



Airworthiness Directive

AD No.: 2022-0165R1

Issued: 28 February 2023

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS S.A.S.

Type/Model designation(s):

A320 and A321 aeroplanes

Effective Date:

Revision 01 : 07 March 2023

Original issue : 16 August 2022

TCDS Number(s):

EASA.A.064

Foreign AD:

Not applicable

Revision:

This AD revises EASA AD 2022-0165 dated 09 August 2022.

ATA – Aircraft Flight Manual – Section Abnormal Procedures – Amendment

ATA 30 / 36 – Ice and Rain Protection / Pneumatic – MMEL Amendment

ATA 36 – Pneumatic – Bleed Monitoring Computer Electrical Connection – Modification

Manufacturer(s):

Airbus

Applicability:

Airbus A320-251N, A320-253N, A321-251N and A321-253N aeroplanes, all manufacturer serial numbers (MSN), except those on which Airbus modification (mod) 161978 has been embodied in production; and

Airbus A320-271N, A321-271N and A321-272N aeroplanes, all MSN, except those on which Airbus mod 161979 has been embodied in production.

Definitions:

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

The AOT: Airbus Alert Operators Transmission (AOT) A36N008-22.



The SB: Airbus Service Bulletin (SB) A320-36-1088.

The AFM TR: Airbus A320/A321 Airplane Flight Manual (AFM) Temporary Revision (TR) 790 issue 1.

The MMEL update: Airbus A318/A319/A320/A321 Master Minimum Equipment List (MMEL) items listed below, as provided in Airbus A318/A319/A320/A321 MMEL Major Event Revision (MER) dated 02 August 2022:

- Item 30-11-01 Wing Anti-Ice Control Valve,
- Item 36-11-01 Engine Bleed Air Supply System.

Reason:

During operations of a flight test aircraft, it was detected that, when heating several sensing elements of the Over-Heat Detection System (OHDS) loop sequentially, no Electronic Centralized Aircraft Monitor (ECAM) warning was triggered. The same behaviour was observed in all OHDS loops of the aeroplane. Investigation identified a missing electrical grounding of the OHDS sensing element up to the Bleed Monitoring Computer (BMC) connector, impairing the OHDS leak detection capability in all OHDS loops of the aeroplane.

This condition, if not detected and corrected, could lead to hot air bleed leakage undetected by the OHDS loops, possibly resulting in exposure of aeroplane structure and systems (e.g. fuel, hydraulic) to high temperatures. Consequently, it could result in reduced structural integrity of the aeroplane, fire ignition, or systems malfunction.

To address this potential unsafe condition, Airbus issued the AOT, as defined in this AD, providing instructions for aeroplane modification to restore the OHDS function. To mitigate the potential unsafe condition prior to aeroplane modification, Airbus also issued the AFM TR and the MMEL update, as defined in this AD, providing procedures to operate the aeroplane without functioning bleed leak detection. Consequently, EASA issued AD 2022-0165 to require amendment of the applicable AFM and MMEL and modification of the BMC electrical connections.

Since that AD was issued, as an alternative to the modification instructions included in the AOT, Airbus issued the SB providing modification instructions to restore the capability of the OHDS to detect leak of the bleed air system. Additionally, Airbus issued Revision 1 of AOT A36N008-22 clarifying several references included in the AOT instructions and adding reference to the SB.

For the reasons described above, this AD is revised to add the SB as an optional modification instruction and make reference to Revision 1 of AOT A36N008-22 in the Ref. publications.



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

Required as indicated, unless accomplished previously:

AFM Amendment:

- (1) Before next flight after 16 August 2022 [the effective date of the original issue of this AD], amend the applicable AFM to incorporate the AFM TR, inform all flight crews and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM of an aeroplane by incorporating a later AFM revision which includes the same content as the AFM TR, as defined in this AD, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aeroplane.

MMEL Amendment:

- (3) Concurrently with the AFM amendment as required by paragraph (1) of this AD, implement the instructions of the MMEL update, as defined in this AD, on the basis of which the operator's MEL must be amended inform all flight crews, and thereafter, operate the aeroplane accordingly.

Modification:

- (4) Within 750 flight hours or 4 months, whichever occurs first after 16 August 2022 [the effective date of the original issue of this AD], modify the electrical connections of both BMC 1 and BMC 2 in accordance with the instructions of the AOT or the SB.

Removal of AFM / MMEL Amendment:

- (5) After modification of an aeroplane as required by paragraph (4) of this AD, the operational procedures of the applicable AFM TR and the dispatch restrictions of the MMEL update are no longer necessary and can be removed from the AFM and MEL, respectively, of that aeroplane.

Ref. Publications:

Airbus AOT A36N008-22 original issue dated 04 August 2022, or Revision 01 dated 12 September 2022.

Airbus A320/A321 AFM TR 790 Issue 1, EASA approval date 29 July 2022.

Airbus A318/A319/A320/A321 MMEL MER dated 02 August 2022.

Airbus SB A320-36-1088 original issue dated 24 October 2022.

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. 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 Safety 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: AIRBUS – Airworthiness Office – 1IASA; E-mail: account.airworth-eas@airbus.com.

