

# Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 22-002

# Issued: 12 January 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:**

Type/Model designation(s): A319, A320 and A321 aeroplanes

Effective Date:	[TBD - standard: 14 days after AD issue date]
TCDS Number(s):	EASA.A.064
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2021-0150 dated 21 June 2021, including its correction dated 25 June 2021.

# ATA – Aircraft Flight Manual / Section Normal Procedures – Amendment

ATA 34 – Navigation – Master Minimum Equipment List – Integrated Standby Instrument System – Amendment

# ATA 27 – Flight Controls – Elevator Aileron Computer System - Modification

#### Manufacturer(s): Airbus

# **Applicability:**

AIRBUS

Airbus A319-151N, A319-153N, A319-171N, A320-251N, A320-252N, A320-253N, A320-271N, A320-272N, A320-273N, A321-251N, A321-251NX, A321-252N, A321-252NX, A321-253N, A321-253NX, A321-271N, A321-271NX, A321-272N and A321-272NX aeroplanes, all manufacturer serial numbers.

# **Definitions:**

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

**The AFM TR:** Airbus A319/A320/A321 Airplane Flight Manual (AFM) Temporary Revision (TR) 787 Issue 1.



The MMEL TR: Airbus A318/A319/A320/A321 Master Minimum Equipment List (MMEL) item 34-23-02B update, ident. MI-34-23-00008619.0009001 dated 18 June 2021.

The SB: Airbus Service Bulletin (SB) A320-27-1288.

Affected ELAC: Elevator aileron computer (ELAC) standard as listed in Appendix 1 of this AD.

**Serviceable ELAC**: ELAC standard 103+, having Part Number (P/N) 3945129117 (data loadable) or P/N 3945128223 (non data loadable), or any later approved standards.

**Groups**: Group 1 aeroplanes are those that have an affected ELAC installed. Group 2 aeroplanes are those that do not have an affected ELAC installed. An aeroplane on which Airbus modification (mod) 169275 has been embodied in production is a Group 2 aeroplane, provided no affected ELAC is installed on that aeroplane.

#### Reason:

EASA and Airbus issued various pieces of communication (respectively EASA Safety Information Bulletin (SIB) 2020-14, Airbus Operators Information Transmission (OIT) 999.0048/20, Airbus Operational Training Transmission (OTT) 999.0025/21, and Airbus Flight Operations Transmission (FOT) 999.0020/21) to remind to apply appropriate protection measures when an aeroplane is parked or stored (even for short periods of time), and to follow recognised manufacturer's procedures to check the Air Data Probes prior to return to service after such parking/storage. Notwithstanding the above, an increasing number of operational disruptions have been reported, due to airspeed discrepancies.

Prompted by investigations performed as part of continuous development, computational simulations identified that the occurrence on the A320neo family of 'consistent erroneous airspeed indications' (which stands for 2 or 3 pitot probes delivering erroneous speed information within the same speed range) may affect the aeroplane's response, in particular during the rotation phase. This condition has not been encountered during operations.

This condition, if not corrected, could lead to an unstable flight path after take-off, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Airbus issued the AFM TR, reinforcing the airspeed check during the take-off phase and providing instructions to abort take-off in case of unreliable airspeed situation is detected, and the MMEL TR, requiring that the Integrated Standby Instrument System (ISIS) Airspeed Indication must be operative to allow this detection. Airbus also issued FOT 999.0042/21 and RED Operations Engineering Bulletin (OEB) 59, providing reinforced aeroplane speed check instructions during take-off. Consequently, EASA issued AD 2021-0150, later corrected, to require amendment of the applicable AFM by incorporating the AFM TR, and the implementation of the MMEL TR.

Since that AD was issued, Airbus developed mod 169275 which aims to detect multiple consistent erroneous airspeed indications and prevent taking-off with erroneous air data.



For the reason described above, this AD retains the requirements of EASA AD 2021-0150, which is superseded, and requires the installation of a new ELAC standard upgrade.

This AD also requires, following that new ELAC upgrade, the removal of the AFM TR and of the MMEL TR from the applicable AFM and MMEL.

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

Required as indicated, unless accomplished previously:

## **AFM Amendment:**

- For Group 1 aeroplanes: Within 7 days after 28 June 2021 [the effective date of EASA AD 2021-0150], amend the applicable AFM by incorporating the AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) For Group 1 aeroplanes: Amending the applicable AFM of an aeroplane by incorporating a later AFM revision, which includes the same content as the AFM TR, is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

## **MMEL Amendment:**

(3) For Group 1 aeroplanes: Concurrently with the AFM amendment as required by paragraph (1) of this AD, implement the instructions of the MMEL TR, 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) For Group 1 aeroplanes: Within 9 months after the effective date of this AD, replace each affected ELAC with serviceable ELAC in accordance with the instructions of the SB.

## AFM and MMEL Change:

(5) Within 2 months after modification of an aeroplane as required by paragraph (4) of this AD, remove the AFM TR, as required by paragraph (1) of this AD, and the instructions implementation of the MMEL TR, as required by paragraph (3) of this AD, from the AFM and MEL of that aeroplane, inform all flight crews, and, thereafter, operate the aeroplane accordingly.

## **Parts Installation:**

- (6) Do not install an affected ELAC on any aeroplane, as required by paragraph (6.1) or (6.2) of this AD, as applicable.
  - (6.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (4) of this AD.
  - (6.2) For Group 2 aeroplanes: From the effective date of this AD.



#### **Ref. Publications:**

Airbus A319/A320/A321 AFM TR 787 Issue 1, EASA approval date 17 June 2021.

Airbus A318/A319/A320/A321 MMEL item 34-23-02B update, ident. MI-34-23-00008619.0009001, dated 18 June 2021.

Airbus SB A320-27-1288 original issue dated 15 October 2021.

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 09 February 2022.
- 2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 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 <u>EU aviation safety reporting system</u>. 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: AIRBUS Airworthiness Office IIASA; E-mail: <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a> .



Part Number	Designation	FIN
3945129110	ELAC soft std L98 data loadable	
3945129111	ELAC soft std L99 data loadable	2CE1 SW1 2CE2 SW1
3945129112	ELAC soft std L101 data loadable	
3945129114	ELAC soft std L102 data loadable	
3945129115	ELAC soft std L103 data loadable	
3945128216	ELAC L98 non data loadable	2CE1 2CE2
3945128217	ELAC L99 non data loadable	
3945128218	ELAC L101 non data loadable	
3945128220	ELAC L102 non data loadable	
3945128221	ELAC L103 non data loadable	

# Appendix 1 – List of affected ELAC

