



SERVIÇO PÚBLICO FEDERAL

DEPARTAMENTO DE AVIAÇÃO CIVIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

EFFECTIVE DATE:

17 Nov. 2005

AD No.:

2005-10-04

The following Airworthiness Directive (AD), issued by the Departamento de Aviação Civil (DAC) 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. 2005-10-04 - EMBRAER - Amendment 39-1101.

APPLICABILITY:

This Airworthiness Directive is applicable to all Embraer EMB-145() and EMB-135() aircraft models in operation, equipped with ailerons (RH or LH) with P/N 145-69000-403, -404, -405, -407, -408, -409, -410, -411, -412, -425, -426, -613, -614, -615, -616, -617, -618, -619, -620, -621, -622, -623, -624, -625, -626, -627, -628, -629, -630, -631, -632, -633, -634, -635 or -636, that have an aileron damper installed.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found the occurrence of two cases of structural failures of the aileron damper rod ends due to wear originated from an insufficient clearance between the aileron damper fitting lugs at the aileron and the damper rod end, associated with an improper fitting clearance between the rod end and its bearing race. A failed rod end is a hidden failure of the aileron damper; therefore, aileron flutter can result in case of an aileron actuator failure.

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.

REQUIRED ACTION:

Rework of the aileron damper fitting and replacement of the aileron damper rod end assembly.

COMPLIANCE:

Required as indicated below, unless already accomplished.

Within the next 400 flight hours after the effective date of this AD, rework the aileron damper fitting lugs, and for aileron dampers P/N 41012130-102, -103 or -104, with S/N between 001 and 0712, inclusive, replace the rod end P/N 41011486-101 with one of P/N 41011486-102, and re-identify the modified ailerons and aileron dampers according to the instructions of the Embraer Service Bulletin No. 145-27-0108, original issue, or further revisions approved by the CTA.

The detailed instructions and procedures to accomplish this AD are described in the Embraer Service Bulletin No. 145-27-0108, original issue, or further revisions approved by the CTA.

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

CONTACT:

For additional technical information, contact:

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APPROVAL:

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NOTE: Original in Portuguese language signed and available in the files of the Registro Geral de Aeronavegabilidade (RGA/TE-1/STE) of the Departamento de Aviação Civil.