



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2016-04-02

Effective Date: 04 Apr. 2016

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. 2016-04-02 - EMBRAER / 39-1398.

APPLICABILITY:

(a) This AD applies to Embraer S.A. Model EMB-500, and EMB-505 airplanes; all serial numbers.

CANCELLATION / REVISION:

Not applicable.

REASON:

(b) This AD results from a determination of an error in the Optimized Performance Analyzer (OPERA) software that occurs when Non EU-OPS-1 option as Operation Type, and Airport Analysis option as Calculation Type, are selected for calculating the landing weight. When this combination of options are selected the calculated landing weight limited by the runway length may be greater than the actual allowed landing weight. This may lead the airplane to overrun off the runway.

REQUIRED ACTION:

Inspection of the OPERA Software Configuration and Airplane Flight Manual (AFM) Limitations section revision.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(c) Within 30 days after the effective date of this AD, inspect the Performance Section of the EMB-500 or EMB-505 Airplane Flight Manual (AFM), as applicable, to determine which OPERA Software Configuration and version applies to your airplane.

Table 1 – Affected OPERA software configuration and versions

Airplane	Software configuration and versions
EMB-500	OP500EA617FE version 12.0, version 12.1, version 12.2, version 12.3 and version 12.4
EMB-505	OP505EA535E version 8.0, version 8.1, version 9.0, version 9.1, version 11.0 and version 11.1

(d) Before further flight after accomplishing the actions required by paragraph (c) of this AD, if the OPERA software configuration and version that applies to your airplane is identified in Table 1 of this AD, revise the Limitations section of the AFM by incorporating the following limitation:

Optimized Performance Analyzer (OPERA) software

Do not use the following combination of options:

**Operating Type: non EU-OPS-1
Calculating Type: Airport Analysis**

Instead of the above combination, you must use:

**Operating Type: non EU-OPS-1
Calculating Type: Given Weight**

(e) The actions required by paragraph (d) of this AD may be done by inserting a copy of Embraer Operational Bulletin (OB) 500-001/16, original issue, dated March 07, 2016, or Embraer OB 505-001/16, original issue, dated March 12, 2016, as applicable, into the Limitations section of the AFM.

(f) When a new version of the affected OPERA Software configuration has been included in a general revision of the AFM and inserted in the AFM, the limitation imposed by this AD may be removed from the AFM.

(g) You must use Embraer S.A. OB 500-001/16, original issue, dated March 07, 2016, or Embraer OB 505-001/16, original issue, dated March 12, 2016, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

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).