AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

[CORRECTED on 1 Jul. 2019]

AD No.: 2019-05-02 **Effective Date: 2 May 2019**

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. 2019-05-02 - EMBRAER / 39-1441.

APPLICABILITY:

This Airworthiness Directive (AD) is applicable to Embraer S.A. airplanes model 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 19000758, inclusive, in operation.

Note (1): Airplanes with an original airworthiness certificate or original export certificate of airworthiness issued on or after September 27, 2018 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 de Homologação Aeronáutica" (RBHA) 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 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 inspections described in the revisions. In this situation, to comply with RBHA 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (c) 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 No. 2016-04-01 / 39-1397, dated 04 Apr. 2016, and is being issued to alter the airworthiness limitations.

REASON:

This AD was prompted by a new revision to the airworthiness limitations of the Maintenance Review Board Report. This AD is being issued to ensure that fatigue cracking of principal structural elements is detected and corrected. Such fatigue cracking could adversely affect the structural integrity of these airplanes.

REQUIRED ACTION:

This AD requires revision to 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.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(a) 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 (a)(1), or (a)(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 12, dated September 27, 2018.

(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 12, dated September 27, 2018.

(ii) The initial compliance time (threshold) for the new inspections incorporated by this AD is within the applicable times specified in Part 1, Certification Maintenance Requirements, and in Part 2, Airworthiness Limitation Inspections - Structures of Appendix A, Airworthiness Limitation, of the Embraer 190 / 195 Maintenance Review Board Report, MRB 1928, Revision 12, dated September 27, 2018, or within 600 flight cycles after the effective date of this AD, whichever occurs later. 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 8, dated October 10, 2018.

(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 8, dated October 10, 2018.

(ii) The initial compliance time (threshold) for the new inspections incorporated by this AD is within the applicable times specified in Part 1, Certification Maintenance Requirements, and in Part 2, Airworthiness Limitation Inspections - Structures of Appendix A, Airworthiness Limitation, of the Embraer ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 8, dated October 10, 2018, or within 600 flight cycles after the effective date of this AD, whichever occurs later. 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.

(b) No alternative actions and intervals

After accomplishment of the revisions required by paragraph (a) of this AD, no alternative actions or intervals may be used unless the alternative action or interval is published in revisions approved by ANAC of the MRB-1928 which are subsequent to revision 12, dated September 27, 2018, for 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 airplanes, or published in revisions approved by ANAC of the MPG-2928 which are subsequent to revision 08, dated October 10, 2018, for model ERJ 190-100 ECJ airplane, or approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (c) of this AD.

(c) 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 General Manager of ANAC's Aeronautical Product Certification Branch (Gerência-Geral de Certificação de Produtos Aeronáuticos – GGCP). The AMOC approval letter must specifically reference this AD.

(d) Material incorporated by reference

You must use this service information as applicable to do 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 12, dated September 27, 2018.

(2) Appendix A, Airworthiness Limitations, of the Embraer ERJ 190-100 ECJ Maintenance Planning Guide, MPG-2928, Revision 8, dated October 10, 2018.

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)
Rua Laurent Martins, nº 209, Jardim Esplanada
CEP 12242-431 – São José dos Campos - SP, BRAZIL.
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APPROVAL:

MÁRIO IGAWA
General Manager
GGCP

ROBERTO JOSÉ SILVEIRA HONORATO
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).

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BRAZILIAN AIRWORTHINESS DIRECTIVE

ERRATA

AD No: 2019-05-02 **Effective Date: 1 Jul. 2019**

AD No. 2019-05-02 - EMBRAER / 39-1441.

This Errata is issued to correct a printing error in the original English version of this Airworthiness Directive. The information in the last 2 lines of paragraph (a)(1)(ii) and in the last 2 lines of paragraph (a)(2)(ii) in the item COMPLIANCE was accidentally partially omitted; it shall read as follows:

COMPLIANCE:

(a) Revision of maintenance program

(1) ...

(i) ...

(ii) ... within 600 flight cycles after the effective date of this AD, whichever occurs later. 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) ...

(i) ...

(ii) ... within 600 flight cycles after the effective date of this AD, whichever occurs later. 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.

Please modify the original AD text and attach this Errata to it.

APPROVAL:

MÁRIO IGAWA
General Manager
GGCP

ROBERTO JOSÉ SILVEIRA HONORATO
Airworthiness Superintendent

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).