



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2010-08-03

Effective Date: 20 Sep. 2010

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 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. 2010-08-03 - EMBRAER - Amendment 39-1315.

APPLICABILITY:

This Airworthiness Directive (AD) applies to Embraer Model ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-100 SR, ERJ 190-200 STD, ERJ 190-200 LR and ERJ 190-200 IGW airplanes; all serial numbers.

NOTE 1: This AD requires revisions to certain operator maintenance documents to include new inspection 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 190 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 or 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 Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness (ICA) to incorporate new and/or modified structural inspections.

COMPLIANCE:

Required as indicated below, unless already accomplished:

Within 60 days after the effective date of this AD, revise the ALS of the ICA to incorporate the new or revised tasks specified in Appendix A, Part 2, Airworthiness Limitations Inspections (ALI) – Structures, of the Embraer ERJ 190 Maintenance Review Board Report (MRB-1928) Revision 4, dated January 14, 2010, with the thresholds and intervals stated in that document. 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 within 600 flight cycles after revising the ALS, 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 190 Maintenance Review Board Report (MRB-1928) Revision 4, dated January 14, 2010, observing for each task, the pre and post-mod condition, 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).