


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2014-0159</p> <p>Date: 07 July 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>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>	
<p>Design Approval Holder's Name:</p> <p>AIRBUS HELICOPTERS</p>	<p>Type/Model designation(s):</p> <p>SA 365, AS 365 and SA 366 helicopters</p>
TCDS Number:	EASA.R.105
Foreign AD:	Not applicable
Supersedure:	This AD supersedes EASA Emergency AD 2010-0064-E dated 06 April 2010.
ATA 53	Fuselage – 9° Frame – Inspection
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale).
Applicability:	SA 365 N, SA 365 N1, AS 365 N2 and AS 365 N3 helicopters, all serial numbers, and SA 366 G1 helicopters, all serial numbers.
Reason:	<p>Airbus Helicopters was informed that, during a Major Inspection of an AS 365 N2 helicopter, a crack was detected on the 9° frame. The affected helicopter had accumulated 10 786 flight hours (FH) at the time of the inspection. The crack was located 230 mm above the cabin floor and had grown over a large section of the 9° frame on the Right Hand (RH) side.</p> <p>This condition, if not detected and corrected, could lead to a structural failure of the 9° frame and reduced structural integrity of the helicopter.</p> <p>To address this potential unsafe condition, and pending the results of analysis, EASA issued Emergency AD 2009-0125-E to require repetitive detailed visual inspections on the RH and Left Hand (LH) side of the 9° frame to detect any crack and, depending on findings, accomplishment of applicable corrective action(s).</p> <p>After EASA AD 2009-0125-E was issued, the results of analyses demonstrated that the flight time leading to crack initiation in the affected area varied significantly depending on the weight and balance data of the affected helicopter models.</p> <p>Consequently, EASA issued EASA Emergency AD 2010-0064-E, retaining the requirements of EASA AD 2009-0125-E, which was superseded, but modifying compliance times, depending on helicopter model.</p>

	<p>Since EASA Emergency AD 2010-0064-E was issued, further analysis led to an amendment of the inspection thresholds defined in Emergency AD 2010-0064-E and enlargement of the area to be inspected up to the junction with the upper part of the 9° frame. Consequently, Airbus Helicopters issued AS365 Alert Service Bulletin (ASB) No. 05.00.57 Revision 2, and SA366 ASB No. 05.39 Revision 2 to provide the revised inspection instructions.</p> <p>For the reasons described above, this AD retains the requirements of EASA AD 2010-0064-E, which is superseded, modifies the compliance times depending on helicopter model, and requires the inspections to be accomplished in accordance with modified instructions.</p>												
Effective Date:	21 July 2014												
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) For helicopters which, on the effective date of this AD, accumulated less flight hours (FH) and flight cycles (FC), than the threshold as defined in Table 1 of this AD, as applicable to helicopter model:</p> <p>Within 110 FH after exceeding the threshold as defined in Table 1 of this AD, whichever occurs first, and as applicable, and thereafter at interval not to exceed 110 FH, inspect the 9° frame on the RH and LH sides, in accordance with the instructions of paragraph 2 of Airbus Helicopters ASB AS365 05.00.57 Revision 2, or SA366 05.39 Revision 2, as applicable to helicopter model.</p> <p>Table 1 – Threshold to Determine Initial Inspection</p> <table border="1"> <thead> <tr> <th>Model</th><th>Service Life Accumulated Since First Flight (FH or FC, whichever occurs first)</th></tr> </thead> <tbody> <tr> <td>SA 365 N</td><td>22 980 FC or 11 490 FH</td></tr> <tr> <td>SA 365 N1</td><td>20 980 FC or 10 490 FH</td></tr> <tr> <td>AS 365 N2</td><td>18 280 FC or 9 140 FH</td></tr> <tr> <td>AS 365 N3</td><td>17 480 FC or 8 740 FH</td></tr> <tr> <td>SA 366 G1</td><td>16 780 FC or 8 390 FH</td></tr> </tbody> </table> <p>(2) For helicopters which, on the effective date of this AD, accumulated FH or FC equal to or more than the threshold as defined in Table 1 of this AD, as applicable to helicopter model:</p> <p>Before exceeding 110 flying FH after the last inspection of 9° frame on the RH and LH sides accomplished in accordance with paragraph 2.B.2 of Airbus Helicopters ASB AS365 05.00.57 Revision 1, or SA366 05.39 Revision 1, as applicable to helicopter model, or within 110 FH after the effective date of this AD, whichever occurs first, and thereafter at interval no to exceed 110 FH, inspect the 9° frame on the RH and LH sides in accordance with the instructions of paragraph 2 of Airbus Helicopters ASB AS365 05.00.57 Revision 2, or SA366 05.39 Revision 2, as applicable to helicopter model.</p> <p>(3) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any crack is detected having a length less than 33 mm, contact Airbus Helicopters for approved repair instructions and accomplish actions specified in paragraphs (3.1) and (3.2) of this AD:</p> <p>(3.1) Within 10 FH after detection of the crack and, thereafter, at intervals not to exceed 10 FH, inspect the area of the 9° frame in accordance with the instructions of paragraph 2 of Airbus Helicopters ASB AS365 05.00.57 Revision 2, or SA366 05.39</p>	Model	Service Life Accumulated Since First Flight (FH or FC, whichever occurs first)	SA 365 N	22 980 FC or 11 490 FH	SA 365 N1	20 980 FC or 10 490 FH	AS 365 N2	18 280 FC or 9 140 FH	AS 365 N3	17 480 FC or 8 740 FH	SA 366 G1	16 780 FC or 8 390 FH
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	<p>Revision 2, as applicable to helicopter model.</p> <p>(3.2) Within 660 FH or 12 months, whichever occurs first after detection of the crack, accomplish the repair in accordance with Airbus Helicopter repair instructions. Accomplishment of the repair constitutes terminating action for repetitive inspection at reduced interval as required by paragraph (3.1) of this AD.</p> <p>(4) If, during any inspection as required by paragraph (1) or (2) of this AD, as applicable, any crack is detected having a length equal to, or more than, 33 mm, before next flight, contact Airbus Helicopters for approved repair instructions and accomplish those instructions accordingly.</p> <p>(5) If, during any inspection accomplished within the reduced interval, as required by paragraph (3.1) of this AD, any new crack is identified, before next flight, contact Airbus Helicopters for approved instructions and accomplish those instructions accordingly.</p> <p>(6) Accomplishment of a repair on a helicopter, as required by paragraph (3.2) or paragraph (4) of this AD, or instructions as required by paragraph (5) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) or (2) of this AD for that helicopter.</p>
Ref. Publications:	<p>Airbus Helicopters AS365 ASB 05.00.57 Revision 1 dated 31 March 2010 and Revision 2 dated 07 April 2014,</p> <p>Airbus Helicopters SA366 ASB 05.39 Revision 1 dated 31 March 2010 and Revision 2 dated 07 April 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"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication. 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 Helicopters (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex, France; Telephone +33 (4) 42 85 97 97; fax +33 (4) 42 85 99 66; E-mail: Directive.technical-support@eurocopter.com.