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# TYPE-CERTIFICATE DATA SHEET

No. EASA.IM.A.526

**for**

EMB-550

**Type Certificate Holder:**

Embraer S.A.

Av. Brigadeiro Faria Lima, 2170.

12227-901, São José dos Campos - SP

Brazil

For Models: EMB-550  
EMB-545



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## **SECTION 1: EMB-550**

### **I. General**

- 1. Type/ Model/ Variant:** EMB-550/EMB-550
- 2. Performance Class:** A
- 3. Certifying Authority:** **Agência Nacional de Aviação Civil – ANAC**  
Gerência Geral de Certificação de Produtos Aeronáuticos  
Rua Laurent Martins, 209  
Jardim Esplanada  
12242-431 - São José dos Campos - SP  
Brazil
- 4. Manufacturer:** **Embraer S.A.**  
Av. Brig. Faria Lima. 2170  
12227-901, São Jose dos Campos - SP  
Brazil
- 5. ANAC Certification Application Date:** April 13<sup>th</sup>, 2009
- 6. EASA Validation Application Date:** May 11<sup>th</sup>, 2009
- 7. ANAC Type Certification Date:** August 12<sup>th</sup>, 2014
- 8. EASA Type Validation Date:** December 16<sup>th</sup>, 2014

### **II. Certification Basis**

- 1. Reference Date for determining the applicable requirements:** December 17<sup>th</sup>, 2009
- 2. ANAC Type Certification Data Sheet No.:**  
EA-2014T04
- 3. ANAC Certification Basis:** RBAC 25 - Airworthiness Requirements. Transport Category Airplanes, corresponding to U.S. 14 CFR Part 25, including amendments 25-1 through 25-128
- 4. EASA Airworthiness Requirements:**  
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 hand-held Fire Extinguishers (ref. DCA 0550-026-00104-2018)

For aircraft including DCA 0550-000-00026-2016 “*EMB-550 Performance Enhancement*” the following EASA Airworthiness Requirements have been applied:

Certification Specification 25, Amendment 18, dated 22 June 2016, except the following paragraphs for which EASA 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



Issue: 10

- 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. Special Conditions:

5.1 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 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)  |



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

5.3 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              |

## 6. Exemptions:

N/A

## 7. Deviations:

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)    |

## 8. 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),<br>25.1391; 25.1393; 25.1395;<br>25.1401(f)) |

## 9. Environmental Protection Standards:

Fuel venting and emissions:

CS 34 Initial Issue - Certification Specifications for Aircraft Engine Emissions and Fuel Venting

CS 34 Amdt. 2 - Certification Specifications for Aircraft Engine Emissions and Fuel Venting (applicable to DCA 0550-000-00026-2016)





Noise:

CS 36 Amdt. 2 - Certification Specifications for Aircraft Noise

CS 36 Amdt. 4 - Certification Specifications for Aircraft Noise (applicable to DCA 0550-000-00026-2016)

### 10. Operational Suitability Requirements:

10.1 OSD MMEL

CS-MMEL, Initial Issue dated 31 January 2014

10.2 OSD FCD

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

## III. Technical Characteristics and Operational 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

|                       |           |  |
|-----------------------|-----------|--|
| <b>4. Dimensions:</b> | Length    | 20.74 m  |
|                       | Span      | 19.25 m  |
|                       | Span      | 21.50 m (for aircraft with DCA<br>0550-000-00026-2016 installed) |
|                       | Height    | 6.44 m   |
|                       | Wing Area | 44.85 m <sup>2</sup>   |
|                       |           |  |

### 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: Refer to approved Airplane Flight Manual

Oil: Refer to approved Airplane Flight Manual

Additives: Refer to the AMM for approved fuel additives

Hydraulic: Refer to the AMM

## 9. Fluid Capacities

Fuel: 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

Fuel: 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.

Oil: 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:** Refer to approved Airplane Flight Manual

**11. Flight Envelope:** Refer to approved Airplane Flight Manual

## 12. Operating Limitations

12.1 Approved Operations: Refer to approved Airplane Flight Manual

12.2 Other Limitations: Refer to approved Airplane Flight Manual

## 13. Maximum Certified Masses:

| Design Weights           | EMB-550<br>(kg) | EMB-550 + SB<br>550-042-0004*<br>(kg) | EMB-550 + DCA 0550-000-00026-<br>2016<br>(kg) |
|--------------------------|-----------------|---------------------------------------|---|
| Maximum Ramp Weight      | 17280           | 17480                                 | 19500   |
| Maximum Takeoff Weight   | 17200           | 17400                                 | 19440   |
| Maximum Landing Weight   | 15480           | 15660                                 | 17000   |
| Maximum Zero Fuel Weight | 12020           | 12020                                 | 13000   |

*\*or with a factory-incorporated equivalent modification*

**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).

**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 |

**23. ETOPS:** N/A

**IV. Operating and Service Instructions**

**1. Airplane Flight Manual (AFM)**

Airplanes must be operated according to the EASA approved AFM, part number AFM-3921-300, revision original (or later approved revision)

For EMB-550 with DCA 0550-000-00026-2016, the EASA approved AFM part number AFM-3921-900, 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



## **V. Operational Suitability Data (OSD)**

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.526 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List (MMEL)

The MMEL is defined in EMBRAER EASA MMEL-5001 Revision 02 or later approved revisions.

2. Flight Crew Data (FCD)

The FCD is defined in EMBRAER Report No. 550MSO208 Revision A dated 7 December 2015 or later approved revisions.

## **VI. Notes**

**Note 1** - 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.

**Note 2** - 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.



## **SECTION 2: EMB-545**

### **I. General**

- 1. Type/ Model/ Variant:** EMB-550/EMB-545
- 2. Performance Class:** A
- 3. Certifying Authority:** **Agência Nacional de Aviação Civil – ANAC**  
Gerência Geral de Certificação de Produtos Aeronáuticos  
Rua Laurent Martins, 209  
Jardim Esplanada  
12242-431 - São José dos Campos - SP  
Brazil
- 4. Manufacturer:** **Embraer S.A.**  
Av. Brig. Faria Lima. 2170  
12227-901, São Jose dos Campos - SP  
Brazil
- 5. ANAC Certification Application Date:** April 13<sup>th</sup>, 2009
- 6. EASA Validation Application Date:** December 22<sup>nd</sup>, 2010
- 7. ANAC Type Certification Date:** August 11<sup>th</sup>, 2015
- 8. EASA Type Validation Date:** September 9<sup>th</sup>, 2015

### **II. Certification Basis**

- 1. Reference Date for determining the applicable requirements:** December 22<sup>nd</sup>, 2010
- 2. ANAC Type Certification Data Sheet No.:** EA-2014T04
- 3. ANAC 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:**  
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 hand-held Fire Extinguishers (ref. DCA 0550-026-00104-2018)
- 5. Special Conditions:**
- 5.1 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



Issue: 10

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

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

None identified

5.3 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              |

## 6. Exemptions: N/A

## 7. Deviations:

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)    |



## 8. 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 D-37 | Lavatory Door – Compliance to CS 25.813(e)                                |   |
| 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),<br>25.1391; 25.1393; 25.1395;<br>25.1401(f)) |

## 9. Environmental Protection Standards:

Fuel venting and emissions:

CS 34 Initial Issue - Certification Specifications for Aircraft Engine Emissions and Fuel Venting

Noise:

CS 36 Amdt. 2 - Certification Specifications for Aircraft Noise

CS 36 Amdt. 4 - Certification Specifications for Aircraft Noise (applicable to DCA 0550-000-00100-2018)

## 10. Operational Suitability Requirements:

- 10.1 OSD MMEL  
CS-MMEL, Initial Issue dated 31 January 2014
- 10.2 OSD FCD  
CS-Flight Crew Data, Initial Issue dated 31 January 2014

## III. Technical Characteristics and Operational Limitations

### 1. Type Design Definition:

550TDSD006 "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 meter shorter fuselage) of EMB-550 baseline with max. passenger capacity of 9.



**3. Equipment:** The equipment required by the applicable requirements shall be installed

|                       |           |  |
|-----------------------|-----------|--|
| <b>4. Dimensions:</b> | Length    | 19.68 m  |
|                       | Span      | 19.25 m  |
|                       | Span      | 21.50 m (for aircraft with DCA<br>0550-000-00100-2018 installed) |
|                       | Height    | 6.43 m   |
|                       | Wing Area | 44.85 m <sup>2</sup>   |

**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;

- (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: Refer to approved Airplane Flight Manual

Oil: Refer to approved Airplane Flight Manual

Additives: Refer to the AMM for approved fuel additives

Hydraulic: Refer to the AMM.

**9. Fluid Capacities**

Fuel:

Total fuel capacity of 5500 kg, two wing tanks 2750 kg each, @ 8.62 m aft of datum for aircraft post-mod SB 550-28-0002 or equivalent factory-incorporated modification.

Total fuel capacity of 4920 kg, two wing tanks 2460 kg each, @ 8.55 m aft of datum for aircraft pre-mod SB 550-28-0002.

Reference fuel density is 0.803kg/L.

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

Fuel: 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:** Refer to approved Airplane Flight Manual

**11. Flight Envelope:** Refer to approved Airplane Flight Manual

## 12. Operating Limitations

12.1 Approved Operations: Refer to approved Airplane Flight Manual

12.2 Other Limitations: Refer to approved Airplane Flight Manual

## 13. Maximum Certified Masses:

| Design Weights           | EMB-545 (kg) | EMB-545 + DCA 0550-000-00100-2018 (kg) |
|--------------------------|--------------|--|
| Maximum Ramp Weight      | 16280        | 17100                                  |
| Maximum Takeoff Weight   | 16220        | 17040                                  |
| Maximum Landing Weight   | 14750        | 15500                                  |
| Maximum Zero Fuel Weight | 11750        | 11775<br>12025*                        |

\* If DCA 0550-000-00037-2023 (SB 550-00-0016) or with a factory-incorporated equivalent modification

**14. Centre of Gravity Range:** Refer to 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):** Refer to 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 |

**23. ETOPS:** N/A

## **IV. Operating and Service Instructions**

### **1. Airplane Flight Manual (AFM)**

Airplanes must be operated according to the EASA approved AFM, part number AFM-3921-600, revision original (or later approved revision)

For EMB-545 with DCA 0550-000-00100-2018, the EASA approved AFM part number AFM-3921-950, 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

## **V. Operational Suitability Data (OSD)**

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.IM.A.526 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

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

The MMEL is defined in EMBRAER EASA MMEL-5001 Revision 02 or later approved revisions.

### **2. Flight Crew Data (FCD)**

The FCD is defined in EMBRAER Report No. 550MSO208 Revision A dated 7 December 2015 or later approved revisions.

## **VI. Notes**

**Note 1** - 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.

**Note 2** - 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.



## **SECTION: ADMINISTRATIVE**

### **I. Acronyms and Abbreviations**

|       |   |
|-------|---|
| AFM   | Airplane Flight Manual                                      |
| AMM   | Airplane Maintenance Manual                                 |
| ANAC  | Agência Nacional de Aviação Civil                           |
| APU   | Auxiliary Power Unit  |
| ATTCS | Automatic Take-off Thrust Control System                    |
| CFR   | Code of Federal Regulations                                 |
| CS    | Certification Specifications                                |
| DCA   | Design Change Approval                                      |
| Dev   | Deviation   |
| EASA  | European Aviation Safety Agency                             |
| ESF   | Equivalent Safety Finding                                   |
| ETOPS | Extended range Twin-engine Operations Performance Standards |
| RBAC  | Regulamento Brasileiro da Aviação Civil                     |
| LOPA  | Lay-Out of Passengers Accommodations                        |
| MAC   | Mean Aerodynamic Chord                                      |
| MLG   | Main Landing Gear   |
| MPH   | Miles Per Hour  |
| N/A   | Not Applicable  |
| NLG   | Nose Landing Gear   |
| WBM   | Weight and Balance Manual                                   |

### **II. Type Certificate Holder Record**

[insert list or table]

### **III. Change Record**

| <b>Issue</b> | <b>Date</b>      | <b>Changes</b>  | <b>TC issue</b>                |
|--------------|------------------|---|--------------------------------|
| Issue 01     | 16 Dec. 2014     | Initial Issue   | Initial Issue,<br>16 Dec. 2014 |
| Issue 02     | 22 July 2015     | Introduction of OSD Requirements and approved data for MMEL and FCD.  |                                |
| Issue 03     | 9 September 2015 | Minor corrections in Section 1<br>Inclusion of EMB-545 Model in new Section 2   |                                |
| Issue 04     | 16 December 2015 | Section 1, Chapter II.5.1<br>- Inclusion of reference to SC B-11<br>Section 1, Chapter III.13<br>- Updated to include new approved of design weights<br>Section 1, Chapter V<br>- MMEL and FCD references updated<br>Section 2, Chapter III.2<br>- MTOW references removed from Description<br>Section 2, Chapter V<br>- MMEL and FCD references included |                                |



|          |                  |   |  |
|----------|------------------|---|--|
| Issue 05 | 26 July 2016     | <p>Section 2, Chapter III.9</p> <ul style="list-style-type: none"> <li>- Total fuel capacity post-mod SB 550-28-0002 added</li> </ul> <p>Section 2, Chapter III.13</p> <ul style="list-style-type: none"> <li>- Updated to include new approved design weights</li> </ul>   |  |
| Issue 06 | 1 November 2016  | <p>Section 1, Chapter II.5.1</p> <ul style="list-style-type: none"> <li>- Inclusion of reference to SC F-51</li> <li>- Inclusion of reference to SC F-52</li> </ul> <p>Section 1, Chapter VI</p> <ul style="list-style-type: none"> <li>- Deletion of Note 1 regarding use of toilet seat (renumbering of Note 2)</li> </ul> <p>Section 2, Chapter II.5.1</p> <ul style="list-style-type: none"> <li>- Inclusion of reference to SC D-34</li> <li>- Inclusion of reference to SC F-51</li> <li>- Inclusion of reference to SC F-52</li> </ul> <p>Section 2, Chapter VI</p> <ul style="list-style-type: none"> <li>- Deletion of Note 1 regarding use of toilet seat (renumbering of Note 2)</li> </ul>  |  |
| Issue 07 | 19 December 2018 | <p>Section 1, Chapter II.4</p> <ul style="list-style-type: none"> <li>- Additional reference to CS 25.851(a)(6) at Amdt. 18 introduced</li> </ul> <p>Section 2, Chapter II.4</p> <ul style="list-style-type: none"> <li>- Additional reference to CS 25.851(a)(6) at Amdt. 18 introduced</li> </ul>   |  |
| Issue 08 | 20 May 2019      | <p>Section 1, Chapter II. 4.</p> <ul style="list-style-type: none"> <li>- Certification Basis for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter II. 5.</p> <ul style="list-style-type: none"> <li>- Reference to SC B-15 for DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter II. 9.</p> <ul style="list-style-type: none"> <li>- Environmental Protection Standards for EMB-550 corrected</li> <li>- Environmental Protection Standards for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter III.4.</p> <ul style="list-style-type: none"> <li>- Span for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter III.9.</p> <ul style="list-style-type: none"> <li>- Fuel information for EMB-550 corrected</li> <li>- Fuel information for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter III.13.</p> <ul style="list-style-type: none"> <li>- New approved design weights for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter IV.1.</p> |  |



|          |                   |   |  |
|----------|-------------------|---|--|
|          |                   | <ul style="list-style-type: none"> <li>- AFM information for EMB-550 with DCA 0550-000-00026-2016 added</li> </ul> <p>Section 1, Chapter VI.1.</p> <ul style="list-style-type: none"> <li>- Note for commercial name of the EMB-550 with 0550-000-00026-2016 added</li> </ul> <p>Section 2, Chapter I. 6.</p> <ul style="list-style-type: none"> <li>- EASA validation application date for EMB-545 corrected</li> </ul> <p>Section 2, Chapter II. 8.</p> <ul style="list-style-type: none"> <li>- Reference to ESF D-37 added</li> </ul> <p>Section 2, Chapter II. 9.</p> <ul style="list-style-type: none"> <li>- Environmental Protection Standards for EMB-545 corrected</li> </ul>   |  |
| Issue 09 | 30 September 2019 | <p>Section 2, Chapter II. 9.</p> <ul style="list-style-type: none"> <li>- Environmental Protection Standards for EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> <p>Section 2, Chapter III.4.</p> <ul style="list-style-type: none"> <li>- Span for EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> <p>Section 2, Chapter III.9.</p> <ul style="list-style-type: none"> <li>- Fuel information for EMB-545 corrected</li> <li>- Fuel information for EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> <p>Section 2, Chapter III.13.</p> <ul style="list-style-type: none"> <li>- New approved design weights for EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> <p>Section 2, Chapter IV.1.</p> <ul style="list-style-type: none"> <li>- AFM information for EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> <p>Section 2, Chapter VI.</p> <ul style="list-style-type: none"> <li>- Note for commercial name of the EMB-545 with DCA 0550-000-00100-2018 added</li> </ul> |  |
| Issue 10 | 15 May 2025       | <p>Section 1, Chapter III.13</p> <ul style="list-style-type: none"> <li>- Table improvement</li> </ul> <p>Section 2, Chapter III.13</p> <ul style="list-style-type: none"> <li>- New approved design weights for EMB-545 with DCA 0550-000-00037-2023 added</li> </ul>  |  |

[insert rows as necessary]

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