



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 23-049

Issued: 20 April 2023

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS DEFENCE AND SPACE S.A.

Type/Model designation(s):

CN-235 and C-295 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.186

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2020-0159 dated 16 July 2020.

ATA 53 – Fuselage – Rear Fuselage / Upper Stringers at Frame 43 – Inspection / Modification

Manufacturer(s):

Airbus Defence and Space, S.A.U., EADS Construcciones Aeronáuticas, S.A.U. (EADS-CASA), Construcciones Aeronáuticas S.A. (CASA)

Applicability:

CN-235, CN-235-200, CN-235-300 and C-295 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The AOT: Airbus Defence and Space (DS) Alert Operators Transmission (AOT)

AOT-CN235-53-0004 Revision 3 and AOT-C295-53-0004 Revision 3, as applicable.

The SB: Airbus DS Service Bulletin (SB) SB235-53-0070C (for CN-235, CN-235-200 and CN-235-300 aeroplanes) and SB295-53-0025C (for C-295 aeroplanes), as applicable.

The affected area: Fuselage structures as defined in section 3.2.2 of the AOT.



Groups: Group 1 aeroplanes are CN-235, CN-235-200 aeroplanes. Group 2 aeroplanes are CN-235-300 and C-295 aeroplanes.

Reason:

Cracks were found on certain CN-235 aeroplanes, on stringers P0 left-hand and P0 right-hand in the area of Frame (FR) 43. Due to the similarity in design, C-295 aeroplanes may also be affected.

This condition, if not detected and corrected, could affect the structural integrity of the aeroplane.

To address this potential unsafe condition, Airbus DS issued AOT-CN235-53-0004 and AOT-C295-53-0004, both at original issue, to provide instructions for a one-time detailed visual inspection (DVI). Revision 1 of these AOTs was subsequently issued to add new thresholds/grace periods and a new inspection method, also expanding the inspection area, and requesting repetitive inspections. Prompted by new crack findings adjacent to the inspected area, Airbus DS issued the Revision 2 of AOT-CN235-53-0004 and AOT-C295-53-0004, expanding the inspected area. Consequently, EASA issued AD 2020-0159 requiring repetitive DVI, or a combination of DVI and High Frequency Eddy Current (HFEC) inspections, of the affected area, as defined in this AD, and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued Airbus DS issued the SB providing instructions to reinforce and to modify the fuselage structures within the affected area to ensure better stress distribution and prevent crack initiation. Additionally, Airbus DS issued the AOT, as defined in this AD, recognising modification of the aeroplane in accordance with the SB as a terminating action for repetitive inspections of the fuselage structures within the affected area.

For the reasons described above, this AD retains the requirements of EASA AD 2020-0159, which is superseded and additionally requires modification of the fuselage structures within the affected area.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within the compliance times as specified in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed the values as specified in Table 2 of this AD, as applicable, accomplish a DVI, or DVI in combination with an HFEC, of the affected area in accordance with the instructions of the applicable AOT.



Table 1 – Initial Inspection (see Note 1 of this AD)

Group	Accumulated Flight Hours (FH) and Flight Cycles (FC)	Compliance Time
1	Less than 2 400 FH or 2 400 FC	Before exceeding 2 450 FH or 2 450 FC, whichever occurs first
	2 400 FH or 2 400 FC or more	During the next A-check, or within 300 FH after 30 July 2020 [the effective date of EASA AD 2020-0159], whichever occurs later
2	Less than 1 400 FH or 1 400 FC	Before exceeding 1 450 FH or 1 450 FC, whichever occurs first
	1 400 FH or 1 400 FC or more, but less than 7 500 FH or 7 500 FC	During the next A-check, or within 300 FH after 30 July 2020 [the effective date of EASA AD 2020-0159], whichever occurs later
	7 500 FH or 7 500 FC or more	Within 50 FH or 50 FC, whichever occurs first after 30 July 2020 [the effective date of EASA AD 2020-0159]

Note 1: Unless indicated otherwise, the FH and FC specified in Table 1 of this AD are those accumulated since first flight of the aeroplane.

Table 2 – Inspection Interval

Group	Intervals (as applicable, A or B)
1	A: Within 690 FH or 690 FC, whichever occurs first since the last DVI
	B: Within 950 FH or 950 FC, whichever occurs first since the last DVI + HFEC
2	A: Within 230 FH or 230 FC, whichever occurs first since the last DVI
	B: Within 340 FH or 340 FC, whichever occurs first since the last DVI + HFEC

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, as defined in the applicable AOT, before next flight, contact Airbus DS for approved instructions and accomplish those instructions accordingly.

Credit:

- (3) Inspection(s) accomplished on an aeroplane, before the effective date of this AD, in accordance with the instructions of Revision 2 of Airbus DS AOT-CN235-53-0004 or Revision 2 of AOT-C295-53-0004, as applicable, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Modification:

- (4) Within the compliance time defined in Table 3 of this AD, as applicable, modify the aeroplane in accordance with the instructions of the SB.



Table 3 – Modification

Aeroplane Model	Compliance Time
CN-235	Before exceeding 5 000 FC accumulated by an aeroplane since new or within 9 months after the effective date of this AD, whichever occurs later
C-295	Before exceeding 4 000 FC accumulated by an aeroplane since new or within 9 months after the effective date of this AD, whichever occurs later

Terminating Action(s):

- (5) Modification of an aeroplane as required by paragraph (4) of this AD, constitutes terminating action for repetitive inspections required by paragraph (1) of this AD for that aeroplane.
- (6) Accomplishment of a repair on an aeroplane in accordance with the instructions of an Airbus DS Repair Design Approval Sheet, as required by paragraph (2) of this AD, constitutes terminating action for repetitive inspections required by paragraph (1) of this AD for that aeroplane.

Ref. Publications:

Airbus DS AOT-CN235-53-0004 Revision 2 dated 25 March 2020, or Revision 3 dated 16 September 2022.

Airbus DS AOT-C295-53-0004 Revision 2 dated 25 March 2020, or Revision 3 dated 19 September 2022.

Airbus DS SB235-53-0070C original issue dated 23 May 2022.

Airbus DS SB295-53-0025C original issue dated 23 May 2022.

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

Remarks:

1. This Proposed AD will be closed for consultation on 18 May 2023.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, 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 PAD 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.



4. For any question concerning the technical content of the requirements in this PAD, 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.

