



MITIGATION MEASURES IMPLEMENTED IN THE CAR REGION DUE TO THE INSTALLATION OF 5G TECHNOLOGY EQUIPMENT

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RADIOALTIMETER

- ✈ *The radio altimeter is a mandatory critical aircraft safety system used to determine the height of an aircraft above the ground. Its information is essential to enable various safety-related flight operations and navigation functions on all commercial aircraft, as well as a wide range of other civil aircraft. Such functions and systems include terrain awareness, aircraft collision avoidance, wind shear detection; flight controls and functions to automatically land an aircraft. If not adequately mitigated, harmful interference to radio altimeter operation during any phase of flight can pose a serious risk to the security of passengers, crew and those on the ground.*



MITIGATION MEASURES

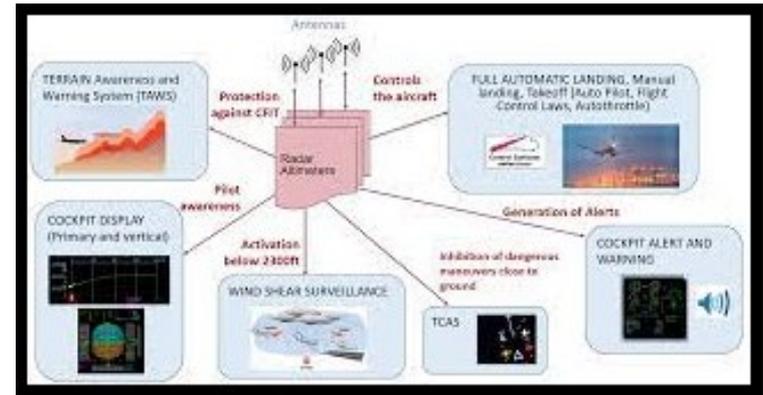
✈ Some States have coordinated within the State with the different organizations (airports, spectrum regulators, telecommunications companies, among others) with the aim of:

- ✈ Performs an analysis of operations at different airports due to the implementation of 5G technology.
- ✈ Works jointly with its national organizations that manage the assignment of frequencies.
- ✈ Works jointly with the local telecommunications companies responsible for the implementation of 5G technology and in the same way with the air operators.
- ✈ Applies the necessary palliative measures as soon as possible.



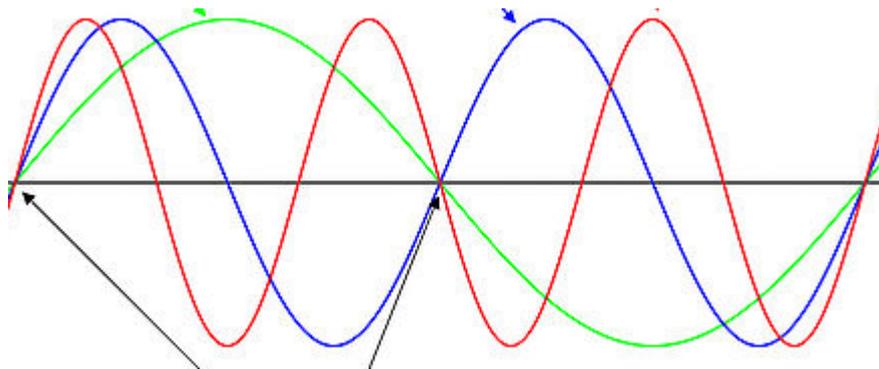
MITIGATION MEASURES

- ✈ Establish frequency separation between terrestrial mobile services on frequencies allocated in the State for 5G and radio altimeters to ensure that there will be no interference between the operation of the two services.



MITIGATION MEASURES

- ✈ National monitoring mechanisms to ensure:
 - ✈ A correct analysis of the impact of the implementation of 5G technology at airports.
 - ✈ Implementation of mitigating measures, according to the analysis carried out.
 - ✈ Establish a mechanism for continuous monitoring of the implemented actions.



- ✈ If states fail to implement mitigation measures, they run the risk of:
 - ✈ Limitation/suspension of precision approach and landing capabilities: this limitation/suspension will reduce airline access to airports in low visibility conditions.
 - ✈ Limitation/suspension of night operations, particularly for airports with challenging terrain. - The radio altimeter is critical for terrain awareness and warning system, which is mandatory for all air transport aircraft.
 - ✈ Lack of State regulations issuance requiring modifications and recertification of aircraft radio altimeters and other related functions



Conclusion

- ✦ It is crucial that all States in the NAM/CAR/SAM regions complete the analysis and implementation of mitigation measures that are appropriate to their operations.



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