AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2016-07-02 **Effective Date: 27 Jul. 2016**

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. 2016-07-02 – EMBRAER / 39-1401.

APPLICABILITY:

This AD applies to Embraer S.A. model EMB-120, EMB-120RT, EMB-120ER, EMB-120FC, and EMB-120QC airplanes; all serial numbers.

Note*: This AD requires revisions to certain operator maintenance documents to include new actions (e.g. inspections). Compliance with these actions are required by Regulamento Brasileiro de Homologação Aeronáutica (RBHA) 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 RBHA 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (e) of this AD. The request should include a description of changes to the required actions that will ensure the continued operational safety of the airplane*.

CANCELLATION/REVISION:

Not applicable.

REASON:

This AD was prompted by changes to the Airworthiness Limitation Section of the Maintenance Review Board Report MRB 120-HI-200, which add life-limited landing gear parts not previously identified. We are issuing this AD to prevent life-limited landing gear parts from being used beyond their safe-life limits, which could lead to collapse of the landing gear.

REQUIRED ACTION:

Revise the Maintenance or Inspection program.

COMPLIANCE:

Do the actions required by this AD within the compliance times specified, unless already done.

Removal from service at life limit

(a) Within 30 days after the effective date of this AD replace each part identified in table 1 of this AD that has reached or exceeded its safe-life limit, or which current status is unknown, with an airworthy part, according to the Accomplishment Instructions of Embraer S.A Alert Service Bulletin (ASB) 120-32-A543, original issue, dated July 11, 2016.

Table 1: Life-limited landing gear parts

Part number	Description	Safe-life limits per certification (landings)			
		CTA/FAA	DGAC	CAA (UK)	IAC-AR
19699-001-00	PIN DRAG STRUT, LOWER	104,054	83,243	69,369	69,369
19429-000-00	PISTON TUBE (PRE MOD SB 120-032-0514)	30,000	24,000	20,000	20,000
19429-000-00	PISTON TUBE (POST MOD SB 120-032-0514)	90,000	72,000	60,000	60,000
19946-001-00	PIN LEG HINGE	90,000	72,000	60,000	60,000
20030-001-00	PIN TORQUE LINK	90,000	72,000	60,000	60,000
19437-000-00	DRAG STRUT, UPPER HALF	104,054	83,243	69,369	69,369
20031-001-00	PIN DRAG STRUT HINGE	104,054	83,243	69,369	69,369
19414-000-00	PISTON TUBE	90,000	72,000	60,000	60,000
19919-000-00	PIN LEG HINGE	90,000	72,000	60,000	69,000

Revision of Maintenance or Inspection Program

(b) Within 90 days after the effective date of this AD, revise the maintenance or inspection program, as applicable, by incorporating the life-limited landing gear parts, and the applicable safe-life limits, identified in table 1 of this AD, as specified in Temporary Revision (TR) 28-1 to MRB 120-HI-200, dated May 17, 2016.

Parts Installation

(c) After the effective date of this AD, no person may install on any airplane a main landing gear or nose landing gear having a part number identified in table 1 of this AD that has reached or exceeded its safe-life limit, or which current status is unknown.

No Alternative Actions and Intervals

(d) After accomplishing the revision required by paragraph (b) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions or intervals are approved as an alternative method of compliance in accordance with the procedures specified in paragraph (e) of this AD.

Alternative Method of Compliance (AMOC)

(e) 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)
Rua Laurent Martins, n° 209, Jardim Esplanada
CEP 12242-431 – São José dos Campos - SP
Fax: (12) 3203-6600; E-mail: pac@anac.gov.br

APPROVAL:

MÁRIO IGAWA
General Manager
GGCP

HÉLIO TARQUÍNIO JÚNIOR
Substitute 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).