

U.S. Department of Transportation

Federal Aviation Administration Aviation Safety Aircraft Certification Service Compliance & Airworthiness Division Operational Safety Branch 10101 Hillwood Pkwy Fort Worth, TX 76177

March 24, 2022

In Reply Refer To: 720-22-4786

Mr. Eduardo Sanches Cerdeira Airworthiness Manager Embraer S.A. Av. Brigadeiro Faria Lima, 2170 12227-901 – S.J. sis Campos – SP Brazil

Reference: GVI-0012/2022, dated March 17, 2022

Subject: Approval of Alternative Method of Compliance (AMOC) to Airworthiness Directive (AD) 2021-23-12

Dear Mr. Cerdeira:

The Federal Aviation Administration (FAA) has received your letter referenced above, proposing an AMOC to paragraph (g) of AD 2021-23-12. That AD requires updating the Airplane Flight Manual to prohibit certain operations requiring radio altimeter in the presence of 5G C-Band interference as identified by Notices to Air Missions (NOTAMs).

The enclosed list of cleared airports/runways is derived from using a rectangle that is defined by a length that is 2 nautical miles beyond each end of the runway, and a width that is 1.25 nautical miles centered on the runway centerline. This applies to airports listed in the Aerodrome NOTAM current as of the date of the 5G Cleared Airport Runway List 720-22-4786-RL, Rev 0, dated March 24, 2022, or later FAA Approved Revision, considering the radio altimeter variable protection radius.

Your proposal provides an acceptable level of safety, since the test data you submitted for certain radio altimeters demonstrates that these radio altimeters can accurately perform their intended function when operating beyond a certain variable protection radius around 5G C-Band transmitters. The FAA has used your test substantiated radio altimeter protection radius in conjunction with the runway protection areas to generate the list of runways that your aircraft, equipped with certain radio altimeters, can safely operate at because the susceptibility to interference from 5G C-band emissions has been minimized.

The Manager of the Operational Safety Branch approves your proposal to allow operation of the Embraer S.A. Model airplanes in the following table equipped with the Honeywell Aerospace KRA-405B radio altimeters to the airports and runways listed in the attached addendum as an AMOC to paragraph (g) of AD 2021-23-12 in areas identified by NOTAMs.

Aircraft Make: Embraer S.A. Aircraft Model: (See Note 1)	Radio Altimeter Manufacturer	Radio Altimeter Model	Radio Altimeter Part Number (See Note 2)
EMB-505	Honeywell Aerospace	KRA-405B	066-01153-0101
Note 1: All Embraer S.A. commercial derivative models with KRA-405B certification. Note 2: Approval only applicable to radio altimeter part numbers listed.			

In accordance with FAA Order 8110.103B, the following limitations apply to this AMOC:

- 1. All provisions of AD 2021-23-12 that are not specifically referenced above remain fully applicable and must be complied with accordingly.
- 2. This approval is applicable only to the model of airplanes and radio altimeters listed above.
- 3. This FAA AMOC is transferable with the aircraft to another owner/operator.
- 4. Before using this AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local Flight Standards District Office/Certificate Holding District Office.
- 5. This AMOC only applies to the FAA AD listed above. The FAA does not have the authority to approve this as an AMOC to any AD issued by another civil aviation authority (CAA). Approval of an AMOC to another CAA's AD must come from that CAA. A copy of this response will be forwarded to the CAA where these aircraft are registered for their consideration.
- 6. This approval is not time limited. However, this approval references an addendum that is time limited and is not applicable after the expiration date. Refer to 5G Cleared Airport Runway List 720-22-4786-RL, Rev 0, dated March 24, 2022, or later FAA Approved Revision, for a list of airports and runways and for the expiration date.

- 7. This approval does not affect other airplane operating limitations not addressed in the AD referenced above.
- 8. This AMOC approval and the referenced addendum is subject to change and may be rescinded at any time.

If you have any questions, or need additional information, please contact Brett Portwood, Continued Operational Safety Technical Advisor, by telephone at (562) 627-5350, or by email at brett.portwood@faa.gov.

Sincerely,

Michael Linegang Manager, Operational Safety Branch Compliance & Airworthiness Division Aircraft Certification Service

cc: Kathleen Arrigotti, AIR-731A: kathleen.arrigotti@faa.gov SEA AED: 9-AVS-AFS-100
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Enclosure: 720-22-4786-RL, Rev 0