



Federal Aviation Administration

Memorandum

Date: August 26, 2015

To: Manager, International Branch, ANM-116

From: Manager, Transport Airplane Directorate, ANM-100

Prepared by: Jayson Claar, ANM-115

Subject: INFORMATION: The Type II Emergency exit marking located on the left side of the Embraer Model EMB-550 and EMB-545 airplanes, FAA Project # TC0717IB-T and AT10256IB-T

ELOS Memo#: TC0717IB-T-C-9

Regulatory Ref: § 25.811(e)(4)

Revision Description: The FAA revised the memo to add the Embraer Model EMB-545.

This memorandum informs the certificate management aircraft certification office of an evaluation made by the Transport Airplane Directorate (TAD) on the establishment of an equivalent level of safety (ELOS) finding for the Embraer Model EMB-550 and EMB-545 airplanes.

Background

The Embraer Model EMB-550 airplane is designed for a maximum of 12 passengers (including toilet seat) and the Model EMB-545 for 9 passengers (including the toilet seat). The interior configuration presents a Type II emergency exit, which is located at the front of the cabin on the left hand side. Title 14, Code of Federal Regulations (14 CFR) section 25.811(e)(4) requires the motion of the rotary handle of the exit door to be in same plane as the door, this is not the case for this configuration. The handle rotary motion of the exit door is not in the same plane as the door.

Applicable regulation(s)

§ 25.811

Regulation(s) requiring an ELOS finding

§ 25.811(e)(4)

Description of compensating design features or alternative standards which allow the granting of the ELOS finding (including design changes, limitations or equipment need for equivalency)

Compensating factors which Embraer believes provides an ELOS to the requirements § 25.811(e)(4) are summarized as follows:

The Model EMB-550 and EMB-545 entry door opening handle is located on the forward side of the exit and its motion is such that the handle runs along the aft surface of the forward left hand side wardrobe. It is this wardrobe surface to which the handle markings will be affixed, using the same arrow dimensions, colors, and placarding as required in § 25.811(e)(4).

Explanation of how design features or alternative standards provide an ELOS to that intended by the regulation

Entry door opening handle markings appropriate to this type of handle, in the same plane as the handle’s rotary motion, and in the same format as markings required by § 25.811(e)(4) meet the intent of the requirements of § 25.811(e)(4).

FAA approval and documentation of the ELOS finding

The FAA has approved the aforementioned ELOS finding in project issue paper C-9, titled Emergency Exit Marking. This memorandum provides standardized documentation of the ELOS finding that is non-proprietary and can be made available to the public. The TAD has assigned a unique ELOS memorandum number (see front page) to facilitate archiving and retrieval of this ELOS. This ELOS memorandum number should be listed in the type certificate data sheet (TCDS) under the Certification Basis section in accordance with the statement below:

ELOS Findings have been made for the following regulation:
§ 25.811(e)(4) Emergency exit marking (documented in TAD ELOS Memo TC0717IB-T-C-9)

Original Signed by

Suzanne Masterson

August 26, 2015

Transport Airplane Directorate,
Aircraft Certification Service

Date

ELOS Originated by: Airframe & Cabin Safety Branch	Project Engineer: Jayson Claar	Routing Symbol: ANM-115
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