



## 適航指令發布單

### Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-09-001	發布日期 Date issued	2018/9/7
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all serial numbers.		
主旨摘要	Aircraft Flight Manual / Engine Bleed Air System – Amendment and Indicating & Recording System – Flight Warning 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> <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> <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	2018-0192	
	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 31. This AD supersedes EASA AD 2016-0226(CAA-2016-11-007 修訂) dated 09 November 2016, including its Correction dated 10 November 2016. Ref. Publications: Airbus SB A340-31-4182 original issue dated 15 May 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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a> 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： <a href="mailto:adcaa@mail.caa.gov.tw">adcaa@mail.caa.gov.tw</a>			



## Airworthiness Directive

**AD No.:** 2018-0192

**Issued:** 03 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):**

A340 aeroplanes

**Effective Date:** 17 September 2018

**TCDS Numbers:** EASA.A.015

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2016-0226 dated 09 November 2016, including its Correction dated 10 November 2016.

### ATA – Aircraft Flight Manual / Engine Bleed Air System – Amendment

### ATA 31 – Indicating & Recording System – Flight Warning Computer – Modification / Replacement

**Manufacturer(s):**

Airbus (formerly Airbus Industrie)

**Applicability:**

Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all serial numbers.

**Definitions:**

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

**The SB:** Airbus Service Bulletin (SB) A340-31-4182.

**Affected FWC:** Flight Warning Computer (FWC) standard L13, Part Number (P/N) LA2E0060F130000, and earlier standard.



**Reason:**

Occurrences were reported by some operators of an engine bleed system over-temperature, without the engine bleed valve closing. In the case of an engine over-temperature, identified by an Electronic Centralised Aircraft Monitored (ECAM) message “AIR ENG 1(2)(3)(4) BLEED FAULT”, the associated engine bleed valve should be automatically closed. Then, another ECAM message “AIR ABNORM BLEED CONFIG” instructs the flight crew to open the cross bleed valve. Investigation results revealed that, in these events, the engine bleed valve jammed in open position and the manual closure normally requested by the ECAM procedure did not permit the isolation of the failed engine bleed air system.

This condition, if not corrected, could lead to damage of the bleed manifold and the ducts downstream of the engine bleed system and exposure of the surrounding structure to heat stress, possibly resulting in reduced structural integrity of the aeroplane.

To initially address this potential unsafe condition, Airbus issued Aircraft Flight Manual (AFM) Temporary Revision (TR), operational procedure AFM TR 746 Issue 1, to provide applicable instructions if an engine bleed over-temperature occurs, identified by the “AIR ENG 1(2)(3)(4) BLEED FAULT” ECAM caution message, and combined with the associated engine bleed valve jammed open. Consequently, EASA issued AD 2016-0226 to require amendment of the AFM by incorporating the Airbus A340 AFM TR 746 Issue 1.

Since that AD was issued, Airbus developed a modification to install improved Flight Warning Computers (FWC), standard L14, and published the SB to provide installation instructions. This modification allows removal of Airbus A340 TR 746 Issue 1 from the AFM of the aeroplane.

For the reasons described above, this AD retains the requirements of EASA AD 2016-0226, which is superseded, and requires a software standard upgrade of the two FWCs, either by modification or replacement, which allows removal of operational procedure previously introduced by Airbus A340 AFM TR 746 Issue 1.

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

Required as indicated, unless accomplished previously:

**AFM Change:**

- (1) Within 30 days after 23 November 2016 [the effective date of EASA AD 2016-0226], amend the applicable AFM to incorporate Airbus A340 AFM TR 746 Issue 1, inform all flight crews, and, thereafter, operate the aeroplane accordingly.
- (2) Amending the applicable AFM of an aeroplane to incorporate a later AFM revision, which includes AFM TR 746 Issue 1 (or AFM DU ABN-36-00005093.0004001), is acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.

**Modification / Replacement:**

- (3) Within 24 months after the effective date of this AD, install software standard L14, P/N LA2E0060F140000, (or later software standard) on both FWCs, or replace both FWCs with FWCs containing software standard L14, P/N LA2E0060F140000, (or later software standard), in accordance with the instructions of the SB.



**AFM Change:**

- (4) After modification of an aeroplane as required by paragraph (3) of this AD, the operational procedure 'AFM TR 746 Issue 1' is no longer necessary and can be removed from the AFM of that aeroplane.

**Part Installation Prohibition:**

- (5) After modification of an aeroplane as required by paragraph (3) of this AD, do not install an affected FWC on that aeroplane.

**Ref. Publications:**

Airbus SB A340-31-4182 original issue dated 15 May 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 16 July 2018 as PAD 18-097 for consultation until 13 August 2018. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto: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](mailto:airworthiness.A330-A340@airbus.com).

