TYPE-CERTIFICATE DATA SHEET

No. EASA.IM.A.570

For
BD-500

Type Certificate Holder:
Airbus Canada Limited Partnership

13100 Henri-Fabre Blvd.
Mirabel, Québec, Canada
J7N 3C6

For Models: BD-500-1A10
BD-500-1A11

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TABLE OF CONTENTS

SECTION 1: MODEL BD-500-1A10

I. General

This Data Sheet, which is part of Type Certificate No. EASA.IM.A.570, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the European Union Aviation Safety Agency

1. Type/ Model/ Variant

BD-500 / BD-500-1A10

2. Performance Class

A

3. Certifying Authority

Transport Canada Civil Aviation

4. State of Design Authority Certification Application Date

Initial: 10 December 2009
Deferred: 31 December 2011

5. EASA Type Certification Application Date

Initial: 4 March 2010
Deferred: 31 December 2011

6. State of Design Authority Type Certificate Date

17 December 2015

7. EASA Type Certification Date

15 June 2016

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements

31 December 2011, nevertheless the 31st of October 2014 letter from TCCA was received (5010-A704 (10076915)) to elect to comply with CS-25 Amendment 12.

SECTION 1: MODEL BD-500-1A10 - continued

2. Reference Date for determining the applicable operational suitability requirements

31 December 2011 for CS-FCD, CS-MMEL and CS-CCD.

3. State of Origin Airworthiness Authority Type Certification Data Sheet No.

TCCA Type Certificate Data Sheet No. A-236 (initial revision 17th of December 2015, or subsequent revisions)

4. State of Origin Airworthiness Authority Certification Basis

Refer to TCCA Type Certificate Data Sheet No. A-236.

5. EASA Airworthiness Requirements

EASA Certification Specification 25, Amendment 12.

EASA Certification Specification All Weather Operations (CS-AWO), Initial Issue.

5.1 Special Conditions

B-01	Flight in Icing Conditions
B-02	Stalling and Scheduled Operating Speeds
B-03	Motion and Effects of Cockpit Controls
B-04	Static Directional, Lateral & Longitudinal Stability & Low Energy Awareness
B-05	Flight Envelope Protection Design
B-14	Steep Approach
B-17	Normal Load Factor Limiting System
B-26	Shorter Landing Distances on eligible Wet Grooved or PFC Runways
C-02	Composite Fuel Tanks – Uncontained Engine Debris
C-06	Design Dive Speed
C-07	Design Manoeuvre Load
C-08	Pilot Limit Forces & torques (Side Stick)
C-12	Tyre Debris vs. Fuel Leakage for CFRP Fuel Tanks
C-13	Automatic Braking System Loads
D-04	Post-Crash Fire – Composite Construction
D-07	Heat Release and Smoke Emission for Seat Installation
D-08	In-Flight Fire – Composite and Unusual Construction
D-14	Towbarless Towing
D-16	Control Surface Position Awareness and EFCS
E-01	Water/ Ice Fuel System
E-11	Fire Withstand Capability of CFPR Wing Fuel Tanks
F-01	HIRF Protection
F-10	Data Link Services for the Single European Sky
F-11	Flight Recorders, Data Link Recording
F-14	Flight Instrument External Probes – Qualification in Icing Conditions
F-21	Airborne Systems & Network Security
F-29	Lithium Battery Installations
F-32	Non Rechargeable Lithium Battery Installation

SECTION 1: MODEL BD-500-1A10 - continued

5.2. Deviations

None.

5.3. Equivalent Safety Findings

B-24	Out of Trim
D-09	Burnthrough Protection at Aft Pressure Bulkhead
D-13	Pack-off Dispatch
D-23	Burnthrough on WTBF
D-26	Burnthrough on Lower Deck Cargo Compartment
D-30	APU Doors ESF
E-13	Fan Zone Non Fire Zone
E-14	Digital Only Displays of Power-Plant Instruments
E-15	Engine Ignition Switches
E-16	Automatic Take-Off Thrust Control System Indication
F-24	Passenger Cabin Minimum Mass Flow of Supplemental Oxygen
F-26	Crew Determination of Quantity of Oxygen in Passenger Oxygen System

5.4. Environmental Protection Requirements

EASA Certification Specification 36, Amendment 3
EASA Certification Specification 34, Initial Issue

For details of the certified noise levels see TCDSN EASA.IM.A.570.

6. Operational Suitability Requirements

6.1 Flight Crew Data

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

6.2. Cabin Crew Data

Certification Specifications and Guidance Material for Cabin Crew Data (CS-CCD), Initial Issue - 31 January 2014.

6.3. Master Minimum Equipment List

Certification Specifications for Master Minimum Equipment List CS-MMEL Initial Issue dated 31 January 2014 (Book 1 only)
Bombardier MMEL development and approval plan Ref. EASA – BD-500 – ORI 4 Issue 2 – 13 February 2014 (as AMC/GM)

SECTION 1: MODEL BD-500-1A10 - continued

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Type design definition applicable to this TCDS for the BD-500-1A10 is defined in RAZ-BA500-027 at Rev. A or later approved revisions.

For particular BD-500-1A10 aircraft configured with the Basic Airbus Corporate Jet (ACJ) modifications in accordance with RAL-BA500-0005 Rev. – or later approved revisions, the approved type design appropriate to the "as delivered" configuration is defined in RAZ-BA500-027 Rev. M or later approved revisions, and RAL-BA500-XXXXX (production sequence number, where XXXXX denotes the aircraft serial number).

2. Description

The BD-500-1A10 model airplane is a swept-wing monoplane with a pressurized single-aisle cabin. The airplane is fitted with two (2) Pratt & Whitney PW1500G ultra-high bypass geared turbofan engines.

The Airplane structure, in general, is fabricated from advanced weight-saving materials (Carbon Fibre Reinforced Plastic (CFRP) and advanced aluminium alloys). Steel alloys and titanium are also used.

3. Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) and defined in the Type Certificate Type Design Definition (RAZ-BA500-027 Rev A or later approved revisions) must be installed in the airplane.

4. Dimensions

Wingspan	35.1 m (115 ft 1 in)
Overall Length	34.9 m (114 ft 9 in)
Height	11.8 m (38 ft 8 in)

5. Engines

Two (2) Pratt & Whitney PW1524G (EASA TCDS EASA.IM.E.090)
Two (2) Pratt & Whitney PW1521G (EASA TCDS EASA.IM.E.090)
Two (2) Pratt & Whitney PW1519G (EASA TCDS EASA.IM.E.090)

6. Auxiliary Power Unit

One (1) Honeywell 131-9(C)

For operating limits, see applicable AFM as listed in Section IV of this TCDS.

SECTION 1: MODEL BD-500-1A10 - continued

7. Propellers

N/A

8. Fluids (Fuel, Oil, Additives, Hydraulics)

8.1 Fuel

For approved fuel grades, fuel additives, fuel temperature limitations and fuel quantity gauging inaccuracy, see applicable AFM as listed in Section IV of this TCDS.

8.2 Oil

For approved oils, see applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

8.3 Hydraulics

For approved hydraulic fluids, see applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

9. Fluid Capacities

9.1 Fuel

See applicable AFM as listed in Section IV of this TCDS.

9.2 Oil

See applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

10. Airspeed Limits

Unless otherwise specified, speeds are indicated airspeeds

		knots	Mach
V_{MO} and M_{MO}		-	-
	Sea Level to 8,000 ft.	300	-
	10,000 ft. to 27,500 ft.	330	-
	Above 27,500 ft.	-	0.82

For additional approved speeds, see applicable AFM as listed in Section IV of this TCDS.

11. Flight Envelope

Maximum Operating Altitude:

Take-off and Landing: 8,000 ft (2,438 m) - 10,000 ft (3,050 m) for aircraft fitted with post SB BD500-314004 or Mod 314004

SECTION 1: MODEL BD-500-1A10 - continued

Enroute: 41,000 ft (12,497 m)

12. Operating Limitations

See applicable AFM as listed in Section IV of this TCDS.

12.1 Approved Operations

- Visual (VFR)
- Instrument (IFR)
- Icing Conditions
- Low weather minima (CAT I, CAT II, CAT III with decision height 50ft and CAT III with no decision height)
- Ditching (see Note 2)

12.2 Other Limitations

Maximum Ambient Temperature for Takeoff and Landing	+52.5°C
Minimum Ambient Temperature for Takeoff	-54°C
Minimum Ambient Temperature for Landing	-30°C -54˚C Post SB BD500-278001
Runway slope	+/- 2%

13. Maximum Certified Weights

Weight	kg	lb
Maximum Ramp Weight (MRW)	64183	141500
Maximum Takeoff Weight (MTOW)	63730	140500
Maximum Landing Weight (MLW)	54658	120500
Maximum Zero Fuel Weight (MZFW)	52617	116000

For additional approved weight variants, see applicable AFM as listed in Section IV of this TCDS.

14. Centre of Gravity Range

See applicable AFM as listed in Section IV of this TCDS.

15. Datum

FS 0.0 is located 640 cm (252.0 in) forward of the aircraft nose.

16. Levelling Means

Aircraft is levelled in the longitudinal and lateral axis by means of a plumb bob and target plate in the rear fuselage/aft equipment bay at FS 1390.83.

17. Minimum Flight Crew

Two (2) – Pilot and Co-Pilot

SECTION 1: MODEL BD-500-1A10 - continued

18. Minimum Cabin Crew

(in accordance with the emergency evacuation test)

Three (3)
No cabin crew required when configured with the Basic Airbus Corporate Jet (ACJ) modifications in accordance with RAL-BA500-0005 Rev.- or later approved revisions, unless fitted with an approved interior.

19. Maximum Aircraft Occupants

133 (including 1 Pilot, 1 Co-pilot, 1 Observer, a minimum of 3 Cabin Crew* and a maximum of 127 Passengers*)
* Maximum 130 cabin occupants when fitted with an approved interior.

3 (1 Pilot, 1 Co-pilot and 1 Observer all located in the cockpit) with no Cabin Crew or passengers when configured with the Basic Airbus Corporate Jet (ACJ) modifications in accordance with RAL-BA500-0005 Rev.- or later approved revisions, unless fitted with an approved interior.

The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (emergency exit arrangement and installed option(s)) and the associated minimum number of cabin crew (CC) members required to demonstrate compliance with the certification requirements.

MPSC	Cabin Configuration	Installed Option(s)	Minimum CC	Maximum CC
127	C – III - C	---	3	5
0	None	Basic Airbus Corporate Jet (ACJ)	0	0

20. Baggage/ Cargo Compartment

	Maximum Loading	
	lb	kg
Fwd Cargo Compartment	3742	1697
Aft Cargo Compartment	4548	2063

See applicable Weight and Balance Manual as listed in Section IV of this TCDS.

21. Wheels and Tyres

21.1 Wheels

Nose Landing Gear: 12”
Main Landing Gear: 21”

SECTION 1: MODEL BD-500-1A10 - continued

21.2 Tyres

Nose Landing Gear: 27x8.5R12 - 16PR - 225 MPH
Main Landing Gear: H42x15.0R21- 26PR - 225 MPH

22. ETOPS

The Type Design, system reliability and performance of the following BD-500-1A10 configurations were found capable for Extended Range Operations (ETOPS) when configured, maintained and operated in accordance with the current revision of the ETOPS Configuration, Maintenance and Procedures (CMP) document, BD500-3AB48-11200-00 Issue 7 or later EASA approved revisions.

This finding does not constitute an approval to conduct Extended Range Operations (operational approval must be obtained from the responsible Authority).
The following table provides details on the ETOPS approvals.

Model	Engine Type	Up to 120 min. Approval date	Up to 180 min. Approval date
BD-500-1A10	PW1524G	04 March 2021	04 March 2021
BD-500-1A10	PW1521G	18 October 2021	18 October 2021
BD-500-1A10	PW1519G	11 April 2024	11 April 2024

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Airplane Flight Manual (AFM), BD500-3AB48-22200-00, Issue 003, or later approved revisions.

2. Instructions for Continued Airworthiness and Airworthiness Limitations

The Instructions for Continued Airworthiness consist of the publications listed in the Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00
(Instructions for Continued Airworthiness, Data Module BD500-A-J00-00-00-00AAA-00VA-A).

Airworthiness Limitations (AWL), BD500-3AB48-11400-02, Issue 002 or later approved revisions.

Maintenance Review Board Report BD500-3AB48-11400-01 Issue 03 or later approved revisions.

3. Weight and Balance Manual (WBM)

Weight and Balance Manual, BD500−3AB48−22100−00-xxx, where xxx denotes the customer-specific code.

SECTION 1: MODEL BD-500-1A10 - continued

V. 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 [original TC number] as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List

a. The MMEL is defined in BD500-3AB48-12701-00, Issue 001 or later approved revisions

2. Flight Crew Data

a. The Flight Crew Data is defined in BAT-BD500-OSD-FC, Initial Issue or later approved revisions

3. Cabin Crew Data

a. The Cabin Crew Data has been approved as per the defined Operational Suitability Data Certification Basis (see Chapter 2) and as demonstrated by the Airbus Canada (ACLP)'s Operational Suitability Data (OSD) Cabin Crew Report A220-100/300 (BD-500-1A10/-1A11) Document Reference S25D24017727 Issue 3 or later EASA approved revisions, which replaces and supersedes previous Bombardier CSCCD, Doc#CC-E-BD500-100 EASA Operational Suitability Data (OSD), Cabin Crew Data (CCD) for Bombardier CSeries BD-500-1A10 (CS100) Report, Issue 1, dated June 1st 2016 and its later approved revisions.

b. The BD-500-1A10 aircraft model is determined to be a new type for cabin crew.

VI. Notes

1. Import Requirements:

   a. The Export Certificate of Airworthiness to EU country issued by TCCA should contain the following statement (in the English language):

      "The aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under EASA Type Certificate No. EASA.IM.A.570 as defined in TCDS EASA.IM.A.570 issue 1 (or later revision) and to be in condition for safe operation."

2. Ditching: The BD-500-1A10 Model configured with the Basic Airbus Corporate Jet (ACJ) modifications as defined in RAL-BA500-0005 Rev. – or later approved revisions, is not approved for ditching, unless fitted with the required ditching equipment.

3. RAZ-BA500-027 Appendix A, Revision M or later revisions, provides guidance to completion centres when installing an interior regarding compliance with the certification basis for the BD500-1A10 configured with the Basic ACJ modifications in accordance with RAL-BA500-0005 Rev. – or later approved revisions. This guidance notes general applicable conditions, or considerations regarding:
   - How compliance has been demonstrated for the Basic ACJ aircraft.
   - If compliance with some requirement(s) is partial for the Basic ACJ aircraft with the

SECTION 1: MODEL BD-500-1A10 - continued

remainder to be addressed by the completion centre.

- Specific items for which compliance must be addressed by the completion centre (N/A to the Basic ACJ aircraft)

The guidance in Appendix A guidance should not be understood as an exhaustive list of all the certification requirements to be addressed by the completion centre during the process of EASA certification for a cabin completion Supplemental Type Certificate.

RAZ-BA500-027 Appendix B, Revision M or later revisions also includes references to installation, interface data with associated limitations, and relevant data to support completion centres' understanding of the scope of the compliance activities.

4. Model airplane BD-500-1A10 receives the commercial designation A220-100.

SECTION 2: MODEL BD-500-1A11

I. General

This Data Sheet, which is part of Type Certificate No. EASA.IM.A.570, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the European Union Aviation Safety Agency

1. Type/ Model/ Variant

BD-500 / BD-500-1A11

2. Performance Class

A

3. Certifying Authority

Transport Canada Civil Aviation

4. State of Design Authority Certification Application Date

Initial: 10 December 2009
Deferred: 31 December 2011

5. EASA Type Certification Application Date

Initial: 4 March 2010
Deferred: 31 December 2011

6. State of Design Authority Type Certificate Date

8 July 2016

7. EASA Type Certification Date

07 October 2016

II. Certification Basis

1. Reference Date for determining the applicable airworthiness requirements

31 December 2011, nevertheless the 31st of October 2014 letter from TCCA was received (5010-A704 (10076915)) to elect to comply with CS-25 Amendment 12.

SECTION 2: MODEL BD-500-1A11 - continued

2. Reference Date for determining the applicable operational suitability requirements

31 December 2011 for CS-FCD, CS-MMEL and CS-CCD.

3. State of Origin Airworthiness Authority Type Certification Data Sheet No.

TCCA Type Certificate Data Sheet No. A-236 (initial revision 17th of December 2015, or subsequent revisions)

4. State of Origin Airworthiness Authority Certification Basis

Refer to TCCA Type Certificate Data Sheet No. A-236.

5. EASA Airworthiness Requirements

EASA Certification Specification 25, Amendment 12.

EASA Certification Specification All Weather Operations (CS-AWO), Initial Issue.

5.1 Special Conditions

B-01	Flight in Icing Conditions
B-02	Stalling and Scheduled Operating Speeds
B-03	Motion and Effects of Cockpit Controls
B-04	Static Directional, Lateral & Longitudinal Stability & Low Energy Awareness
B-05	Flight Envelope Protection Design
B-17	Normal Load Factor Limiting System
B-26	Shorter Landing Distances on eligible Wet Grooved or PFC Runways
C-02	Composite Fuel Tanks – Uncontained Engine Debris
C-06	Design Dive Speed
C-07	Design Manoeuvre Load
C-08	Pilot Limit Forces & torques (Side Stick)
C-12	Tyre Debris vs. Fuel Leakage for CFRP Fuel Tanks
C-13	Automatic Braking System Loads
D-04	Post-Crash Fire – Composite Construction
D-07	Heat Release and Smoke Emission for Seat Installation
D-08	In-Flight Fire – Composite and Unusual Construction
D-14	Towbarless Towing
D-16	Control Surface Position Awareness and EFCS
E-01	Water/ Ice Fuel System
E-11	Fire Withstand Capability of CFPR Wing Fuel Tanks
F-01	HIRF Protection
F-10	Data Link Services for the Single European Sky
F-11	Flight Recorders, Data Link Recording
F-14	Flight Instrument External Probes – Qualification in Icing Conditions
F-21	Airborne Systems & Network Security
F-29	Lithium Battery Installations
F-32	Non Rechargeable Lithium Battery Installation

SECTION 2: MODEL BD-500-1A11 - continued

5.2. Deviations

None.

5.3. Equivalent Safety Findings

B-24	Out of Trim
D-09	Burnthrough Protection at Aft Pressure Bulkhead
D-13	Pack-off Dispatch
D-23	Burnthrough on WTBF
D-26	Burnthrough on Lower Deck Cargo Compartment
D-27	Increased Max Passenger Capacity (149 Max Pax)
D-30	APU Doors ESF
E-13	Fan Zone Non Fire Zone
E-14	Digital Only Displays of Power-Plant Instruments
E-15	Engine Ignition Switches
E-16	Automatic Take-Off Thrust Control System Indication
F-24	Passenger Cabin Minimum Mass Flow of Supplemental Oxygen
F-26	Crew Determination of Quantity of Oxygen in Passenger Oxygen System

5.4. Environmental Protection Requirements

EASA Certification Specification 36, Amendment 3
EASA Certification Specification 34, Initial Issue

For details of the certified noise levels see TCDSN EASA.IM.A.570.

6. Operational Suitability Requirements

6.1 Flight Crew Data

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

6.2. Cabin Crew Data

Certification Specifications and Guidance Material for Cabin Crew Data (CS-CCD), Initial Issue - 31 January 2014.

6.3. Master Minimum Equipment List

Certification Specifications for Master Minimum Equipment List CS-MMEL Initial Issue dated 31 January 2014 (Book 1 only)
Bombardier MMEL development and approval plan Ref. EASA – BD-500 – ORI 4 Issue 2 – 13 February 2014 (as AMC/GM)

SECTION 2: MODEL BD-500-1A11 - continued

III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Type design definition applicable to this TCDS for the BD-500-1A11 is defined in RAZ-BA503-027 at Rev. A or later approved revisions.

2. Description

The BD-500-1A11 model airplane is a swept-wing monoplane with a pressurized single-aisle cabin. The airplane is fitted with two (2) Pratt & Whitney PW1500G ultra-high bypass geared turbofan engines.

The Airplane structure, in general, is fabricated from advanced weight-saving materials (Carbon Fibre Reinforced Plastic (CFRP) and advanced aluminium alloys). Steel alloys and titanium are also used.

3. Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) and defined in the Type Certificate Type Design Definition (RAZ-BA503-027 Rev A or later approved revisions) must be installed in the airplane.

4. Dimensions

Wingspan	35.1 m (115 ft 1 in)
Overall Length	38.7 m (127 ft)
Height	11.5 m (37 ft 9 in)

5. Engines

Two (2) Pratt & Whitney PW1521G-3 (EASA TCDS EASA.IM.E.090)
Two (2) Pratt & Whitney PW1524G-3 (EASA TCDS EASA.IM.E.090)

6. Auxiliary Power Unit

One (1) Honeywell 131-9(C)
For operating limits, see applicable AFM as listed in Section IV of this TCDS.

7. Propellers

N/A

SECTION 2: MODEL BD-500-1A11 - continued

8. Fluids (Fuel, Oil, Additives, Hydraulics)

8.1 Fuel

For approved fuel grades, fuel additives, fuel temperature limitations and fuel quantity gauging inaccuracy, see applicable AFM as listed in Section IV of this TCDS.

8.2 Oil

For approved oils, see applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

8.3 Hydraulics

For approved hydraulic fluids, see applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

9. Fluid Capacities

9.1 Fuel

See applicable AFM as listed in Section IV of this TCDS.

9.2 Oil

See applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

10. Airspeed Limits

Unless otherwise specified, speeds are indicated airspeeds

		knots	Mach
V_{MO} and M_{MO}		-	-
	Sea Level to 8,000 ft.	300	-
	10,000 ft. to 27,500 ft.	330	-
	Above 27,500 ft.	-	0.82

For additional approved speeds, see applicable AFM as listed in Section IV of this TCDS.

11. Flight Envelope

Maximum Operating Altitude:

Take-off and Landing: 8,000 ft (2,438 m) - 10,000 ft (3,050 m) for aircraft fitted with post SB BD500-314004 or Mod 314004

Enroute: 41,000 ft (12,497 m)

SECTION 2: MODEL BD-500-1A11 - continued

12. Operating Limitations

See applicable AFM as listed in Section IV of this TCDS.

12.1 Approved Operations

- Visual (VFR)
- Instrument (IFR)
- Icing Conditions
- Low weather minima (CAT I, CAT II, CAT III with decision height 50ft and CAT III with no decision height)
- Ditching

12.2 Other Limitations

Maximum Ambient Temperature for Takeoff and Landing	+52.5°C
Minimum Ambient Temperature for Takeoff	-54°C
Minimum Ambient Temperature for Landing	-54°C
Runway slope	+/- 2%

13. Maximum Certified Weights

Weight	kg	lb
Maximum Ramp Weight (MRW)	71214	157000
Maximum Takeoff Weight (MTOW)	70896	156300
Maximum Landing Weight (MLW)	58740	129500
Maximum Zero Fuel Weight (MZFW)	55792	123000

For additional approved weight variants see applicable AFM as listed in Section IV of this TCDS.

14. Centre of Gravity Range

See applicable AFM as listed in Section IV of this TCDS.

15. Datum

FS 0.0 is located 427 cm (168.0 in) forward of the aircraft nose.

16. Levelling Means

Aircraft is levelled in the longitudinal and lateral axis by means of a plumb bob and target plate in the rear fuselage/aft equipment bay at FS 1453.83.

17. Minimum Flight Crew

Two (2) – Pilot and Co-Pilot

SECTION 2: MODEL BD-500-1A11 - continued

18. Minimum Cabin Crew
(in accordance with the emergency evacuation test)

Three (3)

19. Maximum Aircraft Occupants

153 (including 1 Pilot, 1 Co-pilot, 1 Observer, a maximum of 5 Cabin Crew and a maximum of 145 Passengers), OR

157 (including 1 Pilot, 1 Co-pilot, 1 Observer, a maximum of 5 Cabin Crew, and 149 Passengers)

The table below provides the certified Maximum Passenger Seating Capacities (MPSC), the corresponding cabin configuration (emergency exit arrangement and installed option(s)) and the associated minimum number of cabin crew (CC) members required to demonstrate compliance with the certification requirements.

MPSC	Cabin Configuration	Installed Option(s)	Minimum CC	Maximum CC
145	C – III - C	---	3	5
149	C – III* - C	Option C25631002	3	5

III* is the over-performing Type III pair of over the wing emergency exits as defined by Option C25631002.
Note:

- The original baseline aircraft maximum passenger seating capacity is 145, and
- Option C25631002 enables the MPSC to be increased from 145 up to 149 (demonstrated through EASA equivalent safety finding D-27), replacing the single-lane-off-wing slide with a dual-lane-off-wing slide, and
- A separate airworthiness approval is needed for the installation of the individual customized cabin layout and the necessary cabin adaptations up to 149 passenger seats.

20. Baggage/ Cargo Compartment

	Maximum Loading	
	lb	kg
Fwd Cargo Compartment	5393	2446
Aft Cargo Compartment	5746	2606

See applicable Weight and Balance Manual as listed in Section IV of this TCDS.

21. Wheels and Tyres

21.1 Wheels

Nose Landing Gear: 12”
Main Landing Gear: 21”

SECTION 2: MODEL BD-500-1A11 - continued

21.2 Tyres

Nose Landing Gear: 27x8.5R12 - 16PR - 225 MPH
Main Landing Gear: H42x15.0R21- 26PR - 225 MPH

22. ETOPS

The Type Design, system reliability and performance of the following BD-500-1A11 configurations were found capable for Extended Range Operations (ETOPS) when configured, maintained and operated in accordance with the current revision of the ETOPS Configuration, Maintenance and Procedures (CMP) document, BD500-3AB48-11200-00 Issue 7 or later EASA approved revisions.

This finding does not constitute an approval to conduct Extended Range Operations (operational approval must be obtained from the responsible Authority).
The following table provides details on the ETOPS approvals.

Model	Engine Type	Up to 120 min. Approval date	Up to 180 min. Approval date
BD-500-1A11	PW1521G-3	04 March 2021	04 March 2021
	PW1524G-3	04 March 2021	04 March 2021

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Airplane Flight Manual (AFM), BD500-3AB48-32200-00, Issue 004, or later approved revisions.

2. Instructions for Continued Airworthiness and Airworthiness Limitations

The Instructions for Continued Airworthiness (ICA) consist of the publications listed in the Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00
(Instructions for Continued Airworthiness, Data Module BD500-A-J00-00-00-00AAA-00VA-A).

Airworthiness Limitations (AWL), BD500-3AB48-11400-02, Issue 002 or later approved revisions.

Maintenance Review Board Report BD500-3AB48-11400-01 Issue 03 or later approved revisions

3. Weight and Balance Manual (WBM)

Weight and Balance Manual, BD500-3AB48-32100-00-xxx, where xxx denotes the customer-specific code.

SECTION 2: MODEL BD-500-1A11 - continued

V. Operational Suitability Data (OSD)

1. Master Minimum Equipment List

a. The MMEL is defined in BD500-3AB48-12701-00, Issue 002, dated September 14th 2016, or later approved revisions.

2. Flight Crew Data

a. The Flight Crew Data is defined in BAT-BD500-OSD-FC, Revision 1, dated 28 Oct 2016 or later approved revisions.

3. Cabin Crew Data

a. The Cabin Crew Data has been approved as per the defined Operational Suitability Data Certification Basis (see Chapter 2) and as demonstrated by the Airbus Canada (ACLP)'s Operational Suitability Data (OSD) Cabin Crew Report A220-100/300 (BD-500-1A10/-1A11) Document Reference S25D24017727 Issue 3 or later EASA approved revisions, which replaces and supersedes previous Bombardier CSCCD, Doc#CC-E-BD500-100/300 EASA Operational Suitability Data (OSD), Cabin Crew Data (CCD) for Bombardier C Series Family (CS100; CS300), BD-500-1A10 (CS100) Report, BD-500-1A11 (CS300) Report, Issue 2, dated August 5th, 2016.

b. For cabin crew, the BD-500-1A11 aircraft model is determined to be the same type as the BD-500-1A10 model.

VI. Notes

1. Import Requirements:

    a. The Export Certificate of Airworthiness to EU country issued by TCCA should contain the following statement (in the English language):

    "The aircraft covered by this certificate has been examined, tested, and found to conform to the Type Design approved under EASA Type Certificate No. EASA.IM.A.570 as defined in TCDS EASA.IM.A.570 issue 1 (or later revision) and to be in condition for safe operation."

2. Model airplane BD-500-1A11 receives the commercial designation A220-300.

SECTION: ADMINISTRATIVE

I. Acronyms and Abbreviations

AFM Airplane Flight Manual
ALI Airworthiness Limitation Items
AMC Acceptable Means of Compliance
APU Auxiliary Power Unit
AWO All Weather Operations
CCD Cabin Crew Data
CG Center of Gravity
CRI Certification Review Item
CS Certification Specification
EASA European Union Aviation Safety Agency
ESF Equivalent Safety Finding
ETOPS Extended Range Operations with Two-Engine Aeroplanes
EU European Union
EWIS Enhanced Wiring Interconnection System
FCD Flight Crew Data
ICA Instructions for Continued Airworthiness
ICAO International Civil Aviation Organization
IFR Instrument Flight Rules
OSD Operational Suitability Data
PW Pratt and Whitney
SC Special Condition
TC type Certificate
TCCA Transport Canada Civil Aviation
TCDS Type Certificate Data Sheet
TCDSN Type Certificate Data Sheet for Noise
VFR Visual Flight Rules

II. Type Certificate Holder Record

Airbus Canada Limited Partnership
13100 Henri-Fabre Blvd.
Mirabel, Québec, Canada
J7N 3C6

SECTION: ADMINISTRATIVE

III. Change Record

Issue	Date	Changes	TC issue
Issue 01	16 June 2016	Initial Issue	Initial Issue, 15 June 2016
Issue 02	30 June 2016	Header correction and chapter 21 Baggage/ Cargo Compartment values corrected.	30 June 2016
Issue 03	20 July 2016	Removal of manufacturer information.	20 July 2016
Issue 04	07 October 2016	CS300 introduced in Section 2.	07 October 2016
Issue 05	18 Nov 2016	CS300 additional weights introduced. CS300 FCD introduced.	07 October 2016
Issue 06	28 Nov 2016	MRB report added.	07 October 2016
Issue 07	07 Dec 2016	Cargo Compartment values corrected. CS300 CCD OSD statement corrected.	07 October 2016
Issue 08	26 Apr 2017	Added CRI B-14, Steep Approach SC. CS100/CS300 Fuel Loads tables revised. Introduced engine PW1524G-3 for CS300. Removed engine variants in CS300 maximum certified weights tables. Introduced new weights in CS300 maximum certified weights tables. OSD FCD updated to cover Steep Approach. CS300 AFM updated to the Issue 6.	07 October 2016
Issue 09	02 Oct 2017	Transfer of TC to C Series Aircraft Limited Partnership	07 October 2016
Issue 10	29 Jan 2018	Various editorial changes.	07 October 2016
Issue 11	30 Nov 2018	Commercial designations revised from CS100 & CS300 to A220-100 & A220-300. CAT IIIa, & b auto-land operations introduced. Corrected Minimum Ambient Temperature for Landing, on BD-500-1A11 only. Various editorial changes.	07 October 2016
Issue 12	01 Jun 2019	Re-Naming of C Series Aircraft Limited Partnership to Airbus Canada Limited Partnership.	07 October 2016
Issue 13	04 Mar 2021	Technical Characteristics and Operational Limitations updates: Maximum operating altitude for TO and landing EASA ETOPS design approval	04 Mar 2021 for ETOPS design approval
Issue 14	12 Mar 2021	Maximum Ramp and Maximum Takeoff Weights updated for BD-500-1A11 model Editorial correction introduced on maximum diversion times for ETOPS as introduced in issue 13, to highlight that EASA approvals cover “up to” 120 minutes and “up to” 180 minutes	07 October 2016

SECTION: ADMINISTRATIVE

Issue 15	23 July 2021	BD-500-1A10: • Page 12: Maximum aircraft occupants information updated: table for MPSC added. BD-500-1A11 Max Pax increase from 145 to 149: • Page 18: ESF D-27 added • Pages 22 and 23: Maximum aircraft occupants information updated: Option for Max Pax Increase from 145 to 149 and table for MPSC added.	23 July 2021
Issue 16	18 October 2021	BD-500-1A10: • Page 9: Two Pratt & Whitney PW1521G engines added as valid aircraft engine option • Page 13: ETOPS airworthiness approval extended to airframe/engine combination BD-500-1A10 with P&W PW1521G	18 October 2021
Issue 17	09 December 2021	BD-500-1A10: • Page 9 Type design definition content updated by adding references to Basic Airbus Corporate Jet (ACJ) modifications. • Page 11 Ditching: Reference to a new Note 2 added • Pages 12 and 13: references to Basic Airbus Corporate Jet (ACJ) modifications added for minimum cabin crew, maximum aircraft occupants and MPSC. • Page 15: Note 2 for ACJ and Ditching added. • Page 15: Note 3 added for ACJ and RAZ-BA500—027 Appendix A	09 December 2021
Issue 18	09 September 2022	BD-500-1A10: Page 12: • Other Limitations: Minimum ambient temperature for landing updated for post SB-BD500-278001 aircraft. • Maximum aircraft certified weights updated (MRW/MTOW/MLW/MZFW)	09 September 2022
Issue 19	01 February 2023	BD-500-1A10 and BD-500-1A11: • Mentions to commercial designations A220-100 and A220-300 removed from cover sheet and from pages 6, 14 and 16. • New notes for commercial designations A220-100 and A220-300 added in pages 15 and 24, respectively. • EASA Special Condition B-26 “Shorter Landing Distances on eligible Wet Grooved or PFC Runways“ added to Certification Basis in pages 7 and 17. • Technical Characteristics and Operational Limitations. Information on Fluids and Fluids Capacities reworded to refer to AFM and applicable publications. Pages 10 and 20.	01 February 2023
Issue 20	09 May 2023	BD-500-1A10: • Page 9: Two Pratt & Whitney PW1519G engines added as valid aircraft engine option.	09 May 2023

SECTION: ADMINISTRATIVE

Issue 21	11 April 2024	BD-500-1A10: Page 13: ETOPS airworthiness approval extended to airframe/engine combination BD-500-1A10 with P&W PW1519G.	11 April 2024
Issue 22	25 April 2025	BD-500-1A10 and BD-500-1A11: Pages 14 and 24: reference to demonstration document for OSD Cabin Crew Data updated.	25 April 2025

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