



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2009-04-01

Effective Date: 29 Apr. 2009

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. 2009-04-01 - EMBRAER - Amendment 39-1264.

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.

CANCELLATION / REVISION:

Not applicable.

REASON:

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

Failure to inspect these components according to the new tasks, thresholds and intervals, could prevent a timely detection of fatigue cracks. Undetected fatigue cracks in these areas could adversely affect the structural integrity of these airplanes.

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:

Updating of the airplane approved maintenance program according to the Maintenance Review Board Report (MRBR).

COMPLIANCE:

Required as indicated below, unless already accomplished.

- (a) Within the next 90 days after the effective date of this AD, modify the airplane approved maintenance program to include the tasks according to the table below. These tasks are listed on Temporary Revisions (TR) 4-1, dated 15 Oct. 2007; TR 4-3, dated 15 Jan. 2008; and TR 4-4, dated 18 Jan. 2008 of the Embraer 170 MRB Report (MRB-1621), or further MRBR revisions approved by ANAC, with the thresholds and intervals stated at these documents.
- (b) The initial compliance time starts from the applicable threshold times and the repetitive inspections must be accomplished thereafter at the interval specified in the correspondent tasks of the MRBR, observing for each task, the pre and pos-mod condition of the associated service bulletin, if applicable.
- (c) In case the airplane has exceeded the new thresholds after accomplishment of paragraph (a), the expired tasks must be accomplished within the next 500 Flight Cycles (FC) after the effective date of this AD.

MRB TR	SUBJET	MRBR TASK NUMBER
TR 4-1	RAT COMPARTMENT, SUPPORT STRUCTURE AND CUTOUT STRUCTURE - INTERNAL	53-10-012-0002
		53-10-012-0003
	NOSE LANDING GEAR WHELL WELL METALLIC STRUCTURE	53-10-021-0005
		53-10-021-0006
TR 4-3	WING STUB SPAR 3 SIDE FITTING - INTERNAL	57-01-012-001
	WING UPPER SKIN PANNELS - EXTERNAL	57-10-010-0002
	FIXED TRAILING EDGE LOWER SKIN PANEL - EXTERNAL	57-50-002-0002
	FIXED TRAILING EDGE RIB 4A - EXTERNAL	57-50-005-0003
	FIXED TRAILING EDGE RIB 6 - INTERNAL	57-50-005-0004
TR 4-4	WING STUB MAIN BOX LOWER - INTERNAL	57-01-002-003

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

CONTACT:

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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).