



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-09-004	發布日期 Date issued	2018/9/11
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A330-202, A330-203 and A330-243 aeroplanes, all manufacturer serial numbers, if equipped with Flight Control Primary Computer (FCPC) having software standard MRTT3 (hardware 2K2), or earlier software standard.		
主旨摘要	Flight Controls - Flight Control Primary Computer - Modification / Replacement		
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 <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC </div> <div style="width: 48%;"> <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ </div> </div>		
	設計國 AD 編號 Original AD number	2018-0196	
	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. Ref. Publications: Airbus SB A330-27-3225 original issue dated 20 March 2018, or revision 1 dated 26 April 2018.		
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.: 2018-0196

Issued: 05 September 2018

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):

A330 aeroplanes

Effective Date: 19 September 2018

TCDS Numbers: EASA.A.004

Foreign AD: Not applicable

Supersedure: None

ATA 27 – Flight Controls – Flight Control Primary Computer – Modification / Replacement

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A330-202, A330-203 and A330-243 aeroplanes, all manufacturer serial numbers, if equipped with Flight Control Primary Computer (FCPC) having software standard MRTT3 (hardware 2K2), or earlier software standard.

Note 1: This software standard corresponds to Part Number (P/N) LA2K2B100T30000. All affected aeroplanes should be equipped with this software, as required by EASA AD 2015-0124R3.

Definitions:

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

The SB: Airbus Service Bulletin (SB) A330-27-3225.

Groups: Group 1 aeroplanes are those in pre-Airbus modification (mod) 206619 configuration. Group 2 aeroplanes are those in post-mod 206619 configuration.



Reason:

In 2015, occurrences were reported of multiple Angle of Attack (AOA) blockages. Investigation results indicated the need for AOA monitoring in order to better detect cases of AOA blockage.

This condition, if not corrected, could, under specific circumstances, lead to undue activation of the Alpha protection, possibly resulting in reduced control of the aeroplane.

To address this unsafe condition, Airbus developed new FCPC software standard for enhanced AOA monitoring and, consequently, EASA issued AD 2015-0124 (later revised) to require this software standard upgrade on Airbus commercial designation MRTT aeroplanes.

Since EASA AD 2015-0124R3 was issued, it was identified that, for some cases, AOA blockages were not detected by this FCPC software standard. Consequently, a new FCPC software standard (MRTT4, mod 206619) has been developed to further improve the detection of AOA blockage. Airbus issued SB A330-27-3225 to implement this mod on in-service aeroplanes.

For the reasons described above, this AD requires a software standard upgrade, either by modification or replacement of the three FCPCs, and allows removal of the Aircraft Flight Manual (AFM) Temporary Revision (T/R), operational procedure 'AFM T/R 528', as previously required by EASA AD 2014-0267-E, from the applicable AFM.

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

Required as indicated, unless accomplished previously:

Modification / Replacement:

- (1) For Group 1 aeroplanes: Within 9 months after the effective date of this AD, modify or replace the three FCPCs, by installing software standard P/N LA2K2B100T40000 / MRTT4 (hardware standard 2K2), in accordance with the instructions of the SB.

AFM Change:

- (2) After modification of an aeroplane as required by paragraph (1) of this AD **and** having an AOA configuration as identified in Table 1 of this AD, or as identified in paragraph (10) [installation of AOA sensors having a P/N approved after 01 June 2015] of EASA AD 2015-0134, as applicable, the operational procedure 'AFM T/R 528' (any issue), as previously required by EASA AD 2014-0267-E, is no longer necessary and can be removed from the AFM of that aeroplane.

Table 1 – AOA Sensor Installation configurations

AOA Sensor P/N – Captain	AOA Sensor P/N – First Officer	AOA Sensor P/N – Standby
C16291AB or C16291AA	C16291AB or C16291AA	C16291AB or C16291AA, 0861ED or 0861ED2

Note 2: For AOA Sensor P/N C16291AA, a detailed inspection (DET) and a functional heating test of each sensor must be accomplished as required by paragraph (3) of EASA AD 2015-0134.



Credit:

- (3) An aeroplane modified as required by paragraph (1) of this AD remains compliant with the modification requirements of paragraph (1) of EASA AD 2015-0124 (any revision) for that aeroplane.

Part Installation Prohibition:

- (4) Do not install on an aeroplane any software of a version earlier than standard MRTT4 (hardware standard 2K2), as required by paragraph (4.1) or (4.2) of this AD, as applicable.

(4.1) For Group 1 aeroplanes: After modification of the aeroplane as required by paragraph (1) of this AD.

(4.2) For Group 2 aeroplanes: From the effective date of this AD.

Ref. Publications:

Airbus SB A330-27-3225 original issue dated 20 March 2018, or revision 1 dated 26 April 2018.

The use of later approved revisions of the above-mentioned document 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 26 June 2018 as PAD 18-088 for consultation until 24 July 2018. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
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](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

