



Airworthiness Directive

AD No.: 2018-0105

Issued: 08 May 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

ATR-GIE AVIONS de TRANSPORT RÉGIONAL

Type/Model designation(s):

ATR 42 and ATR 72 aeroplanes

Effective Date: 22 May 2018

TCDS Number(s): EASA.A.084

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2017-0118 dated 07 July 2017.

ATA 92 – Electric / Electronic Common Installation – Electrical Harness Brackets and Wire Bundles – Inspection

Manufacturer(s):

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

Applicability:

ATR 42-500 aeroplanes, manufacturer serial numbers (MSN) 1001 to 1014 inclusive, 1016 to 1019 inclusive and 1201 to 1212 inclusive; and

ATR 72-212A aeroplanes, MSN 1048 to 1200 inclusive, 1220 to 1353 inclusive, 1355 to 1380 inclusive, 1382, 1385 and 1388.

Definitions:

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

The applicable SB: ATR Service Bulletin (SB) ATR 42-92-0033 or ATR SB ATR 72-92-1044, as applicable.



Group 1 aeroplanes: MSN 1014, 1016 to 1019 inclusive, 1165 to 1212 inclusive, 1220 to 1340 inclusive, 1342 to 1353 inclusive, 1355 to 1366 inclusive, 1368 to 1376 inclusive, 1378 to 1380 inclusive, 1382, 1385 and 1388.

Group 2 aeroplanes: MSN 1001 to 1013 inclusive, 1048 to 1070 inclusive, 1072 to 1140 inclusive, and 1142 to 1164 inclusive.

Reason:

An event was reported of several spurious alarms on a recently delivered ATR 72 aeroplane. During subsequent trouble-shooting, damage was found on the electrical harness wire bundle (Route 1M), due to chafing with a window blinding panel located on the left-hand (LH) side of the fuselage, zone 231. A bracket, necessary to maintain the harness wire bundle close to the structure of the fuselage and avoid chafing, was missing. The same bracket was also found missing on the right-hand (RH) side of the fuselage, zone 232, Route 2M, although without damage on the harness wire bundle. A quality investigation revealed another aeroplane on the production line where same brackets were not installed.

This condition, if not detected and corrected, may lead to wire failure (cut or shorted) and, in case of several failures in combination, to loss of systems, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, ATR published the applicable SB to provide inspection instructions. Consequently, EASA issued AD 2017-0118 to require verification of the installation of the brackets, a one-time inspection of the wire bundles, and depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, an occurrence was reported of engine intermittent auto-feather, caused by damage on the electrical harness bundle Route 1M. The affected aeroplane MSN was not identified in the Applicability of EASA AD 2017-0118.

For the reason described above, this AD retains the requirements of EASA AD 2017-0118, which is superseded, and expands the Applicability to include additional aeroplanes, identified by MSN in Group 2 as specified in section 'Definitions' of this AD.

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

Required as indicated, unless accomplished previously:

Inspection:

- (1) For Group 1 aeroplanes: Within 6 months or 500 flight hours (FH), whichever occurs first after 21 July 2017 [the effective date of EASA AD 2017-0118], inspect the brackets and the wire bundles of the Route 1M (LH side) and Route 2M (RH side) electrical harness in accordance with the instructions of the applicable SB.
- (2) For Group 2 aeroplanes: Within 6 months or 500 FH, whichever occurs first after the effective date of this AD, inspect the brackets and the wire bundles of the Route 1M (LH side) and Route 2M (RH side) electrical harness in accordance with the instructions of the applicable SB at Revision 2.



Corrective Action(s):

- (3) If, during the inspection as required by paragraph (1) or (2) of this AD as applicable, any discrepancy is detected as defined in the applicable SB, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable SB.

Ref. Publications:

ATR SB ATR 42-92-0033 original issue dated 03 May 2017, or Revision 1 dated 20 July 2017 and Revision 2 dated 12 April 2018.

ATR SB ATR 72-92-1044 original issue dated 03 May 2017, or Revision 1 dated 20 July 2017 and Revision 2 dated 12 April 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. This AD was posted on 20 April 2018 as PAD 18-057 for consultation until 04 May 2018. 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. 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.

