



AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL - BRAZIL

BRAZILIAN AIRWORTHINESS DIRECTIVE

AD No.: 2024-05-04

Effective Date: 21 Jul. 2024

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. 2024-05-04 - (BOEING) / 39-1555.

APPLICABILITY:

(a) This Airworthiness Directive (AD) applies to BOEING airplanes models 777-200, 777-300ER, all serial numbers.

CANCELLATION / REVISION:

Not applicable.

REASON:

The reason for this AD is the finding of potential interference in radio altimeters from wireless broadband operations in the 3,300 MHz to 3,700 MHz frequency band (5G C-Band). As a result of this interference, certain airplane systems may not properly function, such as the pitch control laws, including those that provide tail strike protection. Anomalies in radio altimeters caused by interference, such as missing or erroneous radio altimeter data, in combination with multiple flight deck effects, could lead to loss of continued safe flight and landing.

Since this condition may occur in other airplanes and affects flight safety, corrective action is required. Thus, sufficient reason exists to mandate compliance with this AD in the indicated time limit.

REQUIRED ACTION:

Airplane Flight Manual (AFM) Revision

COMPLIANCE:

Required as indicated below, unless already accomplished.

(b) Airplane Flight Manual Revision

(1) For airplanes identified in paragraph **(a)** of this AD, that do not meet

the criteria for a “radio altimeter tolerant aircraft”, as established by PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it, within 10 days after the effective date of this AD, revise the Limitations Section of the existing AFM to include the following information:

Approaches and Landings in the Presence of Radio Altimeter 5G C-Band Interference

Due to the presence of 5G C-Band wireless broadband interference, dispatching or releasing to airports, and approaches or landings on runways, in the Brazilian airspace is prohibited.

NOTE 1: The AFM alteration required by this AD may be accomplished by inserting a copy of this AD into the Aircraft Flight Manual.

NOTE 2: For this AD, a “radio altimeter tolerant aircraft” is the one for which ANAC accepts that the combination airplane-radio altimeter is sufficient to demonstrate tolerance to the limits specified in PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it.

(2) For airplanes identified in paragraph **(a)** of this AD, that are defined as “radio altimeter tolerant aircraft”, according to the established by PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it, no action is required by this paragraph **(b)**.

(c) Terminating Action to the AFM Revision

Modification of a “non-radio altimeter tolerant aircraft” to a “radio altimeter tolerant aircraft”, according to PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it, terminates the limitations required by paragraph **(b)(1)** of this AD. After modification to a “radio altimeter tolerant aircraft”, according to PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it, remove the AFM revision required by paragraph **(b)(1)** of this AD.

(d) Compliance with PORTARIA N° 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it.

For the purpose of this AD, the acceptance of the combination airplane - radio altimeter as a “radio altimeter tolerant aircraft” depends on evidence provided to demonstrate the tolerance limits established in PORTARIA No. 14.318/SAR, de 10 de abril de 2024, or further Portaria that supersedes it. These data should be submitted to ANAC through the e-mail 5g@anac.gov.br. The acceptance by ANAC of the airplane-radio altimeter combination as "radio altimeter tolerant aircraft" will be indicated through an ANAC Ofício to the operator or manufacturer, or an ANAC Portaria listing the configurations accepted by ANAC as "radio altimeter tolerant aircraft".

(e) Alternative methods of compliance (AMOCs).

A different method or a different compliance time from the requirements of this AD may be used if approved by the Manager of the Continuing Airworthiness Technical Branch (GTAC) of ANAC.

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).

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