



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2023-12-02

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. 2023-12-02 - EMBRAER / 39-1539.

APPLICABILITY:

(a) This Airworthiness Directive (AD) is applicable to Embraer S.A. airplanes, models ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-100 ECJ, ERJ 190-100 SR, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200 IGW with manufacturer serial numbers 19000002, 19000004, 19000006 through 19000213, 19000215 through 19000276, 19000278 through 19000466, 19000468 through 19000525, 19000527 through 19000776, inclusive, in operation..

NOTE 1: Airplanes models 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 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: Airplanes models ERJ 190-100 ECJ with an original airworthiness certificate or original export certificate of airworthiness issued on or after October 31st, 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 3: 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 2019-05-02-EMBRAER / 39-1441, dated May 2nd, 2019, 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 Limitation 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

Within three months after the effective date of this AD, revise the maintenance or inspection program, as applicable, to incorporate the applicable Certification Maintenance Requirements, Airworthiness Limitation Inspections, Fuel System Limitation Items, and Life Limited Items in paragraph (b)(1), or (b)(2) of this AD.

(1) For 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: Incorporate 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 190/195 Maintenance Review Board Report, MRB 1928, Revision 17, dated July 14th, 2023.

(i) 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 190/195 Maintenance Review Board Report, MRB 1928, Revision 17, dated July 14th, 2023.

(ii) 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 190 / 195 Maintenance Review Board Report, MRB 1928, Revision 17, 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

(2) For model ERJ 190-100 ECJ airplanes: Incorporate 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 ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 12, dated October 31st, 2023.

(i) 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 ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 12, dated October 31st, 2023.

(ii) 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 ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 12, dated October 31st, 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, intervals and definitions specified by the paragraph (c) of the AD 2022-12-01 shall be kept for the aircraft listed on that AD.

(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-1928 which are subsequent to Revision 17, dated July 14th, 2023, for aircraft models 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, or in revisions approved by ANAC of the MPG-2928 which are subsequent of revision 12, dated October 31st, 2023, for aircraft model ERJ 190-100 ECJ, 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 these information as applicable to accomplish the actions required by this AD, unless this AD specifies otherwise:

(1) Appendix A, Airworthiness Limitations, of the Embraer 190/195 Maintenance Review Board Report, MRB-1928, Revision 17, dated July 14th, 2023.

(2) Appendix A, Airworthiness Limitations, of the Embraer ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 12, dated October 31st, 2023.

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

CONTACT:

For additional technical information, contact:

National Civil Aviation Agency (ANAC)

Continuing Airworthiness Technical Branch (GTAC)

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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

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SUPERSEDED