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The ASO contains relevant operational safety information and may contain recommendations for actions to be taken by operators. However, even if a recommendation is published in an ASO, an alternative action can be as efficient or more efficient for the specific case of each operator and its particularities. The contents of this document are not subject to regulatory enforcement and are not intended to bind the public.

Start of operation of the 5G signal in Brazil.

This ASO provides alert information to the civil aviation community (mainly owners, aircraft operators and crews) about the start of 5G signal operation in Brazil.

Background

Since early 2021, ANAC has been aware of international studies regarding the risk of 5G signal interference in radio altimeter equipment and its potential effects on aircrafts. In May 2021, ANAC (Brazilian National Civil Aviation Agency) started interactions with ANATEL (Brazilian National Telecommunication Agency) seeking a common understanding about the necessary mitigations for the Brazilian scenario, in order to guarantee safe coexistence between Aeronautical Radionavigation services and the Personal 5G Mobile Service in C Band.

ANAC has been working together with ANATEL since then, having also interacted on this matter with civil aviation and telecommunications authorities of other countries, in addition to aircraft manufacturers and air operators.

An evaluation to release the 5G signal operation in Brazil was conducted and resulted in limitations on the installation of 5G stations on a preventive basis, to be applied in regions close to some aerodromes, as specified in Act No. 9064 June 28, 2022, from ANATEL.

According to information from ANATEL, the base stations will begin operate the 5G signal on early July 2022, starting in Brasília (DF) and then expanding to the other state capitals in Brazil.

The present subject continues to be an object of study and discussion. Thus, ANAC will continue to monitor its development together with ANATEL. Nevertheless, the joint understanding of ANAC and ANATEL is that the limitations imposed by ANATEL's Act No. 9064, of June 28, 2022, are sufficient to mitigate the risks of interference identified in the Brazilian scenario, according to the current data available.
### ANAC Recommendations

Although all preventive measures deemed necessary have been taken, ANAC recommends to all aircraft operators, owners and pilots:

- Report to ANAC via e-mail pac@anac.gov.br if there is suspicion of interference with the aircraft’s radio altimeter equipment, during operation, especially at low height, which may be related to 5G signal operation, including in the report as much information as possible regarding the location of the event's occurrence, as well as the perceived effects on the aircraft.

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