



Airworthiness Directive

AD No.: 2019-0171R2

Issued: 02 June 2020

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, 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A321 aeroplanes

Effective Date: Revision 02: 09 June 2020
Revision 01: 07 August 2019
Original issue: 31 July 2019

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2019-0171R1 dated 31 July 2019.

ATA – Aircraft Flight Manual Section Limitations – Amendment

Manufacturer(s):

Airbus

Applicability:

Airbus A321-251N, A321-252N, A321-253N, A321-271N, A321-272N, A321-251NX, A321-252NX, A321-253NX, A321-271NX and A321-272NX aeroplanes, all manufacturer serial numbers, except those that have embodied Airbus modification (mod) 163923 in production.

Definitions:

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

Affected ELAC: Elevator Aileron Computer (ELAC) unit having Part Number (P/N) 3945129100 with L102 software P/N 3945129114 (data-loadable); or ELAC unit having P/N 3945128220 (non-data-loadable).

The applicable AFM TR: Airbus Aircraft Flight Manual (AFM) Temporary Revision (TR) 766 issue 1, TR 767 issue 1, TR 768 issue 1, TR 769 issue 1, TR 770 issue 1, TR 771 issue 2 and TR 772 issue 2, as applicable.



ELAC upgrade: Modification of an aeroplane to install ELAC L103 P/N 3945129115 (data-loadable), or later approved ELAC standards.

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

Group 2 aeroplanes are those that do not have affected ELAC installed.

Reason:

Analysis of the behaviour of the ELAC L102 installed on A321neo revealed a reduced efficiency of the angle of attack protection when the aeroplane is set in certain flight configurations and in combination with specific manoeuvres commanded by the flight crew, as described through Section 2 of Airbus Flight Operations Transmission 999.0029/19.

This condition, although never encountered during operations, if not corrected, could lead to excessive pitch attitude, possibly resulting in increased flight crew workload.

To address this potential unsafe condition, Airbus issued the applicable AFM TR, limiting the centre of gravity (CG) envelope, which prevents the aforementioned condition, and the Flight Operations Transmission 999.0029/19, providing aeroplane loading recommendations.

For the reason described above, EASA issued AD 2019-0171 (later revised) to require amendment of the respective AFM by incorporating the applicable AFM TR.

Since EASA AD 2019-0171R1 was issued, Airbus designed mod 163923, introducing the ELAC L103 P/N 3945129115 (data-loadable), which allows restoring the initial CG envelope for A321neo. This AD is revised to reduce the Applicability accordingly.

The potential unsafe condition addressed by this AD and related required actions are different from those addressed by EASA AD 2019-0189 for A320neo aeroplanes.

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

Required as indicated, unless accomplished previously:

AFM Change:

- (1) For Group 1 aeroplanes: Within 30 days after 31 July 2019 [the effective date of the original issue of this AD], amend the applicable AFM by incorporating the applicable AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) For Group 2 aeroplanes: From 31 July 2019 [the effective date of the original issue of this AD], before next flight after modification of an aeroplane to install affected ELAC, amend the applicable AFM by incorporating the applicable AFM TR, inform all flight crews, and, thereafter, operate the aeroplane accordingly (see Note 1 of this AD).

Note 1: After modification of an aeroplane to install affected ELAC, a Group 2 aeroplane is then considered to be a Group 1 aeroplane.

- (3) For Group 1 and Group 2 aeroplanes: Amending the applicable AFM of an aeroplane by incorporating a later AFM revision, which includes the same content as the applicable AFM TR,



is acceptable to comply with the requirements of paragraph (1) or (2) of this AD, as applicable, for that aeroplane.

- (4) For Group 1 aeroplanes (see Note 1 of this AD): Accomplishment of ELAC upgrade (as defined in this AD) on an aeroplane in accordance with approved Airbus instructions (see Note 2 of this AD) allows the removal of the applicable AFM TR, previously inserted as required by paragraph (1) or (2) of this AD, as applicable, from the AFM of that aeroplane.

Note 2: At the issue date of this AD, Airbus Service Bulletin A320-27-1284 provides instructions to install ELAC L103 software P/N 3945129115 (data-loadable) on affected aeroplanes.

Ref. Publications:

Airbus A321 AFM TR 766 issue 1, EASA approval date 21 June 2019.

Airbus A321 AFM TR 767 issue 1, EASA approval date 21 June 2019.

Airbus A321 AFM TR 768 issue 1, EASA approval date 21 June 2019.

Airbus A321 AFM TR 769 issue 1, EASA approval date 21 June 2019.

Airbus A321 AFM TR 770 issue 1, EASA approval date 21 June 2019.

Airbus A321 AFM TR 771 issue 2, EASA approval date 10 July 2019.

Airbus A321 AFM TR 772 issue 2, EASA approval date 10 July 2019.

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 Programming and Continued Airworthiness 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.
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – IIASA; E-mail: account.airworth-eas@airbus.com.

