



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-120

Issued: 30 August 2022

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 RÉGIONAL

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 31 – Instruments – New Avionics Suite – Replacement

Manufacturer(s):

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

Applicability:

ATR 42-500 and ATR 72-212A aeroplanes, all manufacturer serial numbers on which ATR modification (mod) 05948 (commercially known as '-600 version') has been embodied in production.

Definitions:

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

The applicable SB: ATR Service Bulletin (SB) ATR42-31-0111 Revision 02, SB ATR42-31-0112 Revision 01, SB ATR72-31-1117 Revision 04 and SB ATR72-31-1118 Revision 01, as applicable.

Serviceable NAS: New Avionics Suite (NAS) standard (STD) 2.2 and STD 3.1, or later approved NAS STD.

Affected NAS: NAS STD which is not a serviceable NAS.



Groups: Group 1 aeroplanes are those that have an affected NAS installed.

Group 2 aeroplanes are those that have a serviceable NAS installed. An aeroplane on which ATR mod 07970 or mod 08866 has been embodied in production is a group 2 aeroplane, provided the aeroplane remains in that configuration and it is determined that serviceable NAS is installed.

Reason:

In-service experience has shown that, in case of severe icing conditions, the lateral flight guidance of the Flight Director/Auto Pilot may not limit the HI BANK turns, while the aeroplane is only protected at LO BANK.

This condition, if not corrected, could, when operating in severe icing conditions, possibly result in loss of control of the aeroplane.

To address this potential unsafe condition, ATR has developed the serviceable NAS, as defined in this AD, introducing additional safety margins to “Velocity Minimal” at HI BANK and improved operational procedures related to icing, and issued the applicable SB, as defined in this AD, providing instructions to install serviceable NAS. This incorporates the operational instructions of the OEB 36 ‘Bank Limitation in Severe Icing Conditions’.

For the reasons described above, this AD requires replacement of each affected NAS with a serviceable NAS. This AD also prohibits (re)installation of an affected NAS.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 aeroplanes: Within 18 months after the effective date of this AD, replace the affected NAS with a serviceable NAS, in accordance with the instructions of the applicable SB.

Credit:

- (2) Replacement of the affected NAS on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of ATR SB ATR42-31-0111 original issue, or Revision 01; or ATR SB ATR42-31-0112 original issue; or ATR SB ATR72-31-1117 original issue, or Revision 01, or Revision 02, or Revision 03; or ATR SB ATR72-1118 original issue, as applicable, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Part(s) Installation:

- (3) Do not install an affected NAS on any aeroplane, as required by paragraph (3.1) or (3.2) of this AD, as applicable.
 - (3.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (1) of this AD.
 - (3.2) For Group 2 aeroplanes: From the effective date of this AD.



Ref. Publications:

ATR SB ATR42-31-0111 original issue dated 09 July 2019, or Revision 01 dated 12 December 2019, or Revision 02 dated 04 July 2022.

ATR SB ATR42-31-0112 original issue dated 04 September 2019, or Revision 01 dated 12 December 2019.

ATR SB ATR72-31-1117 original issue dated 09 July 2019, or Revision 01 dated 26 July 2019, or Revision 02 dated 27 November 2019, or Revision 03 dated 25 March 2020, or Revision 04 dated 30 July 2020.

ATR SB ATR72-1118 original issue dated 12 December 2019, or Revision 01 dated 12 December 2019.

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 27 September 2022.
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.

