AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2012-07-01 **Effective Date: 30 Jul. 2012**

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. 2012-07-01 - EMBRAER / 39-1356.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer S.A. model ERJ 170-100 LR, ERJ 170-100 STD, ERJ 170-100 SU, ERJ 170-100 SE, ERJ 170-200 LR, ERJ 170-200 STD and, ERJ 170-200 SU airplanes; as identified in Embraer Service Bulletin (SB) 170-26-0011, revision 01, dated June 19th, 2012.

CANCELLATION / REVISION:

Not Applicable.

REASON:

It was found during an inspection of the cargo compartment fire extinguisher system that High Rate Discharge (HRD) bottle explosive cartridges were swapped between forward and aft cargo compartments. Additional investigation has also revealed the possibility of swapping between the electrical connectors of the HRD and Low Rate Discharge (LRD) bottles and a rotated installation of the HRD bottle. Such improper assembly of the fire extinguishing bottle may cause the extinguishing agent to be discharged toward the unselected cargo compartment rather than toward the cargo compartment with fire, resulting in an insufficient concentration of fire extinguishing agent in the cargo compartment with fire, and consequent inability of the fire extinguishing system to suppress fire.

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 these requirements in the indicated time limit.

REQUIRED ACTION:

Cargo Compartment Fire Extinguisher System – High and Low Rate Discharge Bottle inspection and relocation/replacement, if necessary.

COMPLIANCE:

Required as indicated below, unless already accomplished.

Low and High Rate Discharge bottles inspection and correction/replacement

(a) Within 3.000 flight hours after the effective date of this AD, do a General Visual Inspection (GVI) to detect discrepancies on the assembly of the cargo compartment fire extinguisher LRD and HRD bottles, electrical connectors, harnesses and in the Discharge Heads of the HRD and LRD bottles in accordance with the Accomplishment Instructions of Embraer SB 170-26-0011

revision 01, dated June 19th, 2012, or further revisions approved by ANAC. If any discrepancy is detected: Before further flight, replace the HRD or LRD bottle, as applicable, where the discharge heads were incorrectly installed and, correct any discrepancy in accordance with the Accomplishment Instructions of Embraer SB 170-26-0011 revision 01, dated June 19, 2012, or furthers revisions approved by the ANAC.

Credit for Previous Actions

(b) This paragraph provides credit for inspections and corrective actions, as required by paragraph **(a)** of this AD, if those actions were performed before the effective date of this AD using Embraer SB 170-26-0011, original issuance, dated December 01st, 2011.

Material Incorporated by Reference

(c) The detailed instructions and procedures to perform the actions required by this AD, unless otherwise specified by the AD, are described in the Accomplishment Instructions of Embraer SB 170-26-0011, revision 01, dated June 19th, 2012, or furthers revisions approved by the ANAC.

Alternative means of Compliance (AMOC)

(d) 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 Produto Aeronáutico – GGCP).

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

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).