

 適航指令發布單 Airworthiness Directive Issuance Form	
民航局 AD 編號 AD number	CAA-2017-11-002 發布日期 Date issued 2017/11/14
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), and Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.
主旨摘要	Fuel Pump Cavitation Erosion - Inspection
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 checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC <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 _____
	設計國 AD 編號 Original AD number 2017-0224
	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 28. Ref. Publications: Airbus AOT A28L006-17 original issue dated 03 November 2017.
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.: 2017-0224

Issued: 10 November 2017

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 and A340 aeroplanes

Effective Date: 17 November 2017

TCDS Number(s): EASA.A.015, EASA.A.004

Foreign AD: Not applicable

Revision: None

ATA 28 – Fuel – Fuel Pump Cavitation Erosion – Inspection

Manufacturer(s):

Airbus

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), and

Airbus A340-211, A340-212, A340-213, A340-311, A340-312, A340-313, A340-541, A340-542, A340-642 and A340-643 aeroplanes, all MSN.

Reason:

An occurrence was reported of a fuel pump showing cavitation erosion which breached the fuel pump housing through the inlet webs and exposed the fuel pump power supply wires. Inspections accomplished on fuel pumps removed from other aeroplanes identified signs of erosion in varying degrees. However, no other instance of break-through due to cavitation erosion was found. A list of potentially affected fuel pump Part Numbers (P/N) was established.

This condition, if not detected and corrected, could result, in case the pump is running dry, in an ignition source in the fuel tank, which may result in a fuel tank explosion and consequent loss of the aeroplane.



To address this potential unsafe condition, Airbus issued Alert Operators Transmission (AOT) A28L006-17 to provide instructions to inspect some fuel pumps when installed at specific positions, and to update the applicable Master Minimum Equipment List (MMEL).

For the reasons described above, this AD requires repetitive inspections of these fuel pumps and, depending on findings, replacement of damaged fuel pumps with serviceable parts. This AD also requires an update of the applicable MMEL, and the reporting of inspection results to Airbus.

This AD is considered to be an interim measure and further AD action may follow.

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

Required as indicated, unless accomplished previously:

Note 1: Airbus AOT A28L006-17 is hereafter referred to as 'the AOT' in this AD.

Note 2: For the purpose of this AD, an affected fuel pump has P/N 568-1-28300-101, or P/N 568-1-28300-103, or P/N 568-1-28300-200 and is located at the positions specified in paragraph 3.3 of the AOT.

Note 3: For the purpose of this AD, Group 1 aeroplanes are those equipped with an affected fuel pump (see Note 2 of this AD). Group 2 aeroplanes are those that are not Group 1 aeroplanes.

Inspection:

(1) For Group 1 aeroplanes: Before an affected pump exceeds 10 000 Flight Hours (FH) since first installation on an aeroplane, or within 30 days (for center/rear center tank/aft transfer fuel pump) or 40 days (for stand-by fuel pump), whichever occurs later after the effective date of this AD and, thereafter, at intervals not to exceed those specified in Table 1 of this AD, depending on erosion level, inspect that affected fuel pump in accordance with the instructions of the AOT.

Table 1

Erosion – As defined in the AOT	Inspection Interval - FH
No erosion	5 000
Case 1: Light erosion	
Case 2: Medium erosion	800

Corrective Action(s):

(2) If, during any inspection as required by paragraph (1) of this AD, Case 3: Severe erosion, as specified in the AOT, is found on a fuel pump, before next flight, replace that fuel pump with a serviceable part or de-activate that fuel pump as specified the applicable operator MEL, in accordance with the instructions of the AOT.

Reporting:

(3) Within 10 days after each inspection as required by paragraph (1) of this AD, report the inspection results (including no findings) to Airbus, in accordance with the instructions of the AOT.



Terminating Action:

(4) None.

Part Installation:

(5) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, it is allowed to install a fuel pump P/N 568-1-28300-101, or P/N 568-1-28300-103, or P/N 568-1-28300-200 on an aeroplane provided it is new or, prior to installation, it has passed the inspection (no erosion or Case 1: Light erosion) as required by this AD and that, following installation, it is inspected as required by this AD (see Note 4 of this AD).

Note 4: Fuel pump P/N 568-1-28300-101, or P/N 568-1-28300-103, or P/N 568-1-28300-200, installed in positions other than those specified in paragraph 3.3 of the AOT, are not affected by the inspection requirements of this AD.

(6) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, it is allowed to install a fuel pump P/N 568-1-28300-101, or P/N 568-1-28300-103, or P/N 568-1-28300-200, with Case 2: Medium erosion on an aeroplane provided the pump is not installed at the positions specified in paragraph 3.3 of the AOT.

MMEL Changes - Dispatch Restrictions:

(7) Within 30 days after the effective date of this AD, amend the applicable MMEL, on the basis of which the operator's MEL is established, in accordance with the instructions of the AOT, inform all flight crews, and, thereafter, operate the aeroplane accordingly. This can be accomplished by inserting a copy of the AOT into the applicable MMEL.

(8) For A340-500 and A340-600 aeroplanes: concurrently with the MMEL amendment as required by paragraph (7) of this AD, amend the applicable MMEL, on the basis of which the operator's MEL is established, as indicated in Table 2 of this AD, inform all flight crews and, thereafter, operate the aeroplane accordingly. This can be accomplished by inserting a copy of this AD into the applicable MMEL.

Table 2 – MMEL Item 28-27-06 and 28-27-07 amendment

Applicability	MMEL amendment
A340-500 A340-600	MMEL Item 28-27-06 and 28-27-07 can be applied provided that the related circuit breaker is pulled and tagged for the duration of the MMEL Item

Ref. Publications:

Airbus AOT A28L006-17 original issue dated 03 November 2017.

The use of later approved revisions of this 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. 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 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 – EIAL; E-mail: airworthiness.A330-A340@airbus.com.

