Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00075

for

EMBRAER EMB-550

Type Certificate Holder **EMBRAER S.A.**

Av. Brigadeiro Faria Lima, 2170 12227-901, São José dos Campos – SP Brazil

Model(s): EMB-550

EMB-545

Issue:

Date of issue: 20 December 2024

TCDS No.: UK.TC.A.00075 Date: 20 December 2024

AW-DAW-TP-004

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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.526 at Issue 9 dated 30 September 2019 and are therefore accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.

II. Marketing Designations

The EMB-550 is often referred to in Embraer marketing literature as the "Legacy 500". This name is strictly for marketing purposes and is not part of the official model designation.

The EMB-550 with DCA 0550-000-00026-2016 is often referred to in Embraer marketing literature as the "Praetor 600". This name is strictly for marketing purposes and is not part of the official model designation.

The EMB-545 is often referred to in Embraer marketing literature as the "Legacy 450". This name is strictly for marketing purposes and is not part of the official model designation.

The EMB-545 with DCA 0550-000-00100-2018 is often referred to in Embraer marketing literature as the "Praetor 500". This name is strictly for marketing purposes and is not part of the official model designation.

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Section 2 EMB-550

I. General

1. Type / Variant / Model

a) Type: EMB-550 b) Variant or Model: EMB-550

2. Airworthiness Category

Large Aeroplane

3. Performance Class

Α

4. Certifying Authority

Agência Nacional De Aviação Civil - ANAC Gerência Geral de Certificação de Produtos Aeronáuticos Rua Dr. Orlando Feirabend Filho, 230 Centro Empresarial Aquarius Torre B Andares 14 a 18, Parque Residencial Aquarius, 12246-190 - São José dos Campos – SP Brazil

5. Manufacturer

EMBRAER S.A. Av. Brigadeiro Faria Lima, 2170 12227-901, São José dos Campos - SP Brazil

6. ANAC Certification Application Date

13 April 2009

7. EASA Validation Application Date

11 May 2009

8. UK CAA Type Validation Application Date

UK CAA Type Validation Application Date Prior to 31 December 2020, application dates for type certification are covered by the EASA (JAA) type validation application date, as per Section 7 above. New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

9. ANAC Type Certification Date

12 August 2014

10. EASA Type Validation Date

16 December 2014

11. ETOPS

Not applicable

12. Ditching

Not applicable

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II. Certification Basis

1. Reference Date for determining the applicable requirements

17 December 2009.

2. ANAC (Certifying Authority) Type Certification Data Sheet

ANAC Type Certificate Data Sheet No. EA-2014T04

3. ANAC (Certifying Authority) Certification Basis

RBAC 25 - Requisitos de Aeronavegabilidade. Aviões Categoria Normal, Utilidade, Acrobática de Transporte (Airworthiness Standards. Transport Category Airplanes), corresponding to U.S. 14 CFR Part 25, including amendments 25-1 through 25-128.

4. EASA Airworthiness Requirements

Refer to EASA TCDS EASA.IM.A.526.

5. UK CAA Airworthiness Requirements

5.1 Applicable CS Requirements at the Reference Date (EMB-550)

CS 25 - Certification Specifications for Large Airplanes, Amendment 7

CS 25.851(a)(6) at Amdt. 18 in regards to the equipment installation and qualification of Halon free handheld Fire Extinguishers (ref. DCA 0550-026-00104-2018).

5.2 Applicable CS Requirements at the Reference Date (EMB-550 Performance Enhancement – DCA 0550-000-00026-2016)

For aircraft including DCA 0550-000-00026-2016 "EMB-550 Performance Enhancement" the following CAA Airworthiness Requirements have been applied:

Certification Specification 25, Amendment 18, dated 22 June 2016, except the following paragraphs for which UK CAA accepted a reversion to an earlier amendment in application to Part 21.A.101(b):

- a) CS 25 paragraphs at amendment 7:
 - 25.21
 - 25.807
 - 25.903
 - 25.1043
 - 25.1091
 - 25.1093
 - 25.1322
 - 25.1360
 - 25.1323
 - 25.1325
 - 25.1403
 - 25.1459
 - 25.1521
 - 25.1533
 - 25.1583
- b) CS 25 paragraphs at amendment 11:
 - 25.253
- c) CS 25 paragraphs at amendment 15:
 - 25.143

5.3 Reversions

None Identified

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6. Special Conditions

6.1 Special Conditions issued because the product has novel or unusual design features relative to the design practices on which the applicable airworthiness code is based (21.A.16B(a)1)

SC B-07	Static Longitudinal, Lateral & Directional Stability & Low Speed Awareness
SC B-08	Flight Envelope Protection
SC B-09	Motion and Effect of Cockpit Controls
SC B-10	Normal load factor limiting system
SC B-15	Flight Envelope Protection: Normal Load Factor (g) Limiting Function (this SC replaced EASA SC B-10 in the context of DCA 0550-000-00026-2016 and adopted ANAC FCAR EV-49)
SC B-11	Steep Approach and Landing Requirements
SC C-02	Design Manoeuvre Requirements
SC C-03	Dive Speed Definition with Speed Protection System
SC C-04	Towbarless Towing, Structures
SC C-15	Engine and APU failure loads
SC C-18	Limit Pilot Forces
SC C-23	Landing Pitchover Conditions
SC D-05	Pilot view – Hydrophobic coatings in lieu of windshield wipers
SC D-06	Towbarless Towing, Structures
SC D-07	Control Surface Position Awareness / Electronic Flight Control Systems
SC D-21	Inflatable Restraints
SC D-30	Stowage compartment Fire Protection
SC D-31	Electrical Equipment Bay Fire Detection and Smoke Penetration
SC F-45	Data Link Services
SC F-46	Data Link Recording
SC F-51	Enhanced Flight Vision System (ref. DCA 0550-031-00053-2014)
SC F-52	Aircraft Electronic System Security Protection from Unauthorized External Access (ref. DCA 0550-042-00001-2015)

6.2 Special Conditions issued because the intended use of the product is unconventional (21A.16B(a)2) None identified.

6.3 Special Conditions issued because experience from other products has shown that unsafe conditions may develop (21A.16B(a)3)

SC C-10	Sustained Engine Imbalance
SC D-16	High Altitude Operations
SC E-03	Freezing Fog
SC E-07	Fuel low level warning
SC F-04	High Intensity Radiated Fields (HIRF)
SC F-15	Falling and Blowing Snow

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7. **Exemptions**

N/A

8. Deviations (formerly referred to as "Exemptions")

Following deviations from airworthiness provisions were granted:

Dev D-11 Side Facing Seats/Divans (CS 25.785(b))

Dev D-20 Main Aisle Width (CS 25.815)

9. **Equivalent Safety Findings**

Following Equivalent safety findings with airworthiness provisions were granted (21A.21(c)(2)):

ESF D-18	Emergency exit step down Distance (CS 25.807(a)(3))
ESF D-32	Flight Control System Failure Criteria (CS 25.671(c)(2))
ESF D-33	Pressurised cabins (CS 25.841(b)(1); 25.843 (b) (1))
ESF E-02	APU Fireproof Mounts (CS 25.865)
ESF E-10	Digital Only Display of Turbine Engine High Pressure Rotor Speed (N2) (CS 25.1305(c)(3); 25.1549)
ESF E-11	ATTCS lack of switch (CS 25 Appendix I 25.6 (c) (2))
ESF E-12	2D nacelle area (Fire protection) (CS 25.867)
ESF E-13	APU Filter Bypass (CS 25J1019)
ESF F-30	Landing Light Switch (CS 25.1383(b))
ESF F-49	Position and anti-collision lighting systems luminous intensity amendment (CS 25.1389(b)(1),(b)(2),(b)(3), 25.1391; 25.1393; 25.1395; 25.1401(f))

10. **Environmental Protection Standards**

Noise: ICAO Annex 16, Volume 1

(see TCDSN UK.TC.A.00075 for details)

Prevention of intentional fuel venting: ICAO Annex 16, Volume II, Part II, Chapter 2

11. **Operational Suitability Requirements**

The UK CAA type certification basis with respect to Operational Suitability Data (OSD) is defined as follows:

MMEL: CS-MMEL, Initial Issue dated 31 January 2014

FCD: CS-Flight Crew Data, Initial Issue dated 31 January 2014

There are no Special Conditions, Deviations, Exemptions or Equivalent Safety Findings for OSD.

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III. Technical Characteristic and Operating Limitations

1. Type Design Definition

550TDSD003 "TYPE DESIGN STANDARD DOCUMENT - EASA" rev. B or later approved revision.

2. Description

The EMB-550 presents a conventional configuration with low wing, fuselage mounted twin engines, "T" tailed stabilizers and retractable tricycle double wheeled nose and main landing gears. The primary structure is a metallic construction excepting the composite empennages and control surfaces.

3. Equipment

The equipment required by the applicable requirements shall be installed.

4. Dimensions

Length 20.74 m Span 19.25 m

Span 21.50 m (for aircraft with DCA 0550-000-00026-2016 installed)

 $\begin{array}{ll} \text{Height} & \text{6.44 m} \\ \text{Wing Area} & \text{44.85 m}^2 \end{array}$

5. Engines

Two turbofans Honeywell AS-907-3-1E

Engine Limits Static Thrust (kN)

Take Off (5 minutes) 31.75 Maximum Continuous 30.49

- (1) The ratings are based on static test stand operation under the following conditions;
 - (a) No loading of aircraft accessory drives.
 - (b) No aircraft compressor bleed air extraction.
 - (c) Fan exhaust and turbine exhaust nozzles conforming to Honeywell International Inc. drawings N10780-1 and N10781-1.
 - (d) Bellmouth inlet conforming to Honeywell International Inc. drawing 5837800-1.
 - (e) Dry inlet air.
 - (f) No exhaust nozzle back pressure.
- (2) The normal 5 minutes take-off time may be extended to 10 minutes for engine out contingency.
- (3) Sea level standard day (ISA) conditions.

6. Auxiliary Power Unit

One APU, Honeywell 36-150[EMB]

7. Propellers

N/A

8. Fluids

Fuel: See approved Airplane Flight Manual
Oil: See approved Airplane Flight Manual

Additives: See the AMM for approved fuel additives

Hydraulic: See the AMM

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9. **Fluid Capacities**

Total fuel capacity of 5,920 kg, two wing tanks 2,960 kg each, @ 9.34 m aft of datum.

Reference fuel density is 0.803kg/L.

EMB-550 with DCA 0550-000-00026-2016:

Total fuel capacity of 7,320 kg, two wing tanks 2,960 kg each @ 9.34 m aft of datum, in a forward tank, 650 kg @7.08 m aft of datum, and a ventral tank, 750 kg @11.8 m aft of datum.

Reference fuel density is 0.803kg/L.

Tank mounted on each engine: 7.19 L each

Hydraulic:

Total fluid capacity of 49.7 kg @ 12.60m aft of datum.

10. **Airspeed Limits**

See the approved Airplane Flight Manual

11. Flight Envelope

See the approved Airplane Flight Manual

12. **Operating Limitations**

12.1 **Approved Operations**

See the approved Airplane Flight Manual

12.2 **Other Limitations**

See the approved Airplane Flight Manual

13. **Maximum Certified Masses**

Design Weights	Airplanes Post-Mod. SB 550-042-0004* (kg)	Airplanes Pre-Mod. SB 550-042-0004 (kg)	EMB-550 with DCA 0550-000-00026-2016 (kg)
Maximum Ramp Weight	17,480	17,280	19,500
Maximum Takeoff Weight	17,400	17,200	19,440
Maximum Landing Weight	15,660	15,480	17,000
Maximum Zero Fuel Weight	12,020	12,020	13,000

^{*}or with an equivalent production modification incorporated

14. **Centre of Gravity Range**

Refer to approved Airplane Flight Manual

15. **Datum**

Plane, perpendicular to the fuselage centreline, located 429.92 inches ahead of the wing jack points.

16. Mean Aerodynamic Chord (MAC)

Refer to approved Airplane Flight Manual

17. **Levelling Means**

Plumb bob means located between frames 30 and 31 and electronic means thru cockpit displays (refer to AMM Part II Chapter 8).

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18. Minimum Flight Crew

Two Pilots

19. Minimum Cabin Crew

N/A

20. Maximum Seating Capacity

The maximum seating capacity is limited to a number of 12 passengers (depending on the LOPA configuration).

21. Baggage/ Cargo Compartment:

Wardrobe 40 kg (3.89 m aft of datum)
Internal Stowage Compartment 150 kg (11.5 m aft of datum)
External Cargo Compartment 400 kg (13.8 m aft of datum)

22. Wheels and Tyres

Gear	Quantity	Wheel Size	Tyre Size
NLG	2	9.76"	17.5x5.75-8 10PR 210MPH
MLG	4	16.12"	H26.5x8.0-14 14PR 210MPH

IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Airplanes must be operated according to the UK CAA approved AFM, part number AFM-3921-305, revision original (or later approved revision).

For EMB-550 with DCA 0550-000-00026-2016, the UK CAA approved AFM part number AFM-3921-905, revision original (or later approved revision) is applicable.

2. Instructions for Continued Airworthiness - Airworthiness Limitations

The Airworthiness Limitations Section is found in Chapter 4 "Airworthiness Limitation Section" of the Aircraft Maintenance Manual AMM-5613.

3. Weight and Balance Manual (WBM)

See the approved Airplane Flight Manual and LOPA.

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V. Operational Suitability Data

1. Master Minimum Equipment List (MMEL)

The Operational Suitability Data elements listed below were approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.157 as per Commission Regulation (EU) No. 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. MMEL-5001 revision 05, dated 27 July 2020 was in force as of 31 December 2020.

Following EU-exit, the updated Operational Suitability Data with a specific UK reference listed below is approved by the UK CAA under UK.ADMIN.00142 acting in accordance with Assimilated Regulation (EU) 2018/1139 and Assimilated Regulation (EU) No. 748/2012.

- a. The Master Minimum Equipment List has been approved as per the defined Operational Suitability Data Certification Basis recorded in CRI A-MMEL and as documented in EMB-545/EMB-550 UK CAA Master Minimum Equipment List MMEL-5006, Original Revision, dated 13 December 2024.
- b. Required for entry into service by UK operator.

2. Flight Crew Data (FCD)

The Flight Crew Data revisions up to 31 December 2020 were approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA IM.A.526 as per Commission Regulation (EU) No. 748/2012 as amended by Commission Regulation (EU) No. 69/2014 and were accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement. OSD-FCD report 500MSO208 Revision H (22 November 2019) was in force as of 31 December 2020.

Following EU-exit, the updated Operational Suitability Data with a specific UK reference listed below is approved by the UK CAA under UK.ADMIN.00119 acting in accordance with Assimilated Regulations (EU) 2018/1139 and (EU) No. 748/2012.

The Flight Crew Data is defined in 550MSO294 Revision Original dated 13 December 2024 or later revisions approved by the UK CAA.

VI. Notes

None.

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Section 3 EMB-545

I. General

1. Type / Variant / Model

a) Type: EMB-550 b) Variant or Model: EMB-545

2. Airworthiness Category

Large Aeroplane

3. Performance Class

Α

4. Certifying Authority

Agência Nacional De Avição Civil-ANAC Gerência Geral de Certificação de Produtos Aeronáuticos Rua Dr. Orlando Feirabend Filho, 230 Centro Empresarial Aquarius Torre B Andares 14 a 18, Parque Residencial Aquarius, 12246-190 - São José dos Campos – SP Brazil

5. Manufacturer

EMBRAER S.A. Av. Brigadeiro Faria Lima, 2170 12227-901, São José dos Campos - SP Brazil

6. ANAC Certification Application Date

13 April 2009

7. EASA Validation Application Date

22 December 2010

8. UK CAA Type Validation Application Date

UK CAA Type Validation Application Date Prior to 31 December 2020, application dates for type certification are covered by the EASA (JAA) type validation application date, as per Section 7 above. New applications for UK CAA type validation received after 01 January 2021 will be recorded in this section. At the current issue of this UK CAA TCDS, no new applications for type validation have been received since 01 January 2021.

9. ANAC Type Certification Date

11 August 2015

10. EASA Type Validation Date

09 September 2015

11. ETOPS

Not applicable

12. Ditching

Not applicable

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II. **Certification Basis**

1. Reference Date for determining the applicable requirements

22 December 2010

2. ANAC (Certifying Authority) Type Certification Data Sheet No.

EA-2014T04

3. **ANAC (Certifying Authority) Certification Basis**

RBAC 25 - Airworthiness Requirements. Transport Category Airplanes, corresponding to U.S. 14 CFR Part 25, including amendments 25-1 through 25-129.

4. **EASA Airworthiness Requirements**

Refer to EASA TCDS EASA.IM.A.526.

5. **UK CAA Airworthiness Requirements**

CS-25 - Certification Specifications for Large Airplanes, Amendment 9

CS 25.851(a)(6) at Amdt. 18 in regards to the equipment installation and qualification of Halon free handheld Fire Extinguishers (ref. DCA 0550-026-00104-2018)

6. **Special Conditions**

6.1 Special Conditions issued because the product has novel or unusual design features relative to the design practices on which the applicable airworthiness code is based (21A.16B(a)1)

SC B-07	Static Longitudinal, Lateral & Directional Stability & Low Speed Awareness
SC B-08	Flight Envelope Protection
SC B-09	Motion and Effect of Cockpit Controls
SC B-10	Normal load factor limiting system
SC C-02	Design Manoeuvre Requirements
SC C-03	Dive Speed Definition with Speed Protection System
SC C-04	Towbarless Towing, Structures
SC C-18	Limit Pilot Forces
SC C-23	Landing Pitchover Conditions
SC D-05	Pilot view – Hydrophobic coatings in lieu of windshield wipers
SC D-06	Towbarless Towing, Structures
SC D-07	Control Surface Position Awareness / Electronic Flight Control Systems
SC D-21	Inflatable Restraints
SC D-30	Stowage compartment Fire Protection
SC D-31	Electrical Equipment Bay Fire Detection and Smoke Penetration
SC D-34	Structural Armrest between Seats (ref. DCA 0550-025-00151-2015)
SC F-45	Data Link Services
SC F-46	Data Link Recording
SC F-51	Enhanced Flight Vision System (ref. DCA 0550-031-00053-2014)

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SC F-52 Aircraft Electronic System Security Protection from Unauthorized External Access (ref. DCA 0550-042-00001-2015)

6.2 Special Conditions issued because the intended use of the product is unconventional (21A.16B(a)2)

None identified.

6.3 Special Conditions issued because experience from other products has shown that unsafe conditions may develop (21A.16B(a)3)

SC D-16 High Altitude Operations

SC E-03 Freezing Fog

SC E-07 Fuel low level warning

SC F-04 High Intensity Radiated Fields (HIRF)

SC F-15 Falling and Blowing Snow

7. Exemptions

N/A

8. Deviations (formerly referred to as "Exemptions")

Following deviations from airworthiness provisions were granted:

Dev D-11 Side Facing Seats/Divans (CS 25.785(b))

Dev D-20 Main Aisle Width (CS 25.815)

9. Equivalent Safety Findings

Following Equivalent safety findings with airworthiness provisions were granted (21A.21(c)(2))

ESF D-18 Emergency exit step down Distance (CS 25.807(a)(3))

ESF D-32 Flight Control System Failure Criteria (CS 25.671(c)(2))

ESF D-33 Pressurised cabins (CS 25.841(b)(1); 25.843 (b) (1))

ESF E-02 APU Fireproof Mounts (CS 25.865)

ESF E-10 Digital Only Display of Turbine Engine High Pressure Rotor Speed (N2) (CS 25.1305(c)(3);

25.1549)

ESF E-11 ATTCS lack of switch (CS 25 Appendix I 25.6 (c) (2))

ESF E-12 2D nacelle area (Fire protection) (CS 25.867)

ESF E-13 APU Filter Bypass (CS 25J1019)

ESF F-30 Landing Light Switch (CS 25.1383(b))

ESF F-49 Position and anti-collision lighting systems luminous intensity amendment (CS 25.1389(b)(1),(b)(2),(b)(3), 25.1391; 25.1393; 25.1395; 25.1401(f))

10. Environmental Protection Standards

Noise: ICAO Annex 16, Volume 1

(see TCDSN UK.TC.A.00075 for details)

Prevention of intentional fuel venting: ICAO Annex 16, Volume II, Part II, Chapter 2

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11. **Operational Suitability Requirements**

11.1 **OSD MMEL**

CS-MMEL, Initial Issue dated 31 January 2014

11.2 **OSD FCD**

CS-Flight Crew Data, Initial Issue dated 31 January 2014

III. **Technical Characteristic and Operating Limitations**

1. **Type Design Definition**

550TDSD003 "TYPE DESIGN STANDARD DOCUMENT - EASA" rev. A or later approved revision.

2. **Description**

The EMB-545 is a derivative model of the EMB-550 aircraft family type. It is a shortened version (approximately 1 metre shorter fuselage) of EMB-550 baseline with max. passenger capacity of 9.

3. **Equipment**

The equipment required by the applicable requirements shall be installed.

4. **Dimensions**

Length 19.68 m Span 19.25 m

Span 21.50 m (for aircraft with DCA 0550-000-00100-2018 installed)

Height 6.43 m Wing Area 44.85 m²

5. **Engines**

Two turbofans Honeywell AS-907-3-1E

Engine Limits Static Thrust (kN)

Take Off (5 minutes) 29.53 Maximum Continuous 28.36

- (1) The ratings are based on static test stand operation under the following conditions;
 - No loading of aircraft accessory drives. (a)
 - (b) No aircraft compressor bleed air extraction.
 - (c) Fan exhaust and turbine exhaust nozzles conforming to Honeywell International Inc. drawings N10780-1 and N10781-1.
 - (d) Bellmouth inlet conforming to Honeywell International Inc. drawing 5837800-1.
 - (e) Dry inlet air.
 - No exhaust nozzle back pressure. (f)
- (2) The normal 5 minutes take-off time may be extended to 10 minutes for engine out contingency.
- (3)Sea level standard day (ISA) conditions.

6. **Auxiliary Power Unit**

One APU, Honeywell 36-150[EMB]

7. **Propellers**

N/A

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8. Fluids

Fuel: See the approved Airplane Flight Manual

Oil: See the approved Airplane Flight Manual

Additives: See the AMM for approved fuel additives

Hydraulic: See the AMM

9. Fluid Capacities

Fuel:

Total fuel capacity of 5,500 kg, two wing tanks 2,750 kg each, @ 8.62 m aft of datum for aircraft postmod SB 550-28-0002 or equivalent factory-incorporated modification.

Total fuel capacity of 4,920 kg, two wing tanks 2,460 kg each, @ 8.55 m aft of datum for aircraft premod SB 550-28-0002.

Reference fuel density is 0.803kg/L.

EMB-545 with DCA 0550-000-00100-2018:

Total fuel capacity of 5,920 kg, two wing tanks 2,960 kg each @ 8.69 m aft of datum.

Reference fuel density is 0.803kg/L.

Oil:

Tank mounted on each engine: 7.19 L each

Hydraulic:

Total fluid capacity of 47.7 kg @ 11.90m aft of datum.

10. Airspeed Limits

See approved Airplane Flight Manual

11. Flight Envelope

See approved Airplane Flight Manual

12. Operating Limitations

12.1 Approved Operations

See approved Airplane Flight Manual

12.2 Other Limitations

See approved Airplane Flight Manual

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13. Maximum Certified Masses

Design Weights	EMB-545 (kg)	EMB-545 with DCA 0550-000-00100-2018 (kg)
Maximum Ramp Weight	16,280	17,100
Maximum Takeoff Weight	16,220	17,040
Maximum Landing Weight	14,750	15,500
Maximum Zero Fuel Weight	11,750	11,775

14. Centre of Gravity Range

See approved Airplane Flight Manual

15. Datum

Plane, perpendicular to the fuselage centreline, located 404.4 inches ahead of the wing jack points.

16. Mean Aerodynamic Chord (MAC)

See approved Airplane Flight Manual

17. Levelling Means

Plumb bob means located between frames 29 and 30 and electronic means thru cockpit displays (refer to AMM Part II Chapter 8).

18. Minimum Flight Crew

Two Pilots

19. Minimum Cabin Crew

N/A

20. Maximum Seating Capacity

The maximum seating capacity is limited to a number of 9 passengers (depending on the LOPA configuration).

21. Baggage/ Cargo Compartment:

Wardrobe 40 kg (3.89 m aft of datum)
Internal Stowage Compartment 150 kg (10.4 m aft of datum)
External Cargo Compartment 400 kg (12.7 m aft of datum)

22. Wheels and Tyres

Gear	Quantity	Wheel Size	Tyre Size
NLG	2	9.76"	17.5x5.75-8 10PR 210MPH
MLG	4	16.12"	H26.5x8.0-14 14PR 210MPH

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IV. **Operating and Service Instructions**

1. Airplane Flight Manual (AFM)

Airplanes must be operated according to the UK CAA approved AFM, part number AFM-3921-605, revision original (or later approved revision).

For EMB-550 with DCA 0550-000-00026-2016, the UK CAA approved AFM part number AFM-3921-955, revision original (or later approved revision) is applicable.

2. Instructions for Continued Airworthiness - Airworthiness Limitations

The Airworthiness Limitations Section is found in Chapter 4 "Airworthiness Limitation Section" of the Aircraft Maintenance Manual AMM-5613.

3. Weight and Balance Manual (WBM)

Refer to approved Airplane Flight Manual and LOPA.

٧. **Operational Suitability Data (OSD)**

1. **Master Minimum Equipment List (MMEL)**

The Operational Suitability Data elements listed below were approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.157 as per Commission Regulation (EU) No. 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. MMEL-5001 revision 05, dated 27 July 2020 was in force as of 31 December 2020.

Following EU-exit, the updated Operational Suitability Data with a specific UK reference listed below is approved by the UK CAA under UK.ADMIN.00142 acting in accordance with Assimilated Regulation (EU) 2018/1139 and Assimilated Regulation (EU) No. 748/2012.

- The Master Minimum Equipment List has been approved as per the defined Operational Suitability Data Certification Basis recorded in CRI A-MMEL and as documented in EMB-545/EMB-550 UK CAA Master Minimum Equipment List MMEL-5006, Original Revision, dated 13 December 2024.
- Required for entry into service by UK operator.

2. Flight Crew Data (FCD)

The Flight Crew Data revisions up to 31 December 2020 were approved by the European Union Aviation Safety Agency under the EASA Type Certificate EASA IM.A.526 as per Commission Regulation (EU) No. 748/2012 as amended by Commission Regulation (EU) No. 69/2014 and were accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement. OSD-FCD report 500MSO208 Revision H (22 November 2019) was in force as of 31 December 2020.

Following EU-exit, the updated Operational Suitability Data with a specific UK reference listed below is approved by the UK CAA under UK.ADMIN.00119 acting in accordance with Assimilated Regulation (EU) 2018/1139 and Assimilated Regulation (EU) No. 748/2012.

The Flight Crew Data is defined in 550MSO294 Revision Original dated 13 December 2024 or later revisions approved by the UK CAA.

VI. **Notes**

None.

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Section 4 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
AFM	Airplane Flight Manual
AMM	Aircraft Maintenance Manual
ANAC	Agência Nacional de Aviação Civil
APU	Auxiliary Power Unit
CAA	Civil Aviation Authority (UK)
CS	Certification Specification
DCA	Design Change Approval
Dev	Deviation
EASA	European Union Aviation Safety Agency
EMB	Embraer S.A.
ESF	Equivalent Safety Finding
ETOPS	Extended-range Twin-engine Operations Performance Standards
EU	European Union
FCD	Flight Crew Data
HIRF	High Intensity Radiated Fields
ISA	International Standard Atmosphere
LOPA	Location of Passenger Accommodations
MAC	Mean Aerodynamic Chord
MLG	Main Landing Gear
MMEL	Master Minimum Equipment List
NLG	Nose Landing Gear
OSD	Operational Suitability Data
RBAC	Brazilian Civil Aviation Rules
SC	Special Condition
SP	São Paulo
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
UK	United Kingdom of Great Britain and Northern Ireland
WBM	Weight and Balance Manual

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II. Type Certificate Holder Record

TCH Record	Period
Embraer S.A.	Present. No changes.
Av. Brigadeiro Faria Lima, 2170	
12227-901, São José dos Campos - SP	
Brazil	

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	20 Dec 2024	The content of the initial issue of this UK CAA TCDS was taken from EASA TCDS.IM.A.526 at Issue 9 dated 30 September 2019 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the EMB-550 Aircraft accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement.	Issue 1 20 Dec 2024
		The following general changes have been made to reflect EU- Exit as well as corrections:	
		 Layout and editorial changes to reflect UK CAA TCDS format Where relevant "EASA" removed and replaced by "UK CAA" Update to reference UK law which is now reference as Assimilated law. 	
		 Changes related to UK.ADMIN.00119: Section 2.IV.1: Administrative update to reflect the CAA specific AFM reference. Section 3.IV.1: Administrative update to reflect the CAA specific AFM reference. Section 2 and 3. V. Clarification on EASA approved OSD elements and the addition of the UK CAA specific OSD FCD report (550MSO294). 	
		Changes related to UK.MAJ.00387:	
		 Section 2, V, 1 – EASA MMEL reference replaced with UK CAA MMEL reference 	

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