



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2011-04-01

Effective Date: 05 May 2011

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. 2011-04-01 - EMBRAER / 39-1333.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer Model ERJ 170-100 LR, ERJ 170-100 SE, ERJ 170-100 STD, ERJ 170-100 SU, ERJ 170-200 LR, ERJ 170-200 STD and ERJ 170-200 SU airplanes; all serial numbers.

NOTE 1: This AD requires revisions to certain operator maintenance documents to include new inspections tasks or modification of existing ones and its respective thresholds and intervals. Compliance with these inspections is 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 described inspections. In this situation, to comply with RBHA 91.403(c), the operator must request approval for an alternative method of compliance. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane. An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Product Certification Branch (GGCP).

CANCELLATION / REVISION:

Not applicable.

REASON:

During the airplane full scale fatigue test, cracks were found in some structural components of the airplane. Analysis of these cracks resulted in modifications on the Airworthiness Limitation Section (ALS) of Embraer ERJ 170 Maintenance Review Board Report (MRBR), to include new inspections tasks or modification of existing ones and its respective thresholds and intervals.

Failure to inspect these structural components, according to the new/ revised tasks, thresholds and intervals, could prevent a timely detection of fatigue cracking. These cracks, if not properly addressed, could adversely affect the structural integrity of the airplane.

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:

Revision of the Maintenance Program to include Airworthiness Limitations Inspections updates.

COMPLIANCE:

Required as indicated below, unless already accomplished.

Within 60 days after the effective date of this AD, revise the Maintenance Program for the Embraer ERJ 170 aircraft to include updates that are provided in Appendix A, Part 2, Airworthiness Limitations Inspections (ALI) – Structures, of Embraer 170 Maintenance Review Board Report (MRB-1621) Revision 7, dated November 11, 2010 and Temporary Revision (TR) 7-1, dated February 11, 2011 with the thresholds and intervals stated at these documents. The initial compliance times (thresholds) for the tasks start from the initial delivery date of the applicable airplane at the applicable time specified in the tasks or, with 600 flight cycles after revising the Airworthiness Limitation Section, whichever occurs later. Repeat the applicable inspection thereafter at the interval specified in the Appendix A, Part 2, Airworthiness Limitations Inspections (ALI) – Structures, of the Embraer ERJ 170 Maintenance Review Board Report (MRB-1621) Revision 7, dated November 11, 2010 and TR 7-1, dated February 11, 2011, observing for each task, the pre and post-mod condition of the associated service bulletin, if applicable.

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).