



**AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL**

## **BRAZILIAN AIRWORTHINESS DIRECTIVE**

**AD No.: 2020-05-03**

**Effective Date: 1 Jun. 2020**

The following Brazilian Airworthiness Directive (AD), issued by the Agência Nacional de Aviação Civil (ANAC) in accordance with provisions of Chapter IV, Title III of Código Brasileiro de Aeronáutica - Law No. 7,565 dated 19 December 1986 - and Regulamento Brasileiro da Aviação Civil (RBAC) 39, applies to all aircraft registered in the Registro Aeronáutico Brasileiro. No person may operate an aircraft to which this AD applies, unless it has previously complied with the requirements established herein.

### **AD No. 2020-05-03 - EMBRAER/ 39-1462.**

#### **APPLICABILITY:**

This Airworthiness Directive (AD) apply to Embraer aircraft models EMB-500 and EMB-505 currently in operation, all serial numbers (S/N), if equipped with engines models PW617F-E or PW617F1-E (EMB-500), or engines model PW535E (EMB-505).

#### **CANCELLATION / REVISION:**

Not Applicable.

#### **REASON:**

It has been found that the operation of the aircraft at static air temperatures below -54°C could lead to a condition in which several of its systems and components operate outside the temperature interval for which they have been originally qualified for. In these conditions these systems and components could operate inadequately, and multiple systems failures could occur, potentially compromising flight safety.

Since the flight envelope of aircraft within this Type Certificate comprises static air temperatures below -54°C, which, due to the above condition, could affect flight safety, a corrective action is required and, therefore, sufficient reason exist to mandate compliance with this AD in the indicated time limit.

#### **REQUIRED ACTION:**

Adoption of an Operational Bulletin or, at the discretion of the aircraft operator, adoption of an updated AFM (Aircraft Flight Manual) (see requirements below), to limit the minimum airspeed in the affected region of the Operational Envelope.

#### **COMPLIANCE:**

Required as indicated below, unless already accomplished.

#### **AFM 2655 Alteration (EMB-500 models)**

(a) For aircraft models EMB-500, within 30 days after the effectivity date of this AD, adopt Embraer Operational Bulletin 500-001/20 – Operational Envelope Temperature Limitation, Revision 0, dated March 09, 2020.

(b) Alternatively to paragraph (a) above, within 30 days after the effectivity date of this AD, utilize AFM-2655, Revision 29, or later approved revisions, when operating the aircraft.

(c) Accomplishment of either one of paragraphs (a) or (b) above constitutes terminal action to the requirements of this AD related to Embraer EMB-500 aircraft models.

**AFM 2664 Alteration (EMB-505 models)**

(d) For aircraft models EMB-505, within 30 days after the effectivity date of this AD, adopt Embraer Operational Bulletin 505-005/13 – Operational Envelope Temperature Limitation, Revision 1, dated March 09, 2020.

(e) Alternatively to paragraph (d) above, within 30 days after the effectivity date of this AD, utilize AFM-2664, Revision 21, or later approved revisions, when operating the aircraft.

(f) Accomplishment of either one of paragraphs (d) or (e) above constitutes terminal action to the requirements of this AD related to Embraer EMB-505 aircraft models.

**Material Incorporated by Reference in this AD**

**EMB-500 Models**

(g) Embraer Operational Bulletin 500-001/20 – Operational Envelope Temperature Limitation, Revision 0, dated March 09, 2020.

(h) Alternatively, AFM-2655, Revision 29, or later approved revisions.

**EMB-505 Models**

(i) Embraer Operational Bulletin 505-005/13 – Operational Envelope Temperature Limitation, Revision 1, dated March 09, 2020.

(j) Alternatively, AFM-2664, Revision 21, or later approved revisions.

**Alternative Methods of Compliance (AMOCs)**

(k) A different method or a different compliance time to the requirements of this AD may be used if approved by the General Manager of the Aeronautical Products Certification Branch (Gerência-Geral de Certificação de Produtos – GGCP).

**CONTACT:**

For additional technical information, contact:

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**APPROVAL:**

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Airworthiness Superintendent  
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**NOTE:** Original in Portuguese language signed and available in the files of the Aeronautical Products Certification Branch (GGCP) of the National Civil Aviation Agency (ANAC).

