Airworthiness Directive

AD No.: 2019-0212

Issued: 27 August 2019

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, 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 agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:
AIRBUS DEFENCE AND SPACE S.A.

Type/Model designation(s):
CN-235 and C-295 aeroplanes

Effective Date: 10 September 2019

TCDS Number(s): EASA.A.186

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0004 dated 09 January 2017.

ATA 28 – Fuel – Motorised Fuel Valve – Inspection

Manufacturer(s):
Airbus Defence and Space S.A., formerly EADS-CASA, Construcciones Aeronáuticas S.A. (CASA)

Applicability:
CN-235, CN-235-100, 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 applicable AOT: Airbus Defence and Space (DS) Alert Operators Transmission (AOT) AOT-CN235-28-0001 Revision 2, and AOT-C295-28-0001 Revision 2, as applicable.

Affected part: Motorised fuel valves Part Number (P/N) 7923227F (used as cross-feed, shut-off and defueling valves, as applicable to aeroplane model and configuration).

Serviceable part: An affected part which meets the criteria specified in paragraph 4.1 of the applicable AOT.

Reason:
Leakage of a motorised cross-feed fuel valve P/N 7923227F was reported on a CN-235-100M aeroplane. The leakage was observed through the valve electrical connectors and detected during

accomplishment of a functional check in accordance with task 28.007 of the CN-235 Maintenance Review Board Report (MRB-PV01M). Identical motorised fuel valves are installed on civilian CN-235 and C-295 aeroplanes, as cross-feed, shut-off and defueling valves.

This condition, if not detected and corrected, could lead to failure of an affected part and consequent improper functioning of the fuel system or, in case of an ignition source, could lead to a fire, possibly resulting in damage to the aeroplane and injury to occupants.

To address this potentially unsafe condition, Airbus DS issued AOT-CN235-28-0001 and AOT-C295-28-0001 at original issue to provide inspection instructions.
Consequently, EASA issued AD 2016-0071 to require a one-time inspection of affected parts and, depending on findings, the accomplishment of applicable corrective action(s).

After that AD was issued, new occurrences of fuel leakage involving affected parts were reported and Airbus DS issued Revision 1 of AOT-CN235-28-0001 and AOT-C295-28-0001.
Consequently, EASA issued AD 2017-0004, retaining the requirements of EASA AD 2016-0071, which was superseded, and requiring repetitive inspections and operational checks of affected parts, and, depending on findings, the accomplishment of applicable corrective action(s).

Since that AD was issued, a lack of maintenance instructions was identified for affected parts in storage. Airbus DS issued the applicable AOTs to introduce maintenance requirements for affected parts in storage (in accordance with EATON CMM 28-20-81).

For the reasons described above, this AD retains the requirements of EASA AD 2017-0004, which is superseded, and limits installation of affected parts to those parts which, while in storage, are maintained in accordance with the instructions of the applicable AOT.

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

Required as indicated, unless accomplished previously:

Inspection(s):

(1) Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 300 flight hours (FH), inspect each affected part in accordance with the instructions of paragraph 3.2 of the applicable AOT.

Table 1 – Initial Inspection

Accumulated Service Life [on 25 April 2016, the effective date of EASA AD 2016-0071]	**Compliance Time**
6 000 flight cycles (FC) or more	Within 30 FC or 30 days after 25 April 2016 [the effective date of EASA AD 2016-0071], whichever occurs first
Less than 6 000 FC	Within 300 FH after 25 April 2016 [the effective date of EASA AD 2016-0071], or within 30 days after 23 January 2017 [the effective date of EASA AD 2017-0004], whichever occurs later

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, any fuel leakage is detected, before next flight, replace the affected part with a serviceable part in accordance with the instructions of the applicable AOT.

Terminating Action:

(3) None.

Operational Check:

(4) Within 12 months after 23 January 2017 [the effective date of EASA AD 2017-0004] and, thereafter, at intervals not to exceed 12 months, accomplish an operational check of each affected part in accordance with the instructions of paragraph 4.1 of the applicable AOT.

(5) If, during any operational check as required by paragraph (4) of this AD, any discrepancy is detected as defined in the applicable AOT, before next flight, contact Airbus DS for approved instructions and accomplish those instructions accordingly.

Credit:

(6) Inspections, corrective actions and operational checks on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of AOT-CN235-28-0001 or AOT-C295-28-0001 at original issue or at Revision 1, as applicable, are acceptable to comply with the initial requirements of paragraphs (1), (2) or (4), as applicable, of this AD for that aeroplane.

Part(s) Installation:

(7) From the effective date of this AD, it is allowed to install on any aeroplane an affected part, provided it is a serviceable part, as defined in this AD, and that, following installation, it is inspected and checked as required by this AD.

Reporting:

(8) Within 60 days after replacement of an affected part as required by paragraph (2) of this AD, report the inspection results to Airbus DS.

Ref. Publications:

Airbus DS AOT-CN235-28-0001 original issue dated 19 February 2016, or Revision 1 dated 27 September 2016, or Revision 2 dated 27 March 2019.

Airbus DS AOT-C295-28-0001 original issue dated 19 February 2016, or Revision 1 dated 27 September 2016, or Revision 2 dated 02 April 2019.

The use of later approved revisions of these 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. This AD was posted on 24 July 2019 as PAD 19-138 for consultation until 21 August 2019. No comments were received during the consultation period.

3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness 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.

5. For any question concerning the technical content of the requirements in this AD, please contact: Airbus Defence and Space, Services / Engineering Support, Fax: +34 91 585 3127, E-mail: MTA.TechnicalService@airbus.com.

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