

|  適航指令發布單 Airworthiness Directive Issuance Form | | | |
|---|--|---------------------|-----------|
| 民航局 AD 編號 AD number | CAA-2016-03-017 | 發布日期 Date issued | 2016/3/24 |
| 適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable) | 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. | | |
| 主旨摘要 | Flight Controls - Spoiler Elevator Computer Software update | | |
| 民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other | 設計國民航主管機構 Original Authorities <input type="checkbox"/> FAA <input type="checkbox"/> Germany LBA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> CAA-NL <input type="checkbox"/> Brazil <input type="checkbox"/> UK CAA <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> Japan CAB <input type="checkbox"/> DGAC <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ | | |
| | 設計國 AD 編號 Original AD number | 2016-0056 | |
| | 1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No) | | |
| 備註 Note | ATA 27. This AD supersedes EASA AD 2015-0191(CAA-2015-09-011) dated 22 September 2015, including its Correction dated 25 September 2015. | | |
| 註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw | | | |



Airworthiness Directive

AD No.: 2016-0056

Issued: 18 March 2016

Note: This Airworthiness Directive (AD) 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.

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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

Effective Date: 01 April 2016

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 (identified by P/N B372CAM0104) was developed, which is embodied in production through Airbus modification (mod) 161208 (installation of SEC software standard 126), 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 P/N B372CAM0101, or P/N B372CAM0102, or P/N B372CAM0103 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

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

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 (see Note 3 of this AD) 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.

Note 3: Service Bulletin Information Transmission (SBIT) 16-0001 has been issued to inform operators about typo errors in SB A320-27-1257, original issue. A new revision of SB A320-27-1257 is expected to be issued.

- (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.

Airbus SBIT 16-0001 original issue, dated 20 January 2016.

The use of later approved revisions of these 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. This AD was posted on 04 February 2016 as PAD 16-021 for consultation until 03 March 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: account.airworth-eas@airbus.com.

