

# AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

## BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2022-02-02 Effective Date: 23 Feb. 2022

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. 2022-02-02 - EMBRAER / 39-1490.

#### **APPLICABILITY:**

(a) This Airworthiness Directive (AD) applies to Embraer S.A. model EMB-545 airplanes which have incorporated the Embraer Service Bulletin N. 550-00-0011, original issue, dated December 20, 2019, or further revisions, or the airplanes having an equivalent factory-incorporated modification.

**NOTE**: The airplanes models EMB-545 which have incorporated the Embraer Service Bulletin N. 550-00-0011, original issue, dated December 20, 2019, or further revisions, which includes those ones having an equivalent factory-incorporated modification, are also known under the marketing designation "Praetor 500".

### **CANCELLATION / REVISION:**

Not applicable.

## **REASON:**

An error has been detected in the airplane TAKEOFF CONFIG WARNING logic, which precludes the system to sound an aural alert for the flight crew in the event the pitch trim is in a position that would not allow a safe takeoff (positioned out of the GREEN BAND indication). The lack of reliable takeoff configuration warning with a possible misconfigured airplane may result in loss of airplane controllability.

Since this condition may occur in other airplanes 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 software version of Engine Indication and Crew Alert System (EICAS).

## **COMPLIANCE:**

Required as indicated below, unless already accomplished.

#### (b) Software update.

For airplanes identified in paragraphs (a) of this AD, before they log 1200 Flight Hours (FH) or within the next 12 months after the effective date of this AD, whichever occurs first; install the software EICAS Flex version 3.3 or higher versions. For the installation of software version 3.3 of EICAS Flex, install it according to the detailed instructions and procedures contained in the Embraer Service Bulletin N. 550-42-0014, original issue, dated February 26, 2021, or further revisions approved by the ANAC. For higher software versions, use the applicable Service Bulletin recommended by the manufacturer.

## (c) 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 Technical Manager of Continuing Airworthiness (GTAC) of ANAC.

## (d) Material incorporated by reference.

For the software version 3.3 of EICAS Flex installation, you must use the Embraer Service Bulletin N. 550-42-0014, original issue, dated February 26, 2021, or further revisions approved by the ANAC.

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

#### **CONTACT:**

For additional technical information, contact:

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#### **APPROVAL:**

# ROBERTO JOSÉ SILVEIRA HONORATO

Head of Department
Department of Airworthiness
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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).

**Referência:** Processo nº 00066.012112/2021-81 SEI nº 6803955