust	-	-	*	-	-	-	-
Starting on ground	-	-	N/A	N/A	700	1,292	-
Starting in air	-	-	N/A	N/A	850	1,562	-

* 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).

3.3 Oil Capacity

	Load		Weight *	
	U.S. Gal.	**Litres**	**lb**	**kg**
2 Engines (Each) (Incl. Oil Repl. Lines)	4.8	18.2	39	18
1 Oil Repl. Tank	1.6	6.1	13	6
Total	11.2	42.5	91	42
Usable	1.01	3.83	8.2	3.7

* Assuming an oil density of 8.1073 lb/U.S. Gal.

4. Data Pertinent to BD-700-1A10 and BD-700-1A11 aircraft with commercial designations of Global 6500 and 5500 only (See Note 14)

4.1 Engines

Two Rolls Royce Deutschland Ltd & Co KG BR700-710D5-21. UK CAA Type Certificate UK.TC.E.00084 and associated Type Certificate Data Sheet UK.TC.E.00084.

4.2 Engine Limits

	SL Static Thrust		Fan RPM	Core RPM	ITT		Time Limit
	lbf	**kN**	**N_1%**	**N_2%**	**°C**	**°F**	
Max. Take-off	15,250	67.8	102.1	101.6	890	1,634	5 min AEO 10 min OEI
Max. Take-off (Transient 2 min)	-	-	-	-	900	1,652	-
Max. Continuous	14,255	63.4	102.1	99.9	850	1,562	-
Idle Range	-	-	-	58.2 min.	860 max.	1,562 max.	-
Max. Overspeed / Over-Temperature	-	-	103.3	102.8	915	1,679	20 sec
Reverse Thrust	-	-	70.4	-	-	-	30 sec
Starting on Ground	-	-	N/A	N/A	700	1,292	-
Starting in Air	-	-	N/A	N/A	850	1,562	-

4.3 Oil Capacity:

	Load		Weight	
	U.S. Gal.	**Litres**	**lb**	**kg**
2 Engines (Each)	2.96	11.2	24.0	10.9
1 Oil Repl. Tank (Including Oil Repl. Lines)	1.51	5.7	12.2	5.53
Total	8.94	33.8	72.5	32.9
Usable per Engine	1.08	4.1	8.76	3.97

* Assuming an oil density of 8.1073 lb/U.S. Gal.

5. Data Pertinent to BD-700-1A10 & BD-700-1A11 EXCEPT as Indicated

5.1 Type Certificate Design Definition

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

5.2 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

5.3 Air Speeds

See applicable AFM as listed in Operating and Service Instructions.

5.4 Maximum Operating Altitude

Maximum Operating Altitude - 15,545 m (51,000 ft.)

Take-off and Landing - 4,175 m (13,700 ft.)

5.5 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.

5.6 All Weather Capabilities

Aircraft type design is approved for Cat 2 precision approach.

5.7 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.)

5.8 Baggage/Cargo Compartments

The green aircraft does not include baggage/cargo compartments.

5.9 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

5.10 Minimum Flight Crew

Two (2): Pilot and Co-pilot

5.11 Maximum Passenger Seating Capacity

19 (See Note 2)

5.12 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. <u>BD-700-1A10 & BD-700-1A11 - Global Express and Global 5000</u>

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).

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

BD-700-1A10 & BD-700-1A11 - Global 6000/6500 and Global 5000 ft. GVFD/5500

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), GL 6500 TLMC (for Global 6500) BD-700-1A11-TLMC (for Global 5000), GL 5000 GVFD TLMC (for Global 5000 featuring the Global Vision Flight Deck) and GL 5500 TLMC (for Global 5500).

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), GL 6500 TLMC (for Global 6500), BD-700-1A11-TLMC (for Global 5000), GL 5000 GVFD TLMC (for BD-700-1A11 featuring the Global Vision Flight Deck) and GL 5500 TLMC (for Global 5500).

7. BD-700-1A10 & 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.

   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)
- 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

The LCD HUD is separately installed via Modsums 700T97369 (BD-700-1A10) and 700T97578 (BD700-1A11).

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
UK CAA Validation Application Date:	February 14, 2007
UK CAA 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 with either following combinations of modifications installed:

With 700T901901 *and* **Without** 700T03185	OR	**With** 700T901901 700T03185 700T101134

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 with either following combinations of modifications installed:

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

With 700T901902 *and* **Without** 700T03185	OR	**With** 700T901902 700T03185 700T101134

10. The Global Express XRS is a marketing designation for BD-700-1A10 aircraft serial numbers 9159 to 9429.

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 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.

13. 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

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

Requirement	CS 25 / JAR 25
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
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

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

Requirement	CS 25 / JAR 25
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

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

Requirement	CS 25 / JAR 25
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
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
AWO.A.CVS.101(a) and (b)	EASA CS-AWO, Issue 2*
FCD.050	EASA CS-FCD, Issue 2**
FCD.100	EASA CS-FCD, Issue 2**

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

Requirement	CS 25 / JAR 25
FCD.200	EASA CS-FCD, Issue 2**
FCD.300	EASA CS-FCD, Issue 2**
FCD.305	EASA CS-FCD, Issue 2**
FCD.310	EASA CS-FCD, Issue 2**
FCD.400	EASA CS-FCD, Issue 2**
FCD.405	EASA CS-FCD, Issue 2**
FCD.410	EASA CS-FCD, Issue 2**
FCD.415	EASA CS-FCD, Issue 2**
FCD.420	EASA CS-FCD, Issue 2**
FCD.425	EASA CS-FCD, Issue 2**

* Requirement from EASA CS-AWO Issue 2 is adopted to the certification basis during UK CAA validation of TCCA approved modification RS-709/DCCP-GX-050 (UK CAA Design Approval reference UK.MAJ.00210) in accordance with Further Working Arrangement between TCCA and the UK CAA on the Continuity of Validation Projects, Section 3.3, Scenario 3 b.(i), dated 30 March 2021.

** Requirements from EASA CS-FCD Issue 2 are adopted to the certification basis during UK CAA validation of TCCA approved modifications RS-716/DCCP-GX-057, RS-704/DCCP-GX-048, RS-705/DCCP-GX-046, RS-707/DCCP-GX-052 and RS-709/DCCP-GX-050 (UK CAA Design Approval references UK.MAJ.00202, UK.MAJ.00205, UK.MAJ.00206, UK.MAJ.00208 and UK.MAJ.00210 respectively) in accordance with Further Working Arrangement between TCCA and the UK CAA on the Continuity of Validation Projects, Section 3.3, Scenario 3 b.(i), dated 30 March 2021.

14. BD-700-1A10 “Global 6500” & BD-700-1A11“Global 5500” Definition

The Global 6500 and Global 5500 designations for the BD-700-1A10 and BD-700-1A11, respectively, do not correspond to model designations. These are only commercial designations which incorporate a number of design changes which Bombardier represents as a commercial “Mid-Life Upgrade” package.

First, the Rolls Royce Pearl 15 engine upgrade (model BR700-710D5-21) design change is derived from the BR710A2-20 that the Global BD-700-1A10 (Global Express XRS/Global 6000) and BD-700-1A11 (Global 5000/Global 5000 ft. Global Vision Flight Deck (GVFD)) line of aircraft were originally certified with. The design change to incorporate the BR700-NextGen engine in the baseline design replaces the BR710A2-20 in production, and is therefore only applicable to Global Aircraft with the GVFD installed.

The Rolls Royce Pearl 15 engine upgrade (model BR700-710D5-21) is an efficiency and capability enhancement package for the Global 5000 ft. GVFD and Global 6000 to meet new customer requirements, which included:

- Improved design range at M0.85;
- Improved range capability out of challenging airfields (Hot & High performance);
- Improved efficiency and drive down operating costs;
- New Engine Core (compressor, combustor and HPT);
- Bypass ratio increase;
- Increased number of LPT stages (from 2 to 3);
- New mixer;
- Increase in thrust (less than 10% at all altitudes).

The engine upgrade required minimal change to the existing aircraft design, and utilized the same interfaces and nacelle as the BR710A2-20 model engine.

The design change was weight neutral, with the upgraded aircraft having the same engine and aircraft CofG.

Certification of the engine upgrade also required additional Brake Kinetic Energy (BKE) testing (brake requalification) to ensure existing designs were adequate for use with the engine upgrade and the increased landing speeds. The existing brakes on the aircraft were re-qualified to absorb higher kinetic energies with no physical changes to the brake system.

In addition to the engine design change, parallel design changes were initiated and are incorporated on the BD-700-1A10/1A11 aircraft which represent the complete commercial "Mid-Life Upgrade" package. These parallel changes encompassed an increase to the Global's Maximum Operating Mach Number (MMO) up to 0.90 and the inboard flap extension of 5 inches (inboard side) and an updrooped aileron.

The Global 6500 is a marketing designation for BD-700-1A10 equipped with the Global Vision Flight Deck and Rolls-Royce Deutschland Ltd & Co KG BR700-710D5-21 engines, corresponding to aircraft with the following combination of modifications installed:

With
700T901901
700T03185
700T63572
and
Without
700T101134

The Global 5500 is a marketing designation for BD-700-1A11 equipped with the Global Vision Flight Deck and Rolls-Royce Deutschland Ltd & Co KG BR700-710D5-21 engines, corresponding to aircraft with the following combination of modifications installed:

With
700T901902
700T03185
700T63572
and
Without
700T101134

Reference Application Date for TCCA Certification:	March 7, 2013
TCCA Certification Date:	August 26, 2019
UK CAA Validation Application Date:	March 27, 2013
UK CAA Certification Date:	October 14, 2019

15. For BD-700-1A10 "Global 6500" & BD-700-1A11 "Global 5500" commercial designations

Engine Time Limited Dispatch is not approved for engine model BR700-710D5-21 when fitted in BD-700-1A10 and BD-700-1A11 aircraft.

IV. Operational suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Union 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, and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

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 Union Aviation Safety Agency Master Minimum Equipment List, Bombardier Global Express BD-700-1A10 and Global 5000 BD-7001A11, Revision 11 dated 8th August 2023, or UK CAA approved revisions from 01 January 2021.

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”, Revision 4 dated 22nd November 2023, or UK CAA approved revisions from 01 January 2021.

Section 3 BD-700-2A12

I. General

1. Type / Variant or Model

c) Type: BD-700 Series
d) Model: BD-700-2A12

2. Reference Application Date for UK CAA Certification

BD-700-2A12 13 June 2012

3. UK CAA Certification Date

BD-700-2A12 06 Feburary 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. UK CAA 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.

CS-AWO for All Weather Operations, Initial Issue, 17 October 2003.

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

SC CRI	Title
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
TCCA SCA 2019-04	Operation on Narrow Runways

* These Special Conditions, applicable to the Interiors Installation STC, form part of the certification asis 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

ESF CRI	Title
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.

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 I.

For details of the certified noise levels see TCDSN no. UK.TC.A.00037

Fuel Venting: ICAO Annex 16, Volume II, Amendment 7, Part II, Chapter 2.

III. Technical Characteristic and Operating 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.

5. Maximum Weights

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

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

**For aircraft incorporating SB 700-11-7505, Max. Take off Weight 45,499.4 kg (100,309 lb) applies.

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 in. 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 Servicing 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-J00-00-00-00AAA-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.

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 Compartments

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)

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 70005 and subsequent.

IV. Operational suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Union 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, and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

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 Union Aviation Safety Agency Master Minimum Equipment List, Bombardier BD-700-2A12 Revision 0 dated 11th March 2019, or later EASA approved revisions prior to 01 January 2021, or UK CAA revisions from 01 January 2021.

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-700-2A12” Original issue dated 6th February 2019, or later EASA approved revisions prior to 01 January 2021, or UK CAA approved revisions from 01 January 2021.

Section 4 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
ACP	Audio Control Panel
ADC	Air Data Computers
ADF	Automatic Direction Finder
AEO	All Engines Operative
AFM	Airplane Flight Manual
AMM	Aircraft Maintenance Manual
AMP	Aircraft Maintenance Publication
APU	Auxiliary Power Unit
AWO	All Weather Operations
BKE	Brake Kinetic Energy
CAA	(United Kingdom) Civil Aviation Authority
CCD	Cursor Control Devices
CCP	Cursor Control Panel
CMR	Certification Maintenance Requirement
CRI	Certification Review Item
CS	Certification Specification
CTP	Control Tuning Panel
CVR	Cockpit Voice Recorder
DMC	Data Concentration Unit Module Cabinet
DME	Distance Measuring Equipment
EASA	European Union Aviation Safety Agency
ECL	Electronic Checklists
EFIS	Electronic Flight Instrument System
EICAS	Engine Indication and Crew Alerting System
FAA	Federal Aviation Administration
FADEC	Full Authority Digital Engine Control
FCD	Flight Crew Data
FCOM	Flight Crew Operating Manual
FCP	Flight Control Panel
FDR	Flight Data Recorder
FMS	Flight Management System
GPS	Global Positioning System
GVFD	Global Vision Flight Deck
HIRF	High Intensity Radiated Field
HPT	High Pressure Turbine
ICAO	International Civil Aviation Organization
IFIS	Integrated Flight Information System
ILS	Instrument Landing System
IMS	Information Management System
IPC	Integrated Processing Cabinets
IRU	Inertial Reference Units
ITT	Interstage Turbine Temperature
JAA	Joint Aviation Authorities
JAR	Joint Aviation Regulations
Kg	Kilograms
Lbs	U.S. Pounds
LCD	Liquid Crystal Display
LDS	Lightning Detection System
LDU	Lamp Driver Unit
LPT	Low Pressure Turbine
LRU	Line Replaceable Unit
M	Mach
MFW	Multi-Functional Window
MKP	Multi-function Keyboard Panel
MMEL	Master Minimum Equipment List
M_{MO}	Maximum Operating Limit Speed (Mach)
NDTM	Non-Destructive Testing Manual
No	Number
OEI	One Engine Inoperative
OMS	Onboard Maintenance System
OSD	Operational Suitability Data
PFD	Primary Flight Display
RSP	Reversion Switch Panel
RIU	Radio Interface Units
RPM	Revolutions Per Minute

Section 4: BD-700-2A12

Acronym / Abbreviation	Definition
RVSM	Reduced Vertical Separation Minima
SC	Special Condition
SRM	Structural Repair Manual
STC	Supplemental Type Certificate
SVS	Synthetic Vision System
TAWS	Terrain Awareness and Warning System
TCAS	Traffic Collision Avoidance System
TCCA	Transport Canada Civil Aviation
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
TLMC	Time Limits/Maintenance Checks Manual
TRAS	Thrust Reverser Actuation System
TSO	Technical Standard Orders
TSS	Traffic Surveillance System
UK CAA	United Kingdom Civil Aviation Authority
VOR	Very high frequency Omni-directional Range
WBM	Weight and Balance Manual

Section 4: Administration

II. Type Certificate Holder Record

TCH Record	Period
Bombardier Inc. 400 Côte-Vertu Road West Dorval Québec Canada H4S 1Y9	Present. No changes.

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	04 Aug 2022	The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS No. EASA.IM.A.009 Issue 11 dated 21 November 2019 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the Bombardier BD-700 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement, except as listed below: Changes related to UK.ADMIN.00047: • Section 3.III.5: Added note ** to maximum weights table. Editorial changes/Changes to reflect EU Exit: • Section 1.I.: Updated to reflect UK CAA Type Certificate number. • Section 1.I.4: Type Certificate holder address updated • Section 2.I.1: Type / Model information format updated to UK CAA TCDS template. • Section 2.I.2: "…EASA Certification" updated to "…UK CAA Certification". • Section 2.I.3: "EASA Certification Date" updated to "UK CAA Certification Date" • Section 2.II.4: "EASA Certification Basis" updated to "UK CAA Certification Basis" • Section 2.II.7.1: Reference updated to "MMEL" from "EASA MMEL". • Section 2.II.8: Cert basis for noise updated to remove reference to "Third Edition", and refer to TCDS-N for latest certified noise levels. • Section 2.II.8: Fuel venting: reference updated to clarify that Part II, Chapter 2 is the applicable section of ICAO Annex 16, Volume II, Second Edition. • Section 2.II.10: Reference to TCCA TCDS removed. "EASA Certification Basis" updated to "Certification Basis" • Section 2.II.10.1: Reference to Note 15 corrected to Note 14. • Section 2.II.10.1: Reference to TCCA TCDS removed. "EASA Certification Basis" updated to "Certification Basis" • Section 2.III.3: Title – Reference to Note 15 corrected to Note 14.	Issue 1 04 Aug 2022

Section 4: Administration

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
		• Section 2.III.3.1: Reference to Engine TC & TCDS updated to applicable UK CAA TC & TCDS. • Section 2.III.4: Title – Reference to Note 15 corrected to Note 14. • Section 2.III.4.1: Reference to Engine TC & TCDS updated to applicable UK CAA TC & TCDS. • Section 2.III.5.12, Note 7: Correction of typographical error ("BD-700lA10" to "BD-700-1A10"). Reference to "EASA Validation Application Date" updated to "UK CAA Validation Date". Reference to "EASA Certification Date" updated to "UK CAA Certification Date". • Section 2.III.5.12, Note 12: Reference updated to "approved AFM", from "EASA approved AFM". • Section 2.III.5.12, Note 12: Correction of typographical error ("…correspond model…" to "…correspond to model…") • Section 2.III.5.12, Note 14: Reference to "EASA Validation Application Date" updated to "UK CAA Validation Date". Reference to "EASA Certification Date" updated to "UK CAA Certification Date". • Section 2.IV: Approval statement updated to reflect acceptance of EASA approved OSD under UK-EU Trade and Cooperation Agreement. • Section 2.IV, Sub-sections I & II: Statement updated to reflect applicability of approved EASA and UK CAA revisions pre/post 01 January 2021. • Section 3.I.1: Type / Model information format updated to UK CAA TCDS template. • Section 3.I.2: "…EASA Certification" updated to "…UK CAA Certification". • Section 3.I.3: "EASA Certification Date" updated to "UK CAA Certification Date" • Section 3.II.4: "EASA Certification Basis" updated to "UK CAA Certification Basis" • Section 3.II.9: Cert basis for noise updated to remove reference to "Third Edition", and refer to TCDS-N for latest certified noise levels. • Section 3.II.9: Fuel venting: reference updated to clarify that Part II, Chapter 2 is the applicable section of ICAO Annex 16, Volume II, Second Edition. • Section 3.III.19: Correction of typographical error ("Baggage/Cargo Departments" to "Baggage/Cargo Compartments") • Section 3.IV: Introductory paragraph added. Sub-sections I & II: Statement updated to reflect applicability of approved EASA and UK CAA revisions pre/post 01 January 2021.	
2	25 Jan 2023	Changes related to UK.MAJ.00199: - Section 2.II.9: Change to "Kinds of Operations" to clarify Category I and Non-precision EVS Operational Credit down to 100ft	Issue 1 04 Aug 2022

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TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
		- Section 2.II.10: Change to “Kinds of Operations” to clarify Category I and Non-precision EVS Operational Credit down to 100ft Changes related to UK.MAJ.0202/0205/0206/0208/0210 (UK.ADMIN.00072/74/75/76/77): - Section 2.III.5.5.12: Addition to Certification Basis of EASA CS-FCD Issue 2 Requirements. Changes related to UK.MAJ.00208 (UK.ADMIN.00076): - Section 2.II.10: Addition to Certification Basis of EASA ESF CRI F-44 “Indication removal from Primary Flight Displays during ground phases.” - Section 2.II.10.1: Addition to Certification Basis of EASA ESF CRI F-44 “Indication removal from Primary Flight Displays during ground phases.” Changes related to UK.MAJ.00210 (UK.ADMIN.00077) - Section 2.III.5.5.12: Addition to Certification Basis of EASA CS AWO.A.CVS.101(a) and (b) at EASA CS-AWO Issue 2. Editorial Updates: - Section 3.III.22 and Section 3.III.23: Correction of heading numbers (from 21.1 and 21.2 respectively).	
3	17 May 2023	Changes related to UK.MAJ.00189: - Section 3.II.5: Addition to Certification Basis of TCCA SCA 2019-04 “Operation on Narrow Runways”.	Issue 1 04 Aug 2022
4	19 April 2024	Administrative Updates: Changes related to UK.MAJ.00297: - Section 3.II. 4: Identification of CS-AWO to Certification Basis as currently referenced in EASA CRI A-01 “EASA Type Certification Basis”, Issue 2, date 5 Feb 2019. Changes related to UK.MAJ.00348: - Section 2.III.4: Identification of UK CAA Type Certificate Data Sheet for the engines pertinent to BD-700-1A10 (Global 6500) and BD-700-1A11 (Global 5500).	Issue 1 04 Aug 2022
5	12 July 2024	Administrative Updates: Changes related to UK.MAJ.00328: - Section 2.IV.II: OSD-FC reference update to latest issue. Changes related to UK.MAJ.00371: - Section 2.IV.I: MMEL reference update to latest issue.	Issue 1 04 Aug 2022

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