



## AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

### BRAZILIAN AIRWORTHINESS DIRECTIVE

**AD No.: 2008-09-01**

**Effective Date: 30 Sep. 2008**

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 de Homologação Aeronáutica (RBHA) 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. 2008-09-01 - EMBRAER - Amendment 39-1241.**

#### **APPLICABILITY:**

This Airworthiness Directive is applicable to Embraer ERJ 170-100 STD, ERJ 170-100 LR, ERJ 170-100 SU, ERJ 170-100 SE, ERJ 170-200 STD, ERJ 170-200 LR and ERJ 170-200 SU, of serial numbers (S/B) identified in Embraer Service Bulletins (SB) Nos. 170-24-0019 original issue, dated 20 July 2007, 170-24-0020 original issue, dated 30 Nov. 2006, and 170-31-0020 original issue, dated 27 Nov. 2007.

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

Not applicable.

#### **REASON:**

The result of re-assessment of rotor burst analysis has shown the possibility of loss of electrical power supply to the following aircraft systems: Air Data System (ADS), Ailerons, Multifunctional spoilers and rudder, which result in loss of the aircraft pitch and yaw control.

Since this condition affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.

#### **REQUIRED ACTION:**

Modification of the electrical wiring and ARINC 429 data bus.

#### **COMPLIANCE:**

Required as indicated below, unless already accomplished.

Within the next 6000 flight hours after the effective date of this AD, perform the following:

- (a) Modify the electrical wiring on the overhead panel in the cockpit in accordance with Embraer SB No. 170-24-0019 original issue, or further revisions approved by the ANAC;
- (b) Change the Air Data Smart Probe 3 channel B power supply bus from ESS2 to ESS3, in accordance with Embraer SB No. 170-24-0020 original issue, or further revisions approved by the ANAC; and,
- (c) Duplicate the ARINC 429 airspeed signal for an extension longer than the rotor burst impact area; change the primary power source for MAU 2 from DC BUS 2 to DC ESS BUS 2; and, change the wiring of Slat/Flap Actuators Control Electronics (SF-ACE) 1 and 2 to Primary Actuator Control Electronics (P-ACE) 1, 2 and 3, in accordance with Embraer SB No. 170-31-0020 original issue, or further revisions approved by the ANAC.

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletins Nos. 170-24-0019 original issue, 170-24-0020 original issue, and 170-31-0020 original issue, or its respective further revisions approved by ANAC.

Record compliance with this AD in the applicable maintenance log book.

**CONTACT:**

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**APPROVAL:**

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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).