



Airworthiness Directive

AD No.: 2016-0075R1

Issued: 24 March 2022

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301 or Annex Vb Part ML.A.301, as applicable, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303 or Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS DEFENCE & SPACE S.A.

Type/Model designation(s):

CN-235 aeroplanes

Effective Date: Revision 1: 07 April 2022
Original issue: 03 May 2016

TCDS Number(s): EASA.A.186

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2016-0075 dated 10 April 2016.

ATA 55 – Stabilizers – Elevator Hinge Fittings – Inspection

Manufacturer(s):

EADS-CASA, formerly Construcciones Aeronáuticas S.A.(CASA)

Applicability:

CN-235, CN-235-100, CN-235-200 and CN-235-300 aeroplanes, all manufacturer serial numbers.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: Airbus Defence & Space (D&S) Service Bulletin (SB) SB-235-55-0014C.

Reason:

Excessive play between bushings and their respective fitting housing was reported at Stabilizer Station (STA) 4850, affecting the outboard and inboard elevator hinge fittings and attachment fittings, and the horizontal stabilizer elevator linkage. Additionally, excessive misalignment was detected between the elevator hinge fittings and the elevator brackets during further analysis of the reported cases. Furthermore, an occurrence of an elevator hinge fitting crack was reported.

This condition, if not detected and corrected, could lead to failure or detachment of any of the affected structural parts, possibly resulting in reduced control of the aeroplane.



To address this potentially unsafe condition, Airbus D&S issued Alert Operator Transmissions (AOT) AOT-CN235-55-0001 Revision 2 and AOT-C295-55-0001 Revision 2 to provide inspection instructions to detect misalignment between the elevator hinge fittings and the elevator brackets. Additionally, Airbus D&S issued AOT-CN235-55-0003 and AOT-C295-55-0003 to provide inspection instructions to detect cracking of elevator hinge fitting and attachment fitting.

Consequently, EASA issued AD 2016-0075 to require, for CN-235 and C-295 aeroplanes, a one-time inspection of the elevator hinge fittings and the elevator brackets, repetitive inspections of elevator hinge fittings and attachment fittings, and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, it has been determined that modification of an aeroplane in accordance with the SB, as defined in this AD, allows termination of the repetitive inspections. Also, the elevator outer joint fitting has already been modified on all C-295 aeroplanes in civil configuration.

For the reason described above, this AD is revised to introduce an optional terminating action for the repetitive inspections of CN-235 aeroplanes, and to remove C-295 aeroplanes from the Applicability. This AD also includes editorial changes, not affecting the requirements, to introduce the latest AD writing standard.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Inspections/ Corrective Actions / Credit:

- (1) Before exceeding 600 flight hours (FH) since aeroplane first flight, or within 300 FH after 03 May 2016 [the effective date of the original issue of this AD], whichever occurs later, but not before accumulating 300 FH since aeroplane first flight, inspect the elevator hinge fitting and bracket assembly in accordance with the instructions of Airbus D&S AOT-CN235-55-0001 Revision 2.
- (2) If, during the inspection as required by paragraph (1) of this AD, any discrepancy is detected, as defined in Airbus D&S AOT-CN235-55-0001 Revision 2, before next flight, accomplish all applicable corrective actions in accordance with the instructions of Airbus D&S AOT-CN235-55-0001 Revision 2.
- (3) An inspection of the elevator hinge fitting and bracket assembly on an aeroplane, accomplished before 03 May 2016 [the effective date of the original issue of this AD] in accordance with the instructions of Airbus D&S AOT-CN235-55-0001 original issue or Revision 1, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane, provided that the aeroplane has embodied an additional repair approved by Airbus D&S on the affected elevator hinge fittings.
- (4) Within the compliance defined in Table 1 of Airbus D&S AOT-CN235-55-0003 and, thereafter, at intervals not to exceed the value defined in Table 3 of Airbus D&S AOT-CN235-55-0003, inspect the elevator hinge fitting and attachment fitting in accordance with the instructions of Airbus D&S AOT-CN235-55-0003.



- (5) If, during any inspection as required by paragraph (4) of this AD, any discrepancy is detected, as defined in Airbus D&S AOT-CN235-55-0003, before next flight, contact Airbus D&S for approved repair instructions and, within the compliance time specified therein, accomplish the repair accordingly.

Terminating Action:

- (6) Accomplishment of a repair on an aeroplane as required by paragraph (5) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (4) of this AD for that aeroplane, unless explicitly stated in the associated Airbus D&S repair instructions.
- (7) Modification of an aeroplane in accordance with the instructions of the SB constitutes terminating action for the repetitive inspections as required by paragraph (4) of this AD for that aeroplane.

Ref. Publications:

Airbus D&S AOT-CN235-55-0001 original issue dated 16 December 2014, or Revision 1 dated 06 March 2015, or Revision 2 dated 10 March 2015.

Airbus D&S AOT-CN235-55-0003 original issue dated 22 December 2015.

Airbus D&S SB SB-235-55-0014C original issue dated 23 January 2018.

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. The original issue of this AD was posted on 10 February 2016 as PAD 16-023 for consultation until 09 March 2016. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact Airbus D&S Services / Engineering Support, Fax: +34 91 585 3127, E-mail: MTA.TechnicalService@airbus.com.



For North American operators, contact alternatively
E-mail: TechnicalSupport@airbusmilitaryna.com.

