

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2014-0069</b></p> <p><b>Date: 19 March 2014</b></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>This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<b>Design Approval Holder's Name:</b>		<b>Type/Model designation(s):</b>
AIRBUS		A320 aeroplanes
TCDS Number:	EASA.A.064	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes DGAC France AD 97-311-105 dated 22 October 1997.	
<b>ATA 57</b>		
<b>Wings – Front Spar Vertical Stringers – Inspection</b>		
Manufacturer(s):	Airbus (formerly Airbus Industrie)	
Applicability:	Airbus A320-211, A320-212 and A320-231 aeroplanes, Manufacturer Serial Number (MSN) from 0001 to 0155 inclusive.	
Reason:	<p>During center fuselage certification full scale fatigue test, cracks were found on the front vertical stringer at frame 36. Analysis of these findings indicated that a number of in-service aeroplanes could be similarly affected.</p> <p>This condition, if not detected and corrected, could lead to crack propagation and consequent deterioration of the structural integrity of the aeroplane.</p> <p>To address this potential unsafe condition, DGAC France AD 97-311-105 was issued to require repetitive inspections in accordance with the instruction of Airbus Service Bulletin (SB) A320-57-1016. At the same time, the modification provided by Airbus SB A320-57-1017 was considered to be terminating action for the repetitive inspections required by DGAC France AD 97-311-105.</p> <p>Since that AD was issued, and following new analysis, modification per Airbus SB A320-57-1017 is no longer considered to be terminating action for the repetitive inspections as required by DGAC France AD 97-311-105.</p> <p>Aeroplanes with MSN 0080 up to 0155 inclusive have been delivered with the addition of a 5 mm thick light alloy shim under the heads of 2 fasteners at the top end of the front spar vertical stringers (Airbus modification 21290P1546, which is the production line equivalent to in-service modification through Airbus SB A320-57-1017). From MSN 0156 and higher, all aeroplanes are delivered with vertical stiffeners of the forward wing spar upper end with stiffener cap thickness increased from 4 to 6 mm (Airbus modification 21290P1547).</p>	

	<p>Prompted by these findings, Airbus issued SB A320-57-1178 to introduce new repetitive inspections with new thresholds and intervals.</p> <p>For the reasons described above, DGAC France AD 97-311-105 is superseded and this AD requires the repetitive inspections at new thresholds and intervals.</p> <p>After EASA issued PAD 14-021, it was discovered that additional work, to be included in Revision 01 of Airbus SB A320-57-1178, is required to accomplish the inspections. This Final AD has been amended accordingly.</p>						
Effective Date:	02 April 2014						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Initially, within the compliance time defined in the Appendix 1 of this AD, as applicable, and, thereafter, at intervals not to exceed the values specified in Table 1 of this AD, as applicable, accomplish a High Frequency Eddy Current (HFEC) inspection of the vertical stiffeners radius in accordance with the instructions of Airbus SB A320-57-1178.</p> <p>In addition to the accomplishment instructions of Airbus SB A320-57-1178, during each inspection, remove the shims (if installed, per Airbus modification 21290 P1546, or Airbus SB A320-57-1017) and fasteners on front spar vertical stringer, accomplish a HFEC inspection of the spar vertical stringers radius and of the horizontal beam radius and accomplish a rototest inspection before reinstalling the shims and fasteners.</p> <p>The detailed accomplishment instructions for this additional work will be published in Airbus SB A320-57-1178 Revision 01. Until the revised SB is available (expected end of March 2014), operators should contact Airbus to request all necessary instructions for this additional work.</p> <p style="text-align: center;">Table 1 – Repetitive Inspections</p> <table border="1" data-bbox="568 1131 1425 1346"> <thead> <tr> <th data-bbox="568 1131 967 1249"><b>Aeroplane Configuration</b> (see definitions in Appendix 1 of this AD)</th> <th data-bbox="967 1131 1425 1249"><b>Compliance Times</b> (flight cycles (FC) or flight hours (FH), whichever occurs first)</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1249 967 1294">Configuration 1</td> <td data-bbox="967 1249 1425 1294">8 800 FC or 17 700 FH</td> </tr> <tr> <td data-bbox="568 1294 967 1346">Configurations 2, 3 and 4</td> <td data-bbox="967 1294 1425 1346">24 900 FC or 49 800 FH</td> </tr> </tbody> </table> <p>(2) For aeroplanes on which an initial inspection, in accordance with the instructions of Airbus SB A320-57-1178 at original issue, has already been accomplished, without having accomplished additional work as specified in paragraph (1) of this AD, within the compliance time as defined in Appendix 1 of this AD, as applicable, accomplish the additional work as specified in, and as required by, paragraph (1) of this AD.</p> <p>(3) If, during any inspection as required by paragraph (1) of this AD, any damage is found, before next flight, contact Airbus for approved repair instructions and, within the compliance time specified in those instructions, accomplish the repair, including any follow-on actions, as applicable, accordingly.</p>	<b>Aeroplane Configuration</b> (see definitions in Appendix 1 of this AD)	<b>Compliance Times</b> (flight cycles (FC) or flight hours (FH), whichever occurs first)	Configuration 1	8 800 FC or 17 700 FH	Configurations 2, 3 and 4	24 900 FC or 49 800 FH
<b>Aeroplane Configuration</b> (see definitions in Appendix 1 of this AD)	<b>Compliance Times</b> (flight cycles (FC) or flight hours (FH), whichever occurs first)						
Configuration 1	8 800 FC or 17 700 FH						
Configurations 2, 3 and 4	24 900 FC or 49 800 FH						
Ref. Publications:	<p>Airbus SB A320-57-1016 Revision 02 dated 20 January 1998.</p> <p>Airbus SB A320-57-1017 original issue dated 03 September 1991, or Revision 01 dated 17 March 1997.</p> <p>Airbus SB A320-57-1178 original issue dated 29 October 2013 and Revision 01 [expected end of March 2014].</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"><li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li><li>2. This AD was posted on 27 January 2014 as PAD 14-021 for consultation until 24 February 2014. No comments were received during the consultation period.</li><li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li><li>4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a>.</li></ol>
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Superseded

## Appendix 1 – Inspection Threshold

Configuration 1: MSN 0001 to 0079 inclusive, pre-SB A320-57-1017 at original issue or Rev.01

<b>Compliance Time</b> (whichever occurs later, <b>A</b> , <b>B</b> or <b>C</b> )	
<b>A</b>	Before exceeding 24 000 FC or 48 000 FH, whichever occurs first since aeroplane first flight
<b>B</b>	Within 8 800 FC or 17 700 FH, whichever occurs first since the last inspection in accordance with Airbus SB A320-57-1016
<b>C</b>	Within 850 FC or 1 700 FH, whichever occurs first after the effective date of this AD, without exceeding 14 000 FC from the last inspection in accordance with Airbus SB A320-57-1016

Configuration 2: MSN 0001 to 0079 inclusive, post-SB A320-57-1017 at original issue or Rev.01, **without** Airbus SB A320-57-1016 accomplishment prior to Airbus SB A320-57-1017 accomplishment

<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )	
<b>A</b>	Within 8 800 FC or 17 700 FH whichever occurs first since modification in accordance with Airbus SB A320-57-1017 (original issue or Rev.01)
<b>B</b>	Within 850 FC or 1 700 FH, whichever occurs first after the effective date of this AD

Configuration 3: MSN 0001 to 0079 inclusive, post-SB A320-57-1017 at original issue or Rev.01, **with** Airbus SB A320-57-1016 accomplishment prior to Airbus SB A320-57-1017 accomplishment

<b>Compliance Time</b> (whichever occurs later, <b>A</b> or <b>B</b> )	
<b>A</b>	Within 24 900 FC or 49 800 FH whichever occurs first from Airbus SB A320-57-1017 at original issue or Revision 01 embodiment
<b>B</b>	Within 850 FC or 1 700 FH whichever occurs first after the effective date of this AD

Configuration 4: MSN 0080 to 0155 inclusive

<b>Compliance Time</b>	
Before exceeding 54 300 FC or 108 600 FH, whichever occurs first since aeroplane first flight	