

SUBJECT : Class E Main Deck Cargo Compartment – Partial Liner Installation
REQUIREMENTS incl. Amdt. : CS 25.855(b)(1) at Amdt. 28
ASSOCIATED IM/MoC : Yes / No
ADVISORY MATERIAL :

M-TS-0000394 Issue: 1

Deviation

Class E Main Deck Cargo Compartment – Partial Liner Installation

1. APPLICABILITY

This Deviation is applicable to Large Aeroplanes in Freighter Configuration with a Class E Main Deck Cargo Compartment installed.

1.1 AFFECTED CS

CS 25.855(b)(1) at Amendment 28

1.2 PRE-CONDITIONS FOR APPLICATION OF THE DEVIATION

The design of the cargo compartment must be neither pressurized nor actively ventilated.

2. APPLICABLE ESSENTIAL REQUIREMENTS OF REGULATION (EU) 2018/1139

The following paragraphs of the “*Essential Requirements*” for Airworthiness as defined in Annex II of Regulation (EU) 2018/1139 are related to the CS identified in 1.1 for which a non-compliance exists:

Annex II – Essential Requirements for Airworthiness:

...

2. AIRWORTHINESS ASPECTS OF PRODUCT OPERATION

2.3. Product operations must be protected from hazards resulting from adverse external and internal conditions, including environmental conditions.

...

(b) Cabin compartments, as appropriate to the type of operations, must provide passengers with suitable transport conditions and adequate protection from any expected hazard arising in flight operations or resulting in emergency situations, including fire, smoke, toxic gases and rapid decompression hazards, taking into account the size and configuration of the aircraft. Provisions must be made to give occupants every reasonable chance of avoiding serious injury and quickly evacuating the aircraft and to protect them from the effect of the deceleration forces in the event of an emergency landing on land or water. Clear and unambiguous signs or announcements must be provided, as necessary, to instruct occupants in appropriate safe behaviour

and the location and correct use of safety equipment. Required safety equipment must be readily accessible;

3. STATEMENT OF DEVIATION

To address the non-compliance with the affected CS, the mitigating factors in chapter 4 shall be met. Compliance with the mitigating factors ensures compliance with the applicable essential requirements.

4. MITIGATING FACTORS

The following mitigating factors have been identified as alternative means to ensure compliance with the above identified essential requirements.

- a. As the Main Deck Cargo Compartment is neither pressurized nor actively ventilated, operations above 20.000 ft cabin altitude are by design equivalent to typical Class E oxygen starving procedure.
- b. It must be shown that, in the event of a cargo fire in the MDCC and where heat would not be shielded by a liner, sufficient structural integrity of the airframe until the aeroplane is landed and evacuated is demonstrated.
- c. Operational instructions and limitations must be developed by the Design Approval Holder aimed to ensure that no cargo items to be loaded/unloaded and carried in the MDCC may damage the aircraft structure.