



## AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

### BRAZILIAN AIRWORTHINESS DIRECTIVE

**AD No.: 2014-01-01**

**Effective Date: 20 Jan. 2014**

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. 2014-01-01 – EMBRAER S.A. / 39-1379.**

**APPLICABILITY:**

This Airworthiness Directive (AD) applies to Embraer S.A. model EMB-145, -145ER, -145EU, -145EP, -145LR, -145MR, -145LU, -135ER, -135LR, -145MP, -145MK, -135KE, -135KL, and -145XR airplanes; all serial numbers.

**Note:** This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by Regulamento Brasileiro da Aviação Civil (RBAC) 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with RBAC 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (c) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure.

**CANCELLATION / REVISION:**

None

**REASON:**

This AD was prompted by a new revision to the airworthiness limitations requirements of the Maintenance Review Board Report. We are issuing this AD to ensure that fatigue cracking of various structural elements is detected and corrected.

**REQUIRED ACTION:**

Revision of the maintenance or inspection program.

**COMPLIANCE:**

Required as indicated below, unless already accomplished.

**(a) Revision of Maintenance or Inspection Program**

(1) Within 60 days after the effective date of this AD, revise the maintenance or inspection program by incorporating the inspection tasks with the thresholds and intervals stated in table 1 of this AD. These tasks are identified in Embraer Temporary Revision (TR) 15-3 and 15-4 to Appendix 2, Airworthiness Limitation Requirements, of the Embraer Maintenance Review Board Report, MRBR – 145/1150.

(2) The compliance times depend on the airplane model and the pre-modification and post-modification condition of Embraer service bulletins (SB) specified in table 1 of this AD. The initial compliance times for the tasks specified in table 1 of this AD start from the applicable threshold times specified in table 1 of this AD, or within 600 flight cycles (FC) after the effective date of this AD, whichever occurs later.

**Table 1 – New Airworthiness Limitations Requirements and Compliance Times**

Reference Number	Type	Description	Initial Compliance Time (Threshold) (flight cycle)	Interval (ciclos de voo)	Zone	Applicability
54-50-00-220-812-A01	DET	Internally inspect the PYLON components: • Pylon Yokes I and II (SSI 54-50-05) <b>NOTE:</b> Applicable to aircraft Post-Mod. SB 145-54-0011 and Post-Mod. SB 145-54-0013.	30000	30000	414/ 424	EMB-145 -145ER -145EU -145EP -145LR -145MR -145LU -135ER -135LR -145MP -145MK -135KE -135KL
54-50-00-220-814-A00	DET	Internally inspect the PYLON components: • Pylon Yokes I and II (SSI 54-50-05) <b>NOTE:</b> Applicable to aircraft Pre-Mod. SB 145-54-0013.	20000	20000	414/ 424	-145XR
54-50-00-220-814-A01	DET	Internally inspect the PYLON components: • Pylon Yokes I and II (SSI 54-50-05) <b>NOTE:</b> Applicable to aircraft Post-Mod. SB 145-54-0013.	20000	30000	414/ 424	-145XR
53-12-00-210-802-A00	GVI	Internally inspect the FUSELAGE components: • Windshield lateral post and its attachment (SSI 53-10-20) <b>NOTE:</b> Applicable to aircraft Post-Mod. SB 145-53-0079.	22060	22060	223/ 224	EMB-145 -145ER -145EU -145EP -145LR -145MR -145LU -145XR -135ER -135LR -145MP -145MK -135KE -135KL

53-12-00-250-802-A00	SDE	Externally inspect the FUSELAGE components using Eddy Current method: • Windshield lateral post and its attachment (SSI 53-10-20) <b>NOTE:</b> Applicable to aircraft Pre-Mod. SB 145-53-0079.	11590	11590	223/ 224	EMB-145 -145ER -145EU -145EP -145LR -145MR -145LU -145XR -135ER -135LR -145MP -145MK -135KE -135KL
53-12-00-250-802-A01	SDE	Externally inspect the FUSELAGE components using Eddy Current method: • Windshield lateral post and its attachment (SSI 53-10-20) <b>NOTE:</b> Applicable to aircraft Post-Mod. SB 145-53-0079.	22060	22060	223/ 224	EMB-145 -145ER -145EU -145EP -145LR -145MR -145LU -145XR -135ER -135LR -145MP -145MK -135KE -135KL
53-12-00-250-803-A00	SDE	Internally inspect the FUSELAGE components using Eddy Current method: • Windshield lateral post and its attachment (SSI 53-10-20) <b>NOTE:</b> Applicable to aircraft Pre-Mod. SB 145-53-0079.	11590	11590	223/ 224	EMB-145 -145ER -145EU -145EP -145LR -145MR -145LU -145XR -135ER -135LR -145MP -145MK -135KE -135KL

**(b) No Alternative Inspections or Inspection Intervals**

After accomplishing the revision required by paragraph (g) of this AD, no alternative inspection or inspection intervals may be used, unless the inspection or inspection intervals are approved as an AMOC.

**(c) Alternative Means of Compliance (AMOC)**

A different method or a different compliance time, with the requirements of this AD, may be used if approved by the General-Manager, 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)

Av. Cassiano Ricardo, 521, Bloco B, 2º andar, Parque Residencial Aquarius

Fax: 55 (12) 3797-2330

12246-870 – São José dos Campos - SP, BRAZIL.

E-mail: pac@anac.gov.br

**APPROVAL:**

HÉLIO TARQUÍNIO JÚNIOR

General Manager

GGCP

DINO ISHIKURA

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).