



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2018-10-015	發布日期 Date issued	2018/10/24
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Airbus A330-201, A330-202, A330-203, A330-301, A330-302 and A330-303 aeroplanes, all manufacturer serial numbers.		
主旨摘要	Power plant - Engine Air Inlet Cowl Inner Barrel Lower Panels - Inspection / 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; flex-wrap: wrap;"> <div style="width: 50%;"> <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: 50%;"> <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	2018-0228	
	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 71. Ref. Publications: Airbus SB A330-71-3035 original issue dated 20 February 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.: 2018-0228

Issued: 22 October 2018

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A330 aeroplanes

Effective Date: 05 November 2018

TCDS Numbers: EASA.A.004

Foreign AD: Not applicable

Supersedure: None

ATA 71 – Power plant – Engine Air Inlet Cowl Inner Barrel Lower Panels – Inspection / Replacement

Manufacturer(s):

Airbus, formerly Airbus Industrie

Applicability:

Airbus A330-201, A330-202, A330-203, A330-301, A330-302 and A330-303 aeroplanes, all manufacturer serial numbers.

Definitions:

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

The inspection SB: Airbus Service Bulletin (SB) A330-71-3035.

The modification SB: Airbus SB A330-71-3036.

The Goodrich SB: Goodrich Aerospace SB CF6-80E1-NAC-71-048.

Affected parts: Engine air inlet cowls, having a Part Number (P/N) and serial number as listed in Goodrich Aerospace SB CF6-80E1-NAC-71-048.

Groups: Group 1 aeroplanes are those that have an affected part installed. Group 2 aeroplanes are those that do not have an affected part installed. An aeroplane that embodies production



modification (mod) 203989 is a Group 2 aeroplane, provided the aeroplane remains in that configuration.

Reason:

Occurrences were reported on A330 aeroplanes fitted with General Electric CF6-80E1 engines, where the air inlet cowl inner barrel lower panel, was found disbonded between the back skins and the honeycomb core. The technical investigation results revealed that this occurrence may have been caused by freezing of water, accumulated in the non-drained honeycomb cells, damaging the adhesive bond between the panel core and the back skin.

This condition, if not corrected, in combination with an engine surge condition, could lead to in-flight detachment of an air inlet cowl inner barrel, possibly resulting in damage to the aeroplane, and/or injury to persons on the ground.

To address this potential unsafe condition, Airbus issued the inspection SB to provide instructions for detailed inspections (DET, tap test inspection method) of the air inlet cowl inner barrel lower panels, based on the Goodrich SB. Airbus also developed mod 203989, installation of improved inner barrel lower panels, based on Goodrich Aerospace SB CF6-80E1-NAC-71-052, and published the modification SB as terminating action.

For the reasons described above, this EASA AD requires repetitive DET (tap tests) of the inner barrel lower panels of each affected part on both engines and, depending on findings, replacement with an improved inner barrel lower panel. This AD also allows, in case of no findings, the modification SB as optional terminating action for the repetitive inspections.

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

Required as indicated, unless accomplished previously:

Repetitive Inspections:

- (1) For Group 1 aeroplanes: Within 24 months after the effective date of this AD and, thereafter, at intervals not to exceed 24 months, or 11 000 flight hours, or 2 400 flight cycles (FC), whichever occurs first, accomplish a DET (tap test inspection method) of each affected part of each engine on the aeroplane (see Note 1 of this AD) in accordance with the instructions of the inspection SB.

Note 1: On-wing inspection of only the accessible areas is acceptable, as this is where damage is expected to be found.

Corrective action(s):

- (2) If, during any DET as required by paragraph (1) of this AD, disbonding is found on any affected part, within the compliance time(s) defined in Table 1 of this AD, as applicable, accomplish the applicable corrective action(s).



Table 1 – Finding(s) / Compliance Time(s) / Corrective Action(s)

Size (in square inches) of the cumulative disbonded area	Compliance Time / Action(s)
Less than 50	Before next flight, inspect the inlet anti-ice seal installation in accordance with the inspection SB
50 or more, and less than 100	Before next flight, inspect the inlet anti-ice seal installation in accordance with the inspection SB and within 10 FC, modify the affected part in accordance with the instructions of the modification SB
100 or more	Before next flight, modify the affected part in accordance with the instructions of the modification SB

- (3) If, during any inspection of the inlet anti-ice seal installation as required by paragraph (2) of this AD, any defect is found (as defined in Goodrich SB at Revision 1 or Revision 2), before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the Goodrich SB at Revision 1 or Revision 2.

Terminating Action:

- (4) Modification of all affected parts on an aeroplane in accordance with the instructions of the modification SB constitutes terminating action for the repetitive inspections required by paragraph (1) of this AD for that aeroplane, provided the aeroplane remains in that configuration.

Part(s) Installation:

- (5) For Group 1 aeroplanes: From the effective date of this AD, installation of an affected part on an aeroplane is allowed, provided that, prior to installation, the part has passed (no discrepancies found) a DET in accordance with the instructions of the inspection SB, or the Goodrich SB at Revision 1 or Revision 2.
- (6) For Group 2 aeroplanes: From the effective date of this AD, installation of an affected part on an aeroplane is allowed, provided that, prior to installation, the part has passed (no discrepancies found) a DET in accordance with the instructions of the inspection SB, or the Goodrich SB at Revision 1 or Revision 2 and that, following installation, the part is inspected as required by this AD.
- (7) After modification of an aeroplane as required by paragraph (2) of this AD, installation of an affected part on an aeroplane is allowed, provided that, prior to installation, the part has passed (no discrepancies found) a DET in accordance with the instructions of the inspection SB, or the Goodrich SB at Revision 1 or Revision 2 and that, following installation, the part is inspected as required by this AD.

Ref. Publications:

Airbus SB A330-71-3035 original issue dated 20 February 2018.



Airbus SB A330-71-3036 original issue dated 20 February 2018.

Goodrich Aerospace SB CF6-80E1-NAC-71-048 Revision 1 dated 26 August 2015, or Revision 2 dated 25 February 2016.

Goodrich Aerospace SB CF6-80E1-NAC-71-052 original issue dated 10 February 2016.

The use of later approved revisions of the above-mentioned 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 16 March 2018 as PAD 18-040 for consultation until 13 April 2018, and republished on 26 September 2018 as PAD 18-040R1 for additional consultation until 10 October 2018. The Comment Response Documents 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 – Airworthiness Office – EIAL, E-mail: airworthiness.A330-A340@airbus.com.

