



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2023-04-01

Effective Date: 04 Apr. 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. 2023-04-01 - EMBRAER / 39-1516.

APPLICABILITY:

(a) This Airworthiness Directive (AD) applies to Embraer S.A. airplanes model EMB-505 equipped with Garmin G3000 avionics system, as specified in Embraer Service Bulletin (SB) No.505-31-0023, Revision 02, dated July 12, 2018.

CANCELLATION / REVISION:

Not applicable.

REASON:

It has been found the occurrence of barometric pressure setting inadvertently changed with no input from the flight crew. When synchronization of the barometric pressure setting is enabled, it may occur a change in the altimeter values on both Primary Flight Displays (PFD) of the airplane without an adequate input for the flight crew. An erroneous altitude information presented on both PFD, may result in altitude mismanagement or spatial disorientation of the flight crew, with consequent deviation from the intended altitude and risk of loss of the airplane control, risk of air collision due to an inadequate air traffic separation, or risk of a Controlled Flight Into Terrain (CFIT).

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:

Installation of a new version of the airplane avionics system software.

COMPLIANCE:

Required as indicated below, unless already accomplished.

(b) Software update.

For airplanes identified in paragraphs **(a)** of this AD, within the next 6 months or 300 FH, whichever occurs first, after the effective date of this AD, install the G3000 Load 18.10 avionics system software with P/N 006-B1633-16, the CMC Load 5.20 software with P/N 505-44876-251 and the Default Pilot Profile files with P/N 505-44799-251, as applicable, or applicable higher versions approved by ANAC.

(c) Credit for previous actions.

This paragraph provides credit for the actions specified in paragraph **(b)** of this AD, if those actions were performed before the effective date of this AD using Embraer Service Bulletin (SB) No. 505-31-0023, Original Revision, dated March 01, 2018, or Embraer Service Bulletin (SB) No. 505-31-0023, Revision 01, dated April 17, 2018.

(d) Alternative methods of compliance (AMOCs).

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 Embraer Service Bulletin (SB) No. 505-31-0023, Revision 02, dated July 12, 2018, as applicable; or further revisions approved by ANAC, to do the actions required by this AD, unless this 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:

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NOTA: Original in Portuguese language signed and available in the files of the Continuing Airworthiness Technical Branch (GTAC) of the National Civil Aviation Agency (ANAC).