



**AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL**

## **BRAZILIAN AIRWORTHINESS DIRECTIVE**

**AD No.: 2017-10-01**

**Effective Date: 11 Oct. 2017**

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. 2017-10-01 - EMBRAER / 39-1417.**

#### **APPLICABILITY:**

(a) This Airworthiness Directive (AD) applies to Embraer S.A. airplanes identified in paragraphs (a)(1) and (a)(2) of this AD.

(1) Embraer S.A. EMB-500 airplanes identified in Embraer S.A. Alert Service Bulletin 500-27-A026, original issue, dated September 29, 2017.

(2) Embraer S.A. EMB-505 airplanes identified in Embraer S.A. Alert Service Bulletin 505-27-A028, Revision 01, dated September 29, 2017.

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

Not applicable.

#### **REASON:**

This AD results of a report of one airplane having improperly tied castle nut on the aileron, rudder and elevator trim tab (or autotab) attachment bolts. A disconnected surface may cause an increase in dynamic loads and probable flutter, which may cause structural failure and possible loss of control of the airplane.

Since this condition may occur in other airplanes of the same type and affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit without prior notice.

#### **REQUIRED ACTION:**

Inspection and rework, if necessary, of aileron, rudder and elevator trim tab (or autotab).

#### **COMPLIANCE:**

Required as indicated below, unless already accomplished.

(b) Within 25 flight hours (FH) or 12 months after the effective date of this AD, whichever occurs first, do the actions specified in paragraph (b)(1) or (b)(2) of this AD, as applicable.

(1) For the airplanes identified in paragraph (a)(1) of this AD: Inspect the aileron trim tab, rudder trim tab and elevator trim tab attachment points to make sure the cotter pin is installed on the castle nut of the attaching bolts, and prior to further flight after this inspection, correct any discrepancy; in

accordance with the Accomplishment Instructions of Embraer S.A. Alert Service Bulletin 500-27-A026, original issue, dated September 29, 2017, or further revisions.

(2) For the airplanes identified in paragraph (a)(2) of this AD: Inspect the aileron trim tab, rudder trim tab and elevator autotab attachment points to make sure the cotter pin is installed on the castle nut of the attaching bolts, and prior to further flight after this inspection, correct any discrepancy; in accordance with the Accomplishment Instructions of Embraer S.A. Alert Service Bulletin 505-27-A028, Revision 01, dated September 29, 2017, or further revisions.

(c) You must use the service information specified in paragraphs (c)(1) or (c)(2) of this this AD, as applicable, to do the actions required by this AD.

(1) Embraer S.A. Alert Service Bulletin 500-27-A026, original issue, dated September 29, 2017, or further revisions approved by the ANAC.

(2) Embraer S.A. Alert Service Bulletin 505-27-A028, Revision 01, dated September 29, 2017, or further revisions approved by the ANAC.

(d) This paragraph provides credit for the actions specified in paragraph (b)(2) of this AD, if those actions were performed before the effective date of this AD using Embraer Alert Service Bulletin No. 505-27-A028, original issue, dated September 28, 2017.

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

**CONTACT:**

For additional technical information, contact:

National Civil Aviation Agency (ANAC)  
Aeronautical Products Certification Branch (GGCP)  
Rua Laurent Martins, nº 209, Jardim Esplanada  
CEP 12242-431 – São José dos Campos - SP, BRAZIL.  
Tel: 55 (12) 3203-6600; E-mail: [pac@anac.gov.br](mailto:pac@anac.gov.br)

**APPROVAL:**

MÁRIO IGAWA  
General Manager  
GGCP

ROBERTO JOSÉ SILVEIRA HONORATO  
Airworthiness Superintendent  
ANAC

**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).