



Notification of a proposal to issue an Airworthiness Directive

PAD No.: 16-021

Issued: 04 February 2016

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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:

AIRBUS

Type/Model designation(s):

A318, 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 2015-0191 dated 22 September 2015, including its Correction dated 25 September 2015.

ATA 27 – Flight Controls – Spoiler Elevator Computer Software update

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.

Reason:

Following the introduction of new Spoiler and Elevator Computer (SEC) hardware C Part Number (P/N) B372CAM0100 with software (SW) standards 122, 124 and 125 (identified by P/N B372CAM0101, P/N B372CAM0102 and P/N B372CAM0103, respectively, and hereafter referred to as an "affected SEC SW standard" in this AD), some airlines reported receiving maintenance messages, e.g. "SEC OR WIRING FROM L or R ELEV POS MON XDCR" and/or "SEC OR WIRING FROM G or Y ELEV POS XDCR", which are associated with servo control or elevator transducer monitoring.



Such messages are triggered by a short data inconsistency due to power transients, when the engines are started.

This condition, if not corrected, could lead to an undetected loss of redundancy during flight if an affected SEC cannot control the related elevator servo control(s), possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, EASA issued AD 2015-0191 to require amendment of the applicable Airplane Flight Manual (AFM) to include the flight crew procedure necessary to recover full SEC redundancy.

Since that AD was issued, to fix the software deficiency, SEC software standard 126 was developed, which is embodied in production through Airbus modification (mod) 161208, and introduced in service through Airbus Service Bulletin (SB) A320-27-1252.

For the reason described above, this AD retains the AFM change requirements of EASA AD 2015-0191, which is superseded, and requires the removal and/or upgrade of SEC.

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

Required as indicated, unless accomplished previously:

Partial restatement of the requirements of EASA AD 2015-0191:

- (1) For aeroplanes equipped with SEC hardware C P/N B372CAM0100 with an affected SEC SW standard on SEC position 1 or 2, or both, within 30 days after 29 September 2015 [the effective date of EASA AD 2015-0191], amend the applicable AFM, Section Normal Procedures / Pre-flight Checks, as indicated in Table 1 of this AD, inform all flight crews and, thereafter, operate the aeroplane accordingly.

The AFM amendment as required by this AD can be accomplished by inserting a copy of this AD, or Airbus AFM TR 572 issue 1, into the applicable AFM.

Table 1 – AFM Temporary Revision

<p>AFTER START NORMAL PROCEDURE</p> <p>After both engines start:</p> <p>Turn OFF then ON SEC 1 and SEC 2 one after the other.</p>

Note 1: Airbus Operations Engineering Bulletin OEB-50 provides additional information on the subject addressed by this AD.

New Requirements of this AD:

- (2) Within 3 months after the effective date of this AD, accomplish the actions as required by paragraph (2.1), (2.2) and (2.3) of this AD, as applicable:



- (2.1) For an aeroplane that has received Airbus mod 39429 in production (installation of SEC hardware C P/N B372CAM0100), install SEC SW standard 126 in accordance with the instructions of Airbus SB A320-27-1252.
- (2.2) For an aeroplane that has not received Airbus mod 39429 in production, accomplish an inspection (see Note 2 of this AD) in accordance with the instructions of Airbus SB A320-27-1257 to determine whether an affected SEC SW standard is installed.
- (2.3) If, during the determination as required by paragraph (2.2) of this AD, an affected SEC SW standard is found installed, contact Airbus for approved instructions to replace the affected SW standard and accomplish those instructions accordingly.

Note 2: A review of the aeroplane maintenance records is acceptable to determine the SEC C software standard, provided those records can be relied upon for the purpose of this requirement.

- (3) An aeroplane on which Airbus mod 161208 has been embodied in production is compliant with the requirements of paragraph (2) of this AD, provided it is determined that no affected SEC SW standard is installed on that aeroplane.
- (4) After modification of an aeroplane as required by paragraph (2) of this AD, remove Airbus AFM TR 572 issue 1, or the copy of EASA AD 2015-0191, as applicable, from the AFM of that aeroplane.
- (5) Do not install on any aeroplane an affected SEC SW standard, or a SEC hardware C hosting an affected SEC SW standard, as required by paragraph (5.1) or (5.2) of this AD, as applicable.
 - (5.1) For an aeroplane that, on the effective date of this AD, has an affected SEC SW standard installed: After modification of that aeroplane as required by paragraph (2) of this AD.
 - (5.2) For an aeroplane that, on the effective date of this AD, does not have an affected SEC SW standard installed: From the effective date of this AD.
- (6) Installation on an aeroplane of a SEC SW standard, or of a SEC hardware standard, approved after the effective date of this AD, is equal to compliance with the requirements of paragraph (2) of this AD for that aeroplane, provided the conditions as specified in paragraphs (6.1) and (6.2) of this AD are met.
 - (6.1) The software and/or hardware standard, as applicable, must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and
 - (6.2) The installation must be accomplished in accordance with aeroplane modification instructions approved by EASA, or approved under Airbus DOA.

Ref. Publications:

Airbus SB A320-27-1252 original issue, dated 06 November 2015.

Airbus SB A320-27-1257 original issue, dated 18 December 2015.



The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 03 March 2016.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51
E-mail: account.airworth-eas@airbus.com.

