

# **Airworthiness Directive**

AD No.: 2017-0060

**Issued: 07 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:**

Type/Model designation(s):

AIRBUS A330 and A340 aeroplanes

Effective Date: 21 April 2017

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

Foreign AD: Not applicable

Supersedure: None

## ATA 57 – Wings – Slat Track Front Stop Attachment – Inspection

#### Manufacturer(s):

Airbus (formerly Airbus Industrie)

#### Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-243, A330-223F, 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 aeroplanes, all MSN.

#### Reason:

Several cases of cracked slat tracks at the location of front stop attachment to track have been reported by operators. Analysis of the affected slat tracks (Airbus pre-modification (mod) 45967 design) revealed that induced torque loads during normal installation of the front stop, in combination with an incorrect shaft length of the attachment bolts and geometry of the front stop, are the root cause.

This condition, if not detected and corrected, would affect the structural integrity of the slat surface, which could lead to detachment of an outer or inner slat surface, possibly resulting in reduced control of the aeroplane and/or injury to persons on the ground.



To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A330-57-3123 and SB A340-57-4130, to provide inspection instructions.

For the reasons described above, this AD requires a one-time detailed inspection (DET) of the front stop lateral and aft surfaces, and repetitive special detailed inspections (SDI) of the front stop attachment areas, of slat tracks number (No.) 5 to No. 16 inclusive, both left hand (LH) and right hand (RH) wings, and, depending on findings, accomplishment of applicable corrective action(s). This AD also includes reference to an optional modification (Airbus mod 205378) of the affected slat tracks, for which the associated SBs (SB A330-57-3126 and SB A340-57-4133, as applicable) are expected to become available in July 2017, which constitutes terminating action for the repetitive inspections required by this AD.

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

Required as indicated, unless accomplished previously:

Note 1: Airbus SB A330-57-3123 and A340-57-4130 are hereafter collectively referred to as "the applicable SB" in this AD. Following issuance of the applicable SB at original issue, Airbus published SB Information Transmission (SBIT) 16-0045 to inform operators of an error related to a washer Part Number (P/N) and to clarify the installation assembly.

Note 2: Pre-mod 45967 slat tracks, located at the wing positions as indicated in Figure 1 of this AD, and having a P/N as specified in Appendix 1 of this AD, are hereafter referred to as "affected slat track" in this AD.

Note 3: For the purpose of this AD, Group 1 aeroplanes are those that, on the effective date of this AD, have an affected slat track installed. Group 2 aeroplanes are those that, on the effective date of this AD, do not have any affected slat track installed.

#### Inspection(s):

(1) For Group 1 aeroplanes: Within the thresholds specified in Table 1 of this AD, as applicable, accomplish a DET of the front stop lateral and aft surfaces, and an SDI of the front stop attachment areas of each affected slat track, both RH and LH wings (see Figure 1 of this AD), and, thereafter, depending on findings, at intervals not to exceed the values specified in Table 2 or Table 3 of this AD, as applicable, accomplish an SDI of the front stop attachment areas of each affected slat track, in accordance with the instructions of the applicable SB.

Table 1 – Inspection Thresholds

	Compliance Time: (whichever occurs later, A or B)					
Α	A330:	Before exceeding 15 000 flight cycles (FC) or 50 000 flight hours (FH), whichever occurs first since aeroplane first flight				
	A340:	Before exceeding 15 000 FC or 78 000 FH, whichever occurs first since aeroplane first flight				
В	Within 24 months after the effective date of this AD					



Table 2 – Inspection Intervals

Aeroplane	Compliance Times (FC or FH, whichever occurs first)	
A330	7 000 FC or 24 000 FH	
A340	4 400 FC or 23 000 FH	

(2) If, during any SDI as required by paragraph (1) of this AD, any crack is detected at the front stop attachment area of slat track No. 9 or No. 10 (Slat 4 on A330), or on slat track No. 5 or No. 6 (Slat 2 on A340), as applicable, which does not exceed the applicable allowable damage limit (ADL) as specified in the applicable SB, except as required by paragraph (3) of this AD, repeat the SDI in accordance with the instructions of the applicable SB at reduced intervals not exceeding the values as defined in Table 3 of this AD. For any other slat track(s) (A330: 5 to 8, 11 to 16, and A340: 7 to 16) in similar condition, the intervals remain those specified in Table 2 of this AD.

Table 3 – Reduced Inspection Intervals

Aeroplane	Front Stop Position	Compliance Times (FC or FH, whichever occurs first)
A330	Slat 4 (Tracks 9 and 10)	3 500 FC or 12 000 FH
A340	Slat 2 (Tracks 5 and 6)	2 200 FC or 11 500 FH

## Corrective Action(s):

- (3) If, during any SDI as required by paragraph (1) or (2) of this AD, as applicable, any crack is detected at the front stop attachment area of an affected slat track which exceeds the applicable ADL, or cracks are detected at the front stop attachment area of more than 5 slat tracks on an aeroplane, before next flight, contact Airbus for approved corrective action instructions, and, within the compliance time specified therein, accomplish those instructions accordingly.
- (4) If, during the DET as required by paragraph (1) of this AD, marks (dent, scratch) are found on the front stop lateral and/or aft surfaces of an affected slat track, provided that either no crack is detected, or any crack is detected at the front stop attachment area of that slat track that does not exceed the applicable ADL as specified in the applicable SB, before next flight, rework the affected lateral front stop surface(s) of that slat track, and/or accomplish slat rigging, as applicable, in accordance with the instructions of the applicable SB.
- (5) If, during the DET as required by paragraph (1) of this AD, marks (dent, scratch) are found at the front stop lateral and/or aft surfaces of an affected slat track, and any crack is detected at the front stop attachment area of that slat track that exceeds the applicable ADL, before next flight, contact Airbus for approved corrective action instructions, and, within the compliance time specified therein, accomplish those instructions accordingly.

#### Terminating Action(s):

(6) Accomplishment of rework or rigging on an aeroplane, as required by paragraph (4) of this AD, does not constitute terminating action for the repetitive SDI as required by paragraph (1) or (2) of this AD for that aeroplane.



(7) Replacement of an affected slat track at any position (see Figure 1 of this AD), as required by paragraph (3) or (5) of this AD, as applicable, with a post-mod 45967 slat track, constitutes terminating action for the repetitive inspections required by this AD for that slat track position.

(8) Modification of all affected slat tracks on an aeroplane in accordance with the instructions of Airbus SB A330-57-3126, or SB A340-57-4133, as applicable, constitutes terminating action for the repetitive inspections required by this AD for that aeroplane, provided that, prior to modification, the affected slat tracks have passed an inspection (crack free) in accordance with the instructions of the applicable SB (see Note 1 of this AD).

## Reporting:

(9) Within 60 days after each SDI as required by paragraph (1) or (2) of this AD, as applicable, report the inspection results (including no findings) to Airbus.

### Part(s) Installation:

- (10) For Group 1 aeroplanes: From the effective date of this AD, it is allowed to install an affected slat track (see Note 2 of this AD), provided this is accomplished in accordance with Airbus approved instructions, except as specified in paragraph (11) of this AD.
- (11) After modification of a Group 1 aeroplane as specified in paragraph (8) of this AD, do not install an affected slat track (see Note 2 of this AD) on that aeroplane.
- (12) For Group 2 aeroplanes: From the effective date of this AD, do not install an affected slat track (see Note 2 of this AD).

#### **Ref. Publications:**

Airbus SB A330-57-3123 original issue dated 14 June 2016.

Airbus SB A330-57-3126 (to be issued).

Airbus SB A340-57-4130 original issue dated 14 June 2016.

Airbus SB A340-57-4133 (to be issued).

Airbus SBIT A330, A340 16-0045 original issue dated 10 August 2016.

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.
- This AD was posted on 29 November 2016 as PAD 16-164 for consultation until 27 December 2016 and republished on 07 March 2017 as PAD 16-164R1 for additional consultation until



21 March 2017. The Comment Response Documents can be found in the <u>EASA Safety Publications Tool</u>, 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: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.
- 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS EIAL (Airworthiness Office), E-mail: <a href="mailto:airworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a>.

Slat 2

Figure 1 – Positions of Affected Slat Tracks

Appendix 1 – Affected Slats, Slat Track Positions (see also Figure 1 of this AD) and P/N

Note 4: In case the P/N ID Plate is missing or cannot be read, the slat track can be identified by the ink marking, or vice versa. In case both ID Plate and ink marking are missing or unreadable, Airbus can be contacted for assistance.

Slat	Slat Track	P/N Track Assembly	P/N Track Assembly + Linkage
	Position	(acc. to ID Plate)	(acc. to ink marking)
		F57464105-000	F57464005-000/001
	Track 5	F57464105-002	F57464005-002/003
N - 2		F57464105-004	F57464005-004/005
No.2	Track 6	F57464106-000	F57464006-000/001
		F57464106-002	F57464006-002/003
		F57464106-004	F57464006-004/005
	Track 7	F57464107-000	F57464007-000/001
		F57464107-002	F57464007-002/003
No.3	Track 8	F57464108-000	F57464008-000/001
		F57464108-002	F57464008-002/003
		F57464108-004	F57464008-004/005
	Tue els O	F57464109-000	F57464009-000/001
	Track 9	F57464109-002	F57464009-002/003
No.4		F57464110-000	F57464010-000/001
	Track 10	F57464110-002	F57464010-002/003
		F57464127-000	F57464082-000/001
	Track 11	F57464111-000	F57464011-000/001
		F57464111-002	F57464011-002/003
No.5		F57464111-004	F57464011-004/005
	Track 12	F57464112-000	F57464012-000/001
		F57464112-002	F57464012-002/003
	Track 13	F57464113-000	F57464013-000/001
		F57464113-002	F57464013-002/003
No.6		F57464113-004	F57464013-004/005
No.6		F57464114-000	F57464014-000/001
	Track 14	F57464114-002	F57464014-002/003
		F57464114-004	F57464014-004/005
	Track 15	F57464115-000	F57464015-000/001
		F57464115-002	F57464015-002/003
No.7		F57464115-004	F57464015-004/005
	Track 16	F57464116-000	F57464016-000/001
		F57464116-002	F57464016-002/003