BD-500 TCDS No.: EASA.IM.A.570 Page 1 of 25

Date: 01 Jun 2019 Issue: 12



# **TYPE-CERTIFICATE DATA SHEET**

No. EASA.IM.A.570

For **BD-500 (A220 SERIES)** 

# **Type Certificate Holder:** Airbus Canada Limited Partnership

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

For Models: BD-500-1A10 (A220-100)

BD-500-1A11 (A220-300)

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## Page 3 of 25 Date: 01 Jun 2019

# **TABLE OF CONTENTS**

SECTION 1: MODEL BD-500-1A10 (A220-100)	6
I. General	6
1. Type/ Model/ Variant	6
2. Performance Class	6
3. Certifying Authority	6
4. State of Design Authority Certification Application Date	6
5. EASA Type Certification Application Date	6
6. State of Design Authority Type Certificate Date	6
7. EASA Type Certification Date	6
II. Certification Basis	6
1. Reference Date for determining the applicable airworthiness requirements	6
2. Reference Date for determining the applicable operational suitability requirements	7
3. State of Origin Airworthiness Authority Type Certification Data Sheet No	7
4. State of Origin Airworthiness Authority Certification Basis	7
5. EASA Airworthiness Requirements	7
5.2. Deviations	8
5.3. Equivalent Safety Findings	8
5.4. Environmental Protection Requirements	8
6. Operational Suitability Requirements	8
6.1 Flight Crew Data	8
6.2. Cabin Crew Data	8
6.3. Master Minimum Equipment List	8
III. Technical Characteristics and Operational Limitations	9
1. Type Design Definition	9
2. Description	9
3. Equipment	9
4. Dimensions	9
5. Engines	9
6. Auxiliary Power Unit	9
7. Propellers	
8. Fluids (Fuel, Oil, Additives, Hydraulics)	
8.1 Fuel	10
8.2 Oil	10
8.3 Hydraulics	10
9. Fluid Capacities	10
9.1 Fuel	10
9.2 Oil	
10. Airspeed Limits	11
11. Flight Envelope	
12. Operating Limitations	
13. Maximum Certified Weights	
14. Centre of Gravity Range	
15. Datum	
16. Levelling Means	
17. Minimum Flight Crew	
18. Minimum Cabin Crew	12

TCDS No.: EASA.IM.A.570 BD-500 Issue: 12

	19. Maximum Aircraft Occupants	
	20. Baggage/ Cargo Compartment	
	21. Wheels and Tyres	
	21.1 Wheels	
	21.2 Tyres	
	22. ETOPS	
IV.	. Operating and Service Instructions	
	1. Airplane Flight Manual (AFM)	
	2. Instructions for Continued Airworthiness and Airworthiness Limitations	
	3. Weight and Balance Manual (WBM)	
	Operational Suitability Data (OSD)	
	. Notes	
	TON 2: MODEL BD-500-1A11 (A220-300)	
I. C	General	
	1. Type/ Model/ Variant	
	2. Performance Class	
	3. Certifying Authority	
	4. State of Design Authority Certification Application Date	
	5. EASA Type Certification Application Date	
	6. State of Design Authority Type Certificate Date	
	7. EASA Type Certification Date	
II.	Certification Basis	
	1. Reference Date for determining the applicable airworthiness requirements	
	2. Reference Date for determining the applicable operational suitability requirements	
	3. State of Origin Airworthiness Authority Type Certification Data Sheet No	
	4. State of Origin Airworthiness Authority Certification Basis	
	5. EASA Airworthiness Requirements	
	5.2. Deviations	
	5.3. Equivalent Safety Findings	
	5.4. Environmental Protection Requirements	
	6. Operational Suitability Requirements	
	6.1 Flight Crew Data	
	6.2. Cabin Crew Data	
	6.3. Master Minimum Equipment List	
III.	Technical Characteristics and Operational Limitations	
	1. Type Design Definition	
	2. Description	
	3. Equipment	
	4. Dimensions	
	5. Engines	
	6. Auxiliary Power Unit	
	7. Propellers	
	8. Fluids (Fuel, Oil, Additives, Hydraulics)	
	8.1 Fuel	
	8.2 Oil	
	8.3 Hydraulics	
	9. Fluid Capacities	
	9.1 Fuel	
	9.2 Oil	
	10. Airspeed Limits	
	11. Flight Envelope	ΖU

Page 4 of 25

Date: 01 Jun 2019

TCDS No.: EASA.IM.A.570 BD-500

Issue: 12

12.	Operating Limitations	20
13.	Maximum Certified Weights	20
14.	Centre of Gravity Range	21
15.	Datum	21
16.	Levelling Means	21
17.	Minimum Flight Crew	21
18.	Minimum Cabin Crew	21
19.	Maximum Aircraft Occupants	21
20.	Baggage/ Cargo Compartment	21
21.	Wheels and Tyres	21
21.1	L Wheels	21
21.2	? Tyres	21
22.	ETOPS	22
IV. Op	erating and Service Instructions	22
1.	Airplane Flight Manual (AFM)	22
2.	Instructions for Continued Airworthiness and Airworthiness Limitations	22
3.	Weight and Balance Manual (WBM)	22
V. Ope	erational Suitability Data (OSD)	22
VI. No	tes	23
SECTION	I: ADMINISTRATIVE	24
I. Acro	nyms and Abbreviations	24
	e Certificate Holder Record	
	ange Record	

Page 5 of 25

Date: 01 Jun 2019

TCDS No.: EASA.IM.A.570 BD-500 Page 6 of 25 Date: 01 Jun 2019

Issue: 12

# **SECTION 1: MODEL BD-500-1A10 (A220-100)**

#### 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 (A220-100 commercial designation)

2. Performance Class

Α

3. Certifying Authority

**Transport Canada Civil Aviation** 

4. State of Design Authority Certification Application Date

10 December 2009 Initial: 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.



Issue: 12

# SECTION 1: MODEL BD-500-1A10 (A220-100) - 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
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

TCDS No.: EASA.IM.A.570 BD-500 Page 8 of 25 Date: 01 Jun 2019

Issue: 12

## SECTION 1: MODEL BD-500-1A10 (A220-100) - 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)

TCDS No.: EASA.IM.A.570 BD-500 Page 9 of 25 Date: 01 Jun 2019

Issue: 12

# SECTION 1: MODEL BD-500-1A10 (A220-100) - 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.

## 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)

#### 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



TCDS No.: EASA.IM.A.570 BD-500 Page 10 of 25

Issue: 12 Date: 01 Jun 2019

## SECTION 1: MODEL BD-500-1A10 (A220-100) - continued

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

In case of conflict with the applicable associated publication, the data contained in the associated publication takes precedence.

#### 8.1 Fuel

		Specification		
Canada	USA	UK	Australia	Other
CAN/CGSB-3.23	ASTM D1655 – JET A	Defence Standard 91- 91	1QTA K/1/80	GOST 10227 – TS-1, RT
	ASTM D1655 – JET A1			GB6537-2006 JET No. 3
-	MIL-DTL- 83133 – JP-8	-	-	-

For additional 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

Approved engine oils\* BP Turbine Oil 2380, Royco/Aeroshell Turbine Oil 500, Royco 500, Mobil Jet Oil II, BP Turbo Oil 2197, Royco/Aeroshell Turbine Oil 560, Mobil Jet Oil 254 \*Or additional approved oils as listed in the applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

#### 8.3 Hydraulics

Hydraulic fluid: HYJET IV - A PLUS (BAMS 564-003)\*

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

# 9. Fluid Capacities

In case of conflict with the applicable associated publication, the data contained in the associated publication takes precedence.

#### 9.1 Fuel

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

9.2 Oil

Maximum Engine Oil Volume: 24.4 liters Minimum Engine Oil Volume: 8.23 liters



TCDS No.: EASA.IM.A.570 BD-500 Page 11 of 25

Issue: 12 Date: 01 Jun 2019

## SECTION 1: MODEL BD-500-1A10 (A220-100) - continued

Maximum APU Oil Volume: 7.74 quarts Minimum APU Oil Volume: 2.74 quarts

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

#### 10. Airspeed Limits

Unless otherwise specified, speeds are indicated airspeeds

		<u>knots</u>	<u>Mach</u>
$V_{MO}$ 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)

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

#### 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

Runway slope +/- 2%

# 13. Maximum Certified Weights

Weight	kg	lb
Maximum Ramp Weight (MRW)	61235	135000
Maximum Takeoff Weight (MTOW)	60781	134000



TCDS No.: EASA.IM.A.570 BD-500 Page 12 of 25 Date: 01 Jun 2019

Issue: 12

# SECTION 1: MODEL BD-500-1A10 (A220-100) - continued

Maximum Landing Weight (MLW)	52390	115500
Maximum Zero Fuel Weight (MZFW)	50349	111000

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

#### 18. Minimum Cabin Crew

(in accordance with the emergency evacuation test)

Three (3)

#### 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\*)

# 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



<sup>\*</sup> Maximum 130 cabin occupants when fitted with an approved interior.

Page 13 of 25 TCDS No.: EASA.IM.A.570 BD-500

Date: 01 Jun 2019 Issue: 12

#### SECTION 1: MODEL BD-500-1A10 (A220-100) - continued

12" Nose Landing Gear: Main Landing Gear: 21"

21.2 Tyres

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

#### 22. ETOPS

No ETOPS approval granted.

#### **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.

#### 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



TCDS No.: EASA.IM.A.570 BD-500 Page 14 of 25 Issue: 12 Date: 01 Jun 2019

# SECTION 1: MODEL BD-500-1A10 (A220-100) - continued

#### 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 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", or 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."

Page 15 of 25 TCDS No.: EASA.IM.A.570 BD-500 Date: 01 Jun 2019

Issue: 12

# **SECTION 2: MODEL BD-500-1A11 (A220-300)**

#### 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 (A220-300 commercial designation)

2. Performance Class

Α

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

4 March 2010 Initial: 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.



TCDS No.: EASA.IM.A.570 BD-500 Page 16 of 25 Issue: 12 Date: 01 Jun 2019

# SECTION 2: MODEL BD-500-1A11 (A220-300) - 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
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

TCDS No.: EASA.IM.A.570 BD-500 Page 17 of 25 Date: 01 Jun 2019

Issue: 12

## SECTION 2: MODEL BD-500-1A11 (A220-300) - 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)

TCDS No.: EASA.IM.A.570 BD-500 Page 18 of 25 Date: 01 Jun 2019

Issue: 12

# SECTION 2: MODEL BD-500-1A11 (A220-300) - 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

TCDS No.: EASA.IM.A.570 BD-500 Page 19 of 25 Date: 01 Jun 2019

Issue: 12

#### SECTION 2: MODEL BD-500-1A11 (A220-300) - continued

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

In case of conflict with the applicable associated publication, the data contained in the associated publication takes precedence.

#### 8.1 Fuel

Specification				
Canada	USA	UK	Australia	Other
CAN/CGSB-3.23	ASTM D1655 – JET A	Defence Standard 91- 91	1QTA K/1/80	GOST 10227 – TS-1, RT
	ASTM D1655 – JET A1			GB6537-2006 JET No. 3
	MIL-DTL- 83133 – JP-8			

#### 8.2 Oil

Approved engine oils\*:

BP Turbine Oil 2380, Royco/Aeroshell Turbine Oil 500, Royco 500, Mobil Jet Oil II, BP Turbo Oil 2197, Royco/Aeroshell Turbine Oil 560, Mobil Jet Oil 254

\*Or additional approved oils as listed in the Pratt and Whitney Service Bulletin PW1500 Series 79-00-00-00A. See also, applicable Aircraft Maintenance Publication (AMP) BD500-3AB48-10200-00.

# 8.3 Hydraulics

Hydraulic fluid: HYJET IV - A PLUS (BAMS 564-003)\*

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

## 9. Fluid Capacities

In case of conflict with the applicable associated publication, the data contained in the associated publication takes precedence.

#### 9.1 Fuel

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

9.2 Oil

Maximum Engine Oil Volume: 24.4 liters Minimum Engine Oil Volume: 8.23 liters

Maximum APU Oil Volume: 7.74 quarts



TCDS No.: EASA.IM.A.570 BD-500 Page 20 of 25

Issue: 12 Date: 01 Jun 2019

## SECTION 2: MODEL BD-500-1A11 (A220-300) - continued

Minimum APU Oil Volume: 2.74 quarts

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

## 10. Airspeed Limits

Unless otherwise specified, speeds are indicated airspeeds

		<u>knots</u>	<u>Mach</u>
$V_{MO}$ 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)

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

#### 12.2 Other Limitations

Maximum Ambient Temperature for Takeoff and Landing +52.5°C

-54°C Minimum Ambient Temperature for Takeoff

Minimum Ambient Temperature for Landing -54°C

Runway slope +/- 2%

# 13. Maximum Certified Weights

Weight	kg	lb
Maximum Ramp Weight (MRW)	68039	150000
Maximum Takeoff Weight (MTOW)	67585	149000
Maximum Landing Weight (MLW)	58740	129500
Maximum Zero Fuel Weight (MZFW)	55792	123000

TCDS No.: EASA.IM.A.570 BD-500 Page 21 of 25 Date: 01 Jun 2019

Issue: 12

# SECTION 2: MODEL BD-500-1A11 (A220-300) - continued

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

#### 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 minimum of 3 Cabin Crew and a maximum of 145 Passengers)

# 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"

# 21.2 Tyres



Page 22 of 25 TCDS No.: EASA.IM.A.570 BD-500

Date: 01 Jun 2019 Issue: 12

#### SECTION 2: MODEL BD-500-1A11 (A220-300) - continued

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

#### 22. ETOPS

No ETOPS approval granted.

#### 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.

## V. Operational Suitability Data (OSD)

#### 1. Master Minimum Equipment List

a. The MMEL is defined in BD500-3AB48-12701-00, Issue 002, dated September 14<sup>th</sup> 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



TCDS No.: EASA.IM.A.570 BD-500 Page 23 of 25 Issue: 12 Date: 01 Jun 2019

# SECTION 2: MODEL BD-500-1A11 (A220-300) - continued

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 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 5<sup>th</sup>, 2016, or later approved revisions.

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."

TCDS No.: EASA.IM.A.570 BD-500 Page 24 of 25 Date: 01 Jun 2019

Issue: 12

#### **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** type Certificate TC

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

TCDS No.: EASA.IM.A.570 BD-500

Page 25 of 25

Date: 01 Jun 2019

Issue: 12

# **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	30 June 2016
		Compartment values corrected.	
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