


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2014-0012</p> <p>Date: 10 January 2014</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>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 closing date indicated.</p>	
Design Approval Holder's Name: AIRBUS	Type/Model designation(s): A330 and A340-300 aeroplanes
TCDS Number:	EASA A.004, EASA A.015
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA AD 2007-0284 dated 12 November 2007.
ATA 53	Fuselage – Longitudinal Doubler at Vertical Tail Plane Attachment Cut Out – Inspection / Modification
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	<p>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) on which Airbus modification 44205 has been embodied in production, except those on which Airbus modification 52974 or 53223 has been embodied in production, and</p> <p>Airbus A340-311, A340-312 and A340-313 aeroplanes, all MSN on which Airbus modification 44205 has been embodied in production, except those on which Airbus modification 52974 or 53223 has been embodied in production.</p>
Reason:	<p>During fatigue tests (EF3) on the A340-600, damage was found in the longitudinal doubler at the Vertical Tail Plane (VTP) attachment cut out between Frame (FR) 80 and FR86. This damage occurred between 58 341 and 72 891 simulated flight cycles (FC).</p> <p>Due to the higher Design Service Goal and different design of the affected structural area (e.g. doubler thickness) for A330-200/-300 and A340-300 aeroplane series, the damage assessment concluded that these aeroplanes may be also potentially affected.</p> <p>This condition, if not detected and corrected, could affect the structural integrity of the upper shell structure between FR80 and FR86.</p> <p>Prompted by these findings, EASA issued AD 2007-0284 to require implementation of an inspection programme of this structural area using a high frequency eddy current (HFEC) method and a modification to improve the upper</p>

	<p>shell structure.</p> <p>Since that AD was issued, in the frame of a new fatigue and damage tolerance evaluation, taking into account the aeroplane utilisation, the inspection threshold and intervals have been reassessed and the conclusion was that the thresholds and intervals for inspection, as well as the threshold for modifying the aeroplane, must be reduced.</p> <p>For the reason described above, this AD retains the requirements of EASA AD 2007-0284, which is superseded and introduces redefined thresholds and intervals.</p>						
Effective Date:	24 January 2014						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Part A – A330-300 and A340-300 aeroplanes (except Weight Variant (WV) 027) (see Part C of this AD):</p> <p>(1) For aeroplanes that, before the effective date of this AD, have <u>never</u> been inspected in accordance with the instructions of Airbus SB A330-53-3168 or SB A340-53-4174, as applicable to aeroplane type:</p> <p>Within the compliance time defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed the values, whichever occurs first as defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, depending on aeroplane type, configuration and utilisation, accomplish a HFEC inspection of the upper shell structure between FR80 and FR86 in accordance with the instructions of Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type.</p> <p style="text-align: center;"><u>Table 1 – Threshold</u></p> <table border="1"> <thead> <tr> <th></th><th>Compliance time (whichever occurs later, A or B)</th></tr> </thead> <tbody> <tr> <td>A</td><td>Within the inspection threshold defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight</td></tr> <tr> <td>B</td><td>Within 12 months after the effective date of this AD, but without exceeding the previous inspection interval values, whichever occurs first, as defined in Airbus SB A330-53-3168 Revision 01 or Airbus SB A340-53-4174 Revision 01, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight</td></tr> </tbody> </table> <p>(2) For aeroplanes that, before the effective date of this AD, have already been inspected in accordance with the instructions of Airbus SB A330-53-3168 or Airbus SB A340-53-4174, as applicable to aeroplane type:</p> <p>Within the compliance time defined in Table 2 of this AD, as applicable, and, thereafter, at intervals not to exceed the values defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, whichever occurs first, depending on aeroplane type, configuration and utilisation, accomplish a HFEC inspection of the upper shell structure between FR80 and FR86 in accordance with the instructions of Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type.</p>		Compliance time (whichever occurs later, A or B)	A	Within the inspection threshold defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight	B	Within 12 months after the effective date of this AD, but without exceeding the previous inspection interval values, whichever occurs first, as defined in Airbus SB A330-53-3168 Revision 01 or Airbus SB A340-53-4174 Revision 01, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight
	Compliance time (whichever occurs later, A or B)						
A	Within the inspection threshold defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight						
B	Within 12 months after the effective date of this AD, but without exceeding the previous inspection interval values, whichever occurs first, as defined in Airbus SB A330-53-3168 Revision 01 or Airbus SB A340-53-4174 Revision 01, as applicable to aeroplane type, configuration and utilisation, since aeroplane first flight						

Table 2 – First inspection after the effective date of this AD

	Compliance time (whichever occurs later, C or D)
C	Within the new interval, as defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, depending on aeroplane type, configuration and utilisation to be counted from the last inspection
D	Within 12 months after the effective date of this AD but without exceeding the previous value as defined in Airbus SB A330-53-3168 Revision 01 or Airbus SB A340-53-4174 Revision 01, depending on aeroplane type, configuration and utilisation to be counted from the last inspection

- (3) If, during any HFEC inspection as required by paragraph (1) or (2) of this AD, a crack less than 10 mm in length is detected, depending on crack length, aeroplane configuration and utilisation, accomplish the following actions:
- (3.1) Amend the interval of repetitive HFEC inspection, as required by paragraph (1) or (2) as applicable, as defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type, configuration and utilisation, and
 - (3.2) Contact Airbus for approved repair instructions and within the next [or second] reduced interval as defined in Airbus SB A330-53-3168 Revision 02 or Airbus SB A340-53-4174 Revision 02, as applicable to aeroplane type, configuration and utilisation, accomplish those instructions accordingly.
- (4) If, during any HFEC inspection as required by paragraph (1) or (2) of this AD, a crack equal to or more than 10 mm in length is detected, before next flight, contact Airbus for approved repair instructions and accomplish those instructions accordingly.
- (5) Accomplishment of a repair as required by paragraph (3) or (4) of this AD, as applicable, does not constitute terminating action for the repetitive HFEC inspections as required by paragraph (1) or (2) of this AD, as applicable. The need and definition of any subsequent repetitive inspection for the repaired area must be defined in the applicable Repair Approval Sheet (RAS).
- (6) Modification of an aeroplane in accordance with the instructions of Airbus SB A330-53-3159 (at any revision) or Airbus SB A340-53-4165 (at any revision) constitutes terminating action for the repetitive HFEC inspections as required by paragraph (1) or (2) or (3) of this AD, as applicable for that aeroplane.

Part B – A330-200 aeroplanes:

- (7) Within the compliance time as defined in Table 3 of this AD, inspect and modify the aeroplane upper shell structure between FR80 and FR86 in accordance with the instructions of Airbus SB A330-53-3160 Revision 03.

	<p style="text-align: center;">Table 3</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th data-bbox="588 185 636 248"></th><th data-bbox="636 185 1437 248">Compliance time (whichever occurs later, E or F)</th></tr> <tr> <td data-bbox="588 248 636 371">E</td><td data-bbox="636 248 1437 371">Within the threshold defined in Airbus SB A330-53-3160 Revision 03, depending on WV and aeroplane utilisation, since aeroplane first flight</td></tr> <tr> <td data-bbox="588 371 636 495">F</td><td data-bbox="636 371 1437 495">Within 12 months after the effective date of this AD, but without exceeding the previous threshold as defined in Airbus SB A330-53-3160 Revision 02, since aeroplane first flight</td></tr> </table> <p>(8) If, during the inspection as required by paragraph (7) of this AD, any crack is detected, before next flight, contact Airbus to obtain approved repair instructions and accomplish those instructions accordingly, concurrent with the modification as required by paragraph (7) of this AD.</p> <p>(9) Inspection and modification of an aeroplane upper shell structure between FR80 and FR86, accomplished before the effective date of this AD in accordance with the instructions of Airbus SB A330-53-3160 at original issue or Revision 01 or Revision 02, are acceptable to comply with the requirements of paragraph (7) of this AD for that aeroplane.</p> <p>Part C – A340-300 aeroplanes, only WV 027:</p> <p>(10) Before accumulation of 14 200 FC from aeroplane first flight, inspect and modify the aeroplane upper shell structure between FR80 and FR86 in accordance with the instructions of Airbus SB A340-53-4172.</p> <p>(11) If, during the inspection as required by paragraph (10) of this AD, any crack is detected, before next flight, contact Airbus to obtain approved repair instructions and accomplish those instructions accordingly, concurrent with the modification as required by paragraph (10) of this AD.</p>		Compliance time (whichever occurs later, E or F)	E	Within the threshold defined in Airbus SB A330-53-3160 Revision 03, depending on WV and aeroplane utilisation, since aeroplane first flight	F	Within 12 months after the effective date of this AD, but without exceeding the previous threshold as defined in Airbus SB A330-53-3160 Revision 02, since aeroplane first flight
	Compliance time (whichever occurs later, E or F)						
E	Within the threshold defined in Airbus SB A330-53-3160 Revision 03, depending on WV and aeroplane utilisation, since aeroplane first flight						
F	Within 12 months after the effective date of this AD, but without exceeding the previous threshold as defined in Airbus SB A330-53-3160 Revision 02, since aeroplane first flight						
Ref. Publications:	<p>Airbus SB A330-53-3159 original issue dated 19 September 2007, or Revision 01 dated 15 June 2009, or Revision 02 dated 29 March 2010.</p> <p>Airbus SB A330-53-3160 original issue dated 09 July 2007, or Revision 01 dated 28 April 2009, or Revision 02 dated 29 March 2010, or Revision 03 dated 06 January 2012.</p> <p>Airbus SB A330-53-3168 original issue dated 19 September 2007, or Revision 01 dated 15 February 2008, or Revision 02 dated 21 December 2011.</p> <p>Airbus SB A340-53-4165 original issue dated 19 September 2007, or Revision 01 dated 17 June 2009, or Revision 02 dated 29 March 2010.</p> <p>Airbus SB A340-53-4172 original issue dated 10 July 2007, or Revision 01 dated 08 July 2009.</p> <p>Airbus SB A340-53-4174 original issue dated 19 September 2007, or Revision 01 dated 15 February 2008, or Revision 02 dated 21 December 2011.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>						
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 04 December 2013 as PAD 13-180 for consultation until 01 January 2014. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. 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. 						