



**AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL**

## **BRAZILIAN AIRWORTHINESS DIRECTIVE**

**AD No.: 2023-12-01**

**Effective Date: 15 Dec. 2023**

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. 2023-12-01 - EMBRAER / 39-1538.**

#### **APPLICABILITY:**

(a) This Airworthiness Directive (AD) is applicable to Embraer S.A. airplanes, models ERJ 170-100 LR, ERJ 170-100 SE, ERJ 170-100 STD, ERJ 170-100 SU, ERJ 170-200 LR, ERJ 170-200 STD, ERJ 170-200 SU and ERJ 170-200 LL with manufacturer serial numbers 17000002, 17000004 through 17000013, and 17000015 through 17000948, inclusive, in operation.

**NOTE 1:** Airplanes with an original airworthiness certificate or original export certificate of airworthiness issued on or after July 14th, 2023 must comply with the airworthiness limitations specified as part of the airworthiness certification of those airplanes, or in accordance with operations specifications approved under “Regulamento Brasileiro da Aviação Civil” (RBAC) 121 or 135, or an inspection program approved under paragraph 91.409(e) of “Regulamento Brasileiro da Aviação Civil” (RBAC) 91.

**NOTE 2:** This AD requires revisions to certain operator maintenance documents to include new inspections or modification to the existing ones and its respective thresholds and intervals. Compliance with these inspections is required by RBAC 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 inspections described in the revisions. In this situation, to comply with RBAC 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (d) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure.

#### **CANCELLATION / REVISION:**

This AD cancels and supersedes the AD 2022-02-01-EMBRAER / 39-

1489, dated 09 Feb. 2022, the AD 2010-10-01-EMBRAER / 39-1322, dated 27 Oct. 2010, the AD 2009-04-01-EMBRAER / 39-1264, dated 29 Apr. 2009, and the AD 2005-03-02R1-EMBRAER / 39-1239, dated 11 Aug. 2008, and is being issued to alter the airworthiness limitations of the airplanes listed on the paragraph (a) of this AD.

**REASON:**

This AD was prompted by a new revision to the airworthiness limitations of the Maintenance Review Board Report.

Failure to inspect structural components, according to the new or revised tasks, thresholds and intervals, addressed in the Airworthiness Limitation Inspections (ALI) could prevent a timely detection of fatigue cracking. These cracks, if not properly addressed, could adversely affect the structural integrity of the airplane.

In addition, Airworthiness Limitations associated with Certification Maintenance Requirements – CMR, Fuel System Limitations Items – FSL, and Life Limited Items – LLI are mandatory for continued airworthiness. Failure to accomplish these instructions could result in an unsafe condition.

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:**

This AD requires revision to the maintenance or inspection program, as applicable, to incorporate the applicable Airworthiness Limitations (Certification Maintenance Requirements, Airworthiness Limitation Inspections, Fuel System Limitation Items, and Life Limited Items).

**COMPLIANCE:**

**(b) Revision of maintenance program**

(1) Within three months after the effective date of this AD, revise the maintenance program by incorporating the information in Part 1, Certification Maintenance Requirements, Part 2, Airworthiness Limitation Inspections - Structures, Part 3, Fuel System Limitation Items, and Part 4, Life Limited Items, of Appendix A, Airworthiness Limitation, of the Embraer 170 and 175 Maintenance Review Board Report, MRB 1621, Revision 19, dated July 14th, 2023.

(2) The compliance times depend on the airplane configuration, and the pre-modification and post-modification conditions specified in Part 1, Certification Maintenance Requirements, and in Part 2, Airworthiness Limitation Inspections – Structures, of Appendix A, Airworthiness Limitations, of the Embraer 170 and 175 Maintenance Review Board (MRB) Report, MRB 1621, Revision 19, dated July 14th, 2023.

(3) For the initial compliance times for the new inspections and intervals incorporated by this AD, the information stated on the Paragraph 2 - "Implementation Plan" of the Appendix A, Airworthiness Limitation, of the Embraer 170 and 175 Maintenance Review Board (MRB) Report, MRB 1621 Revision 19, dated July 14th, 2023, may be taken into consideration. For the purposes of this AD, the initial compliance times (identified as "Threshold" or "T" in the service information) are expressed in "total flight cycles" or in "total flight hours" as applicable.

**NOTE:** The inspections and intervals specified by the EAD 2022-05-02 shall be kept for the aircraft listed on that EAD.

**(c) Alternative actions and intervals**

After accomplishing the actions required by paragraph (b) of this AD, no

alternative inspections or inspection intervals may be used unless the alternative inspection or interval is published in revisions approved by ANAC of the MRB-1621 which are subsequent to Revision 19, dated July 14th, 2023, or approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (d) of this AD.

**(d) Alternative Methods of Compliance (AMOC)**

A different method or a different compliance time, with the requirements of this AD, may be used if approved by the Manager of the Continuing Airworthiness Technical Branch (GTAC) of ANAC.

**(e) Material incorporated by reference**

You must use the Appendix A, Airworthiness Limitations, of the Embraer 170 and 175 Maintenance Review Board Report, MRB 1621, Revision 19, dated July 14th, 2023, to do the actions required by this AD, unless the AD specifies otherwise.

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

**CONTACT:**

For additional technical information, contact:

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**APPROVAL:**

Original in Portuguese language available at the Continuing Airworthiness Technical Branch (GTAC) of the National Civil Aviation Agency (ANAC). Signed by:

**ROBERTO JOSÉ SILVEIRA HONORATO**

Head of Department  
Department of Airworthiness (SAR)  
ANAC