

Airworthiness Directive

AD No.: 2020-0221

Issued: 13 October 2020

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:

ATR-GIE AVIONS DE TRANSPORT REGIONAL

Type/Model designation(s):

ATR 42 aeroplanes

Effective Date: 27 October 2020

TCDS Number(s): EASA.A.084

Foreign AD: Not applicable

Supersedure: None

ATA 31 – Instruments – Angle of Attack Probe Electrical Routing – Inspection

Manufacturer(s):

ATR-GIE Avions de Transport Régional, formerly EADS ATR - Alenia, Aerospatiale Matra ATR - ALENIA, Aerospatiale - Alenia, Aerospatiale – Aeritalia

Applicability:

ATR 42-200, ATR 42-300 and ATR 42-320 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The AOM: ATR Airworthiness Operators Message (AOM) 2020/13 Issue 1.

Affected wiring: Electrical wire routing of the left-hand and right-hand side Angle of Attack (AOA) probes.

Reason:

Several events have been reported by ATR 42 operators of experiencing spurious activation of the stall warning system. Such activation can lead to one or a combination of the following events:

- Autopilot disconnection
- Stick pusher activation
- Stick shaker activation

- Aural stall warning (cricket audio alert)
- Master CAUTION light flashing amber
- STICK PUSHER green light ON
- FLT CTL amber light on CAP
- Stick PUSHER/SHAKER pushbutton 'FAULT' amber light illumination
- Whooler Audio alert

Subsequent investigation results indicated that wiring damage on the wire bundle between an AOA probe and the Crew Alerting Computer can trigger the above scenario.

This condition, if not detected and corrected, could lead to loss of control of the aeroplane during take-off and landing phases.

To address this potential unsafe condition, ATR issued the AOM to provide inspection instructions.

For the reasons described above, this AD requires a one-time visual inspection of the affected wiring and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires reporting to ATR of the inspection results.

This AD is considered to be an interim action and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Inspection(s):

- (1) Within 2 months after the effective date of this AD, accomplish a visual inspection of the affected wiring in accordance with the instructions of the AOM.

Corrective Action(s):

- (2) If, during the inspection as required by paragraph (1) of this AD, discrepancies are detected as identified in the AOM, before next flight, contact ATR for approved repair instructions and accomplish those instructions accordingly.

Reporting:

- (3) Within 30 days after the inspection as required by paragraph (1) of this AD, report the results (including no findings) to ATR. This can be accomplished in accordance with the instructions of the AOM.

Ref. Publications:

ATR AOM 2020/13 Issue 1 dated 28 September 2020.

The use of later approved revisions of the above-mentioned document 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
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](#). 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: ATR - GIE Avions de Transport Régional, Continued Airworthiness Service, Telephone: +33 (0)5 62 21 62 21, Fax: +33 (0) 5 62 21 67 18; E-mail: continued.airworthiness@atr-aircraft.com.

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