



Notification of a proposal to issue an Airworthiness Directive

PAD No.: 17-012

Issued: 24 January 2017

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A330 and A340 aeroplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

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

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2014-0136 dated 13 June 2014.

ATA 53 – Fuselage – Frame 40 Skin Panel Junction – Inspection

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A330-201, A330-202, A330-203, A330-223, A330-243, 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, A340-312 and A340-313, all MSN,

on which Airbus modification (mod) 44360 has been embodied in production.

Reason:

During full scale fatigue test of the Frame (FR) 40 to fuselage skin panel junction, fatigue damage was found. Corrective actions consisted of in-service installation of an internal reinforcing strap on the related junction, as currently required by DGAC France AD 1999-448-126(B), which refers to Airbus Service Bulletin (SB) A340-53-4104 Revision 02, and AD 2001-070(B), which refers to Airbus SB A330-53-3093 Revision 04; retrofit improvement of internal reinforcing strap fatigue life through



recommended Airbus SB A330-53-3145; and introducing a design improvement in production through Airbus mod 44360.

After those actions were implemented, cracks were found on both left hand (LH) and right hand (RH) sides on internal strap, butt strap, keel beam fitting, or forward fitting FR40 flange. These findings were made during embodiment of a FR40 web repair on an A330 aeroplane, and during keel beam replacement on an A340 aeroplane, where the internal strap was removed and a special detailed inspection (SDI) was performed on several holes.

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

Prompted by these findings, Airbus issued SB A330-53-3215 and SB A340-53-4215, providing inspection instructions. Consequently, EASA issued AD 2014-0136 to require repetitive SDI (rototest) of 10 fastener holes located at the FR40 lower shell panel junction on both LH and RH sides and, depending on findings, accomplishment of applicable corrective action(s).

Since that AD was issued, prompted by the results of complementary fatigue analyses, it was determined that post-mod 55792 aeroplanes could be also affected by crack initiation and propagation at this area of the fuselage. These analyses demonstrated that post-mod 55792 aeroplanes must follow the same maintenance program as aeroplanes in post-mod 55306 and pre-mod 55792 configuration. Consequently, Airbus published SB A330-53-3215 Revision 01 and SB A340-53-4215 Revision 01 to expand the Effectivity accordingly.

For the reasons described above, this AD retains the requirements of EASA AD 2014-0136, which is superseded, which now also apply to aeroplanes in post-mod 55792 configuration.

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

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, Airbus SB A330-53-3215 Revision 02 and SB A340-53-4215 Revision 02 are hereafter collectively referred to as 'the applicable SB' in this AD.

Repetitive Inspections:

(1) Before exceeding the applicable threshold(s) as defined in the applicable SB, depending on aeroplane utilisation and configuration, to be counted from aeroplane first flight, and, thereafter, at intervals not to exceed the values defined in the applicable SB, depending on aeroplane utilisation and configuration, accomplish an SDI of the 10 fasteners holes located at FR40 lower shell panel junction on both LH and RH sides in accordance with the instructions of the applicable SB.

Corrective Action(s):

(2) If, during any SDI, as required by paragraph (1) of this AD, a crack is detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of the applicable SB.



- (3) If, during any inspection, as required by paragraph (1) of this AD, the diameter of a fastener hole is found to be outside the tolerances of the transition fit as specified in the applicable SB, before next flight, contact Airbus to obtain a Repair Design Approval Sheet (RDAS) and accomplish the instructions of that repair accordingly, including post-repair follow-on action(s), if any are specified in that RDAS.

Credit for Previous Action(s):

- (4) Inspection and corrective action(s) on an aeroplane, accomplished before 27 June 2014 [the effective date of EASA AD 2014-0136] in accordance with the instructions of Airbus Technical Disposition (TD) Reference LR57D11023360, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD for that aeroplane.
- (5) Inspections and corrective action(s) on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions Airbus SB A330-53-3215 original issue or Revision 01, or SB A340-53-4215 original issue or Revision 01, as applicable, are acceptable to comply with the initial requirements of paragraphs (1) and (2) of this AD for that aeroplane.

Terminating Action(s): None

Ref. Publications:

Airbus SB A330-53-3215 original issue dated 21 June 2013, or Revision 01 dated 17 April 2014, or Revision 02 dated 23 November 2016.

Airbus SB A340-53-4215 original issue dated 21 June 2013, or Revision 01 dated 17 April 2014, or Revision 02 dated 23 November 2016.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 21 February 2017.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – EIAL (Airworthiness Office), E-mail: airworthiness.A330-A340@airbus.com.

