European Union Aviation Safety Agency

FAQ n.95259

FAQs:

Cargo Tracking Devices

Question:

What are the differences between the three different methods of AMC1 CAT.GEN.MPA.140 (d)(3)? Does my device need to deactivate the radio functions in flight?

Answer:

Method (i) is an aircraft type-specific safety assessment and relies on an appropriate design assurance level of the cargo tracking device. It is seldom used in practice.

Method (ii) takes credit from the HIRF certification of aircraft to mitigate the risk associated to backdoor interferences. This is the method to follow to authorise cargo tracking devices using GSM/3G/LTE technologies. The various conditions are detailed in the AMC, the main one being the presence of an automated radio suspension in flight. The absence of front door interferences should be demonstrated by showing compliance with DO-160() Section 21 Cat. H criteria and by the use of (EN) compliant transmitters.

Method (iii) is dedicated to devices with low-powered emissions (EIRP < 100 mW). Those devices do not require a radio suspension in flight, since it is considered that the risk of backdoor interferences can be neglected. However, as they will be active in all phases of flight, a successful DO-160() Section 21 Cat. H evaluation is still needed.

Criteria regarding device maintenance and lithium batteries (paragraphs (e) and (f)) apply independently from the chosen EMI method.

Last updated:

09/04/2019

Link:

https://www.easa.europa.eu/en/faq/95259