

 適航指令發布單 Airworthiness Directive Issuance Form			
民航局 AD 編號 AD number	CAA-2017-04-011	發布日期 Date issued	2017/5/4
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 and A340-313 aeroplanes, all MSN,		
主旨摘要	Wings - Centre Wing Box Fastener Holes at Frame 40 Vertical Web - Inspection / Modification		
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	2017-0069	
	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 57. This AD supersedes EASA AD 2014-0149(CAA-2014-06-) dated 13 June 2014.		
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.: 2017-0069

Issued: 25 April 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: 23 May 2017

TCDS Numbers: EASA.A.004, EASA.A.015

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2014-0149 dated 13 June 2014.

ATA 57 – Wings – Centre Wing Box Fastener Holes at Frame 40 Vertical Web – Inspection / Modification

Manufacturer(s):

Airbus (formerly Airbus Industrie)

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 and A340-313 aeroplanes, all MSN,

except those on which Airbus Repair Instruction (RI) R57115092 has been embodied in service on both Right Hand (RH) and Left Hand (LH) sides.

Reason:

During accomplishment of A330 Airworthiness Limitation Item (ALI) task 57-11-04 on the rear fitting of the Frame (FR) 40 between stringers (STR) 38 and STR39 on both LH and RH sides of the fuselage, cracks were found on an adjacent hole. After reaming at second oversize of the subject hole, the crack was still present. As a result of a sampling inspection program, additional crack findings were reported on this adjacent hole on other A330 and A340 aeroplanes.



This condition, if not detected and corrected, could affect the structural integrity of the centre fuselage of the aeroplane.

Prompted by these findings, EASA issued AD 2014-0149 to require removal of the fasteners and repetitive Special Detailed Inspection (SDI) of fastener holes at FR40 vertical web above or below Centre Wing Box (CWB) lower panel reference on both LH and RH sides of the fuselage, and, depending on findings, accomplishment of the applicable corrective actions. That AD excluded certain aeroplanes from the Applicability, on which Airbus modification (mod) 55792 or mod 55306 had been embodied in production.

Since EASA AD 2014-0149 was issued, prompted by complementary fatigue analyses correlated with in-service findings, Airbus published Service Bulletin (SB) A330-57-3115 Revision 01 and SB A340-57-4124 Revision 02, which introduced revised thresholds and intervals for the repetitive inspections of the inside CWB (above bottom skin), and an alleviation of the number of holes to be inspected, for post-mod 44360 and pre-mod 55306 configuration aeroplanes.

In addition, for aeroplanes in post-mod 44360, post-mod 55306 and pre-mod 205225 configuration, Airbus developed mod 206051, introducing reinforcement of the structural integrity of the inside CWB (above bottom skin) area, and published associated Airbus SB A330-57-3129 and SB A340-57-4136, as applicable, which avoids the need for required repetitive inspections for the inside of the CWB.

Finally, Airbus published SB A330-57-3116 Revision 01 and SB A330-57-4125 Revision 01, as applicable, to expand their Effectivity to include aeroplanes in post-mod 44360 and post-mod 49202 configuration for inspections of the outside CWB (below bottom skin), and introduced revised thresholds and intervals for the repetitive inspections of the outside CWB, and to provide an alleviation of the number of holes to be inspected. The repetitive inspection program for aeroplanes in pre-mod 44360 configuration remains unchanged.

For the reasons described above, this AD partially retains the requirements of EASA AD 2014-0149, which is superseded, and requires new repetitive inspections of the fastener holes at FR40 of the inside and the outside CWB (above and below bottom skin), and the implementation of the modification of the inside CWB, as terminating action of the repetitive SDI.

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

Required as indicated, unless accomplished previously:

Note 1: Airbus SB A330-57-3114 original issue (CWB area to be inspected: below – see references in Table 1 of this AD), SB A330-57-3115 Revision 01 (above) and SB A330-57-3116 Revision 01 (below), or SB A340-57-4123 original issue (below), SB A340-57-4124 Revision 02 (above) and SB A340-57-4125 Revision 01 (below), as applicable, are hereafter collectively referred to as “the applicable Inspection SB” in this AD.

Note 2: Airbus SB A330-57-3130 and SB A330-57-3131 and SB A330-57-3132; or SB A340-57-4137 and SB A340-57-4138; and SB A340-57-4139; (at any revision), as applicable, depending on aeroplane configuration, are hereafter referred to as “the applicable Optional Modification SB” in this AD.



Repetitive Inspections:

- (1) Before exceeding the thresholds as specified in the applicable Inspection SB (except as specified in Note 3 of this AD), depending on aeroplane configuration and utilisation, or within the compliance time specified in Table 1 of this AD, whichever occurs later, and, thereafter, at intervals not to exceed the values defined in the applicable Inspection SB (except as specified in Note 4 of this AD), depending on aeroplane configuration and utilisation, and in accordance with the instructions of the applicable Inspection SB, depending on aeroplane utilisation, configuration and area to be inspected (above or below), remove the fasteners and accomplish an SDI of the fastener holes at FR40 vertical web, on both LH and RH sides, of the affected CWB lower panel area.

Note 3: When it is determined that, on an aeroplane, no Repair Design Approval Sheet (RDAS) is found to exist for the FR40 area, it is acceptable to accomplish the first SDI before exceeding the applicable threshold, instead of 'before next flight', as specified in Airbus SB A330-57-3115, SB A330-57-3116, SB A340-57-4124 and SB A340-57-4125, as applicable for that aeroplane.

Note 4: For post-mod 44360 aeroplanes and pre-mod 55306 aeroplanes that have previously been inspected (see paragraph (4) of this AD) as previously required by EASA AD 2014-0149, it is allowed to defer the next due inspection to 18 months after the effective date of this AD, provided the previous inspection interval, as applicable, depending on aeroplane configuration and utilisation, as defined in the previous revision of applicable Inspection SB, is not exceeded.

Table 1 – Inspection Threshold

Aeroplane Type (configuration)	CWB Area	Compliance Time
A330 (pre-mod 44360)	Below	Within 2 400 flight cycles (FC) or 24 months, whichever occurs first after 27 June 2014 [the effective date of EASA AD 2014-0149]
A340 (pre-mod 44360)		Within 1 300 FC or 24 months, whichever occurs first after 27 June 2014 [the effective date of EASA AD 2014-0149]
A330 and A340 (post-mod 44360)	Below	Within 18 months after the effective date of this AD
A330 and A340 (pre-mod 55306)	Above	

Corrective Action(s)

- (2) If, during any inspection as required by paragraph (1) of this AD, no crack is detected, before next flight, install new fasteners in transition fit, in accordance with the instructions of the applicable Inspection SB.
- (3) If, during any inspection, as required by paragraph (1) of this AD, a crack is detected, accomplish the applicable actions (additional inspection followed by repetitive inspections) within the times specified in, and in accordance with the instructions of, the applicable Inspection SB, or, depending on findings, before next flight, contact Airbus to obtain an RDAS



and accomplish that repair accordingly, including post-repair follow-on action(s), if any are specified in that RDAS.

If, during any inspection of a post-mod 44360 aeroplane, as required by paragraph (1) of this AD, a crack is detected only on the LH or RH side, as previously repaired by an Airbus RDAS, it is acceptable to partially apply the applicable Optional Modification SB (optional terminating action – see Note 2 and paragraph (8) of this AD), on the non-repaired side.

Credit for Previous Action(s):

- (4) Inspection(s) and, depending on findings, corrective action(s) on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions Airbus SB A330-57-3114 original issue, or SB A330-57-3115 original issue, or SB A330-57-3116 original issue, or SB A340-57-4123 original issue, or SB A340-57-4124 original issue or Revision 01, or SB A340-57-4125 original issue, as applicable, are acceptable to comply with the initial requirements of paragraphs (1), (2) and (3) of this AD, as applicable, for that aeroplane.

Inspection(s) and, depending on findings, corrective action(s) and installation of fasteners on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of Airbus Technical Disposition Reference LR57D11023270, LR57D11023714, or LR57D11029170, or LR57D11029171, or LR57D11029172, or LR57D11029173, or LR57D11030740, or LR57D11030741, as applicable, are acceptable to comply with the initial requirements of paragraphs (1), (2) and (3) of this AD, as applicable, for that aeroplane.

After the effective date of this AD, inspections, corrective actions and fastener replacements must be accomplished as required by this AD.

Modification:

- (5) For aeroplanes in post-mod 55306 and pre-mod 205225 configuration, before exceeding the thresholds as specified in Table 2 of this AD, as applicable, depending on short range (SR) or long range (LR) operation (see Note 5 of this AD), or within 18 months after the effective date of this AD, whichever occurs later, modify the inside CWB (above bottom skin) in accordance with the instructions of Airbus SB A330-57-3129 or SB A340-57-4136, as applicable.

Table 2 – CWB Modification

Aeroplane Model	Compliance Time (flight hours (FH) or FC, whichever occurs first since aeroplane first flight)	Operation
A330-200	36 908 FH or 10 545 FC	SR
	51 198 FH or 7 877 FC	LR
A330-300	32 475 FH or 9 941 FC	SR
	52 115 FH or 7 702 FC	LR
A340-300	27 627 FH or 6 907 FC	SR
	35 065 FH or 5 195 FC	LR

Note 5: The instructions provided by Airbus Operators Information Telex (OIT) 999.0086/11 can be used to determine whether an aeroplane is operated SR or LR.



Related Actions:

- (6) Accomplishment on an aeroplane of the initial and repetitive inspections as required by this AD, cancels the need to accomplish Airworthiness Limitation Items (ALI) task 57-11-02 and task 57-11-04 for that aeroplane.
- (7) Modification of an aeroplane as required by paragraph (5) of this AD cancels the need to accomplish ALI task 57-11-02 for that aeroplane.

Terminating Action:

- (8) Modification of a post-mod 44360 aeroplane by multiple cold working in accordance with the instructions of the applicable Optional Modification SB(s) (see Note 2 of this AD), constitutes terminating action for the repetitive SDI as required by this AD for that aeroplane, provided this is accomplished within the limits specified in the applicable Inspection SB, depending on aeroplane configuration and on accumulated FH/FC at the time of Optional Modification SB embodiment.

Ref. Publications:

Airbus SB A330-57-3114 original issue dated 12 March 2013, or Revision 01 dated 13 January 2017.

Airbus SB A330-57-3115 original issue dated 04 April 2013, or Revision 01 dated 23 November 2016.

Airbus SB A330-57-3116 original issue dated 12 March 2013, or Revision 01 dated 23 November 2016.

Airbus SB A330-57-3129 original issue dated 05 October 2016.

Airbus SB A330-57-3130 original issue dated 23 November 2016.

Airbus SB A330-57-3131 original issue dated 23 November 2016.

Airbus SB A330-57-3132 original issue dated 23 November 2016.

Airbus SB A340-57-4123 original issue dated 12 March 2013, or Revision 01 dated 13 January 2017.

Airbus SB A340-57-4124 original issue dated 04 April 2013, or Revision 01 dated 22 August 2013, or Revision 02 dated 23 November 2016.

Airbus SB A340-57-4125 original issue dated 12 March 2013, or Revision 01 dated 23 November 2016.

Airbus SB A340-57-4136 original issue dated 05 October 2016.

Airbus SB A340-57-4137 original issue dated 23 November 2016.

Airbus SB A340-57-4138 original issue dated 23 November 2016.



Airbus SB A340-57-4139 original issue dated 23 November 2016.

Airbus OIT 999.0086/11 dated 9 November 2011.

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 25 January 2017 as PAD 17-014 for consultation until 22 February 2017. 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. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – EIAW (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

