



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2009-04-02

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. 2009-04-02 - EMBRAER - Amendment 39-1265.

APPLICABILITY:

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

CANCELLATION / REVISION:

Not applicable.

REASON:

During ERJ 190 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) 2-5, dated 06 Dec. 2007; and TR 2-6, dated 12 Feb. 2008 of the Embraer 190 MRB Report (MRB-1928), 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 grace period specified on the table bellow counting from the effective date of this AD.

MRB TR	SUBJET	MRBR TASK NUMBER	GRACE PERIOD
TR 2-5	WING STUB MAIN BOX LOWER SKIN AND SPLICES - INTERNAL	57-01-002-0002	250 FC
	WING STUB SPAR 3 - INTERNAL	57-01-008-0003	500 FC
	WING STUB SPAR 3 - EXTERNAL	57-01-008-0004	500 FC
	WING LOWER SKIN PANEL STRINGERS - INTERNAL	57-10-007-0004	500 FC
	WING MAIN BOX RIB 11 - INTERNAL	57-10-012-0003	500 FC
TR 2-6	NOSE LANDING GEAR WHEEL WELL METALLIC STRUCTURE	53-10-021-0004	500 FC

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

For acquisition, contact:

National Civil Aviation Agency (ANAC)
Publications Branch
Av. Presidente Vargas, 850 – 13º andar - Centro
Fax: (21) 3501-5467
20.071-001 - Rio de Janeiro - RJ
E-mail: publicacoes@anac.gov.br

APPROVAL:

ADEMIR ANTÔNIO DA SILVA
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).