



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-129R1

Issued: 10 December 2024

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:

ATR-GIE AVIONS DE TRANSPORT REGIONAL

Type/Model designation(s):

ATR 42 and ATR 72 aeroplanes

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

TCDS Number(s): EASA.A.084

Foreign AD: Not applicable

Supersedure: None

ATA 27 – Flight Controls – Rudder Travel Limitation Unit Logic – Modification

Manufacturer(s):

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

Applicability:

ATR 42-400 and ATR 42-500 aeroplanes, all manufacturer serial numbers (MSN), except those on which ATR modification (mod) 10469 has been embodied in production; and ATR 72-101, ATR 72-102, ATR 72-201, ATR 72-202, ATR 72-211, ATR 72-212 and ATR 72-212A aeroplanes, all MSN, except those on which ATR mod 10453 has been embodied in production.

Definitions:

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

The applicable SB1: ATR Service Bulletin (SB) ATR42-27-0115 revision 01 or ATR72-27-1075 revision 01, as applicable.

The applicable SB2: ATR SB ATR42-27-0118 revision 01 or ATR72-27-1077 revision 02, as applicable.



Groups: Group 1 aeroplanes are:

ATR 42-400 and 42-500 all MSN which do not have ATR mod 05948 embodied.

ATR 72-101, ATR 72-102, ATR 72-201, ATR 72-202, ATR 72-211, ATR 72-212 and ATR 72-212A, all MSN which do not have ATR mod 05948 embodied.

Group 2 aeroplanes are:

ATR 42-400 and 42-500 all MSN which have ATR mod 05948 embodied.

ATR 72-101, ATR 72-102, ATR 72-201, ATR 72-202, ATR 72-211, ATR 72-212 and ATR 72-212A, all MSN which have ATR mod 05948 embodied.

Reason:

During an ATR internal review of the Travel Limitation Unit (TLU) new avionics suite design, it has been identified that an erroneous behaviour of Core Processing Module (CPM) 2, hosting the Data Concentration Application (DCA) 2, might affect the TLU command, monitoring and indication.

Further investigation results indicated that an erroneous monitoring of the TLU could occur when the aeroplane is flying above 185 kt (ATR72) or 195 kt (ATR42), due to the fact that the logic takes into account either ADC1 or ADC2 input.

This condition, if not corrected, could result in the rudder deflection not being limited at high aeroplane speed which, if combined with a large rudder pedal input, could lead to loss of control of the aeroplane.

To address this potential unsafe condition, ATR developed mod 10469 (for ATR42 aeroplanes) and mod 10453 (for ATR72 aeroplanes), and issued the applicable SB1 and SB2 to provide modification instructions for in-service aeroplanes.

For the reasons described above, this AD requires installation of one or two relay(s) and associated wiring to improve the TLU command and monitoring logics, considering both ADC1 and ADC2 inputs.

Since PAD 24-129 was issued, it has been identified that, after changes made in accordance with the instructions of SB ATR72-27-1075 at original issue, SB ATR72-27-1077 at original issue or at revision 01, SB ATR42-27-0115 at original issue, or SB ATR42-27-0118 at original issue, as applicable, the Maintenance Procedure (MP) task ATR-A-27-23-XX-00ZZZ-340Z-A cannot be successfully accomplished. Consequently, ATR revised the above mentioned SBs and revised the MP ATR-A-27-23-XX-00ZZZ-340Z-A.

This PAD is revised to include reference to the latest revision of those SBs and to require additional work for certain aeroplanes, and is republished for additional consultation.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Modification:

- (1) Within the compliance time as defined in Table 1 of this AD, as applicable, modify the aeroplane in accordance with the instructions of section 3.C of the applicable SB.



Table 1 – Modification Compliance Time

Group	Compliance Time (after the effective date of this AD)	Applicable SB
1	Within 24 months	Applicable SB1
2	Within 12 months	Applicable SB2

Tests:

(2) Before next flight after the modification of an aeroplane as required by paragraph (1) of this AD, accomplish the tests in accordance with the instructions of section 3.D of the applicable SB.

Corrective Action(s):

(3) If, during the accomplishment of the tests, as required by paragraph (2) of this AD, any discrepancy is detected, before next flight contact ATR for applicable instructions and accomplish those instructions accordingly.

Note 1: Following modification of an aeroplane as required by paragraph (1) of this AD, that aeroplane is considered to be in post-mod 10469 (ATR42) or post-mod 10453 (ATR72) configuration. ATR issued Time Limits Document (TLD) temporary revisions introducing applicable maintenance requirements, which are referenced in EASA PAD 24-127 and PAD 24-128.

Additional Work:

(4) For Group 1 and Group 2 aeroplanes that, before the effective date of this AD, have been modified in accordance with the instructions of ATR SB ATR72-27-1075 at original issue, SB ATR72-27-1077 at original issue or at revision 01, SB ATR42-27-0115 at original issue, or SB ATR42-27-0118 at original issue: Within 750 flight hours or 6 months, whichever occurs first after the effective date of this AD, accomplish the additional work as identified in, and in accordance with the instructions of, the SB1 or the SB2 as applicable.

Ref. Publications:

ATR SB ATR42-27-0115 revision 01 dated 29 November 2024.

ATR SB ATR42-27-0118 revision 01 dated 29 November 2024.

ATR SB ATR72-27-1075 revision 01 dated 29 November 2024.

ATR SB ATR72-27-1077 revision 02 dated 29 November 2024.

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 03 January 2025.



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: 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.

