

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2014-0162</b></p> <p><b>Date: 10 July 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>	
<p><b>Design Approval Holder's Name:</b></p> <p>AIRBUS HELICOPTERS</p>	<p><b>Type/Model designation(s):</b></p> <p>SA 365, AS 365 and SA 366 helicopters</p>
TCDS Number:	EASA.R.105
Foreign AD:	Not applicable
Supersedure:	None
<b>ATA 53</b>	<b>Fuselage – 9° Frame – Inspection</b>
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 were 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>To address this potential unsafe condition, 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. Consequently, EASA issued EASA Emergency AD 2010-0064-E, retaining the requirements of EASA AD 2009-0125-E, which was superseded, but modifying compliance times, depending on helicopter model. Since EASA Emergency AD 2010-0064-E was issued, further analysis led to an amendment of the inspection thresholds and enlargement of the area to be inspected up to the junction with the upper part of the 9° frame and, consequently, EASA issued AD 2014-0159.</p> <p>Although, no incident was reported involving the upper part of the 9° frame,</p>

	<p>analyses conducted by Airbus Helicopters show that crack may be initiated also in this area and, consequently, reduce the structural integrity of the 9° frame.</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 provide inspection instructions addressing the upper part of the 9° frame, Airbus Helicopters issued Emergency Alert Service Bulletin (ASB) ASB 05.00.68 for AS365 model and ASB 05.43 for SA366 model.</p> <p>For the reasons described above, this AD requires inspection of the upper part of the 9° frame and, depending on finding, accomplishment of a repair.</p>												
Effective Date:	24 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 FH and flight cycles (FC), than the threshold as defined in Table 1 of this AD, as applicable to helicopter model:</p> <p>Within 75 FH after exceeding the threshold as defined in Table 1 of this AD, whichever occurs first, and as applicable to helicopter model and, thereafter, at interval not to exceed 75 FH, inspect the upper part of the 9° frame in accordance with the instructions of paragraph 3 of Airbus Helicopters ASB AS365 05.00.68 or ASB SA366 05.43, as applicable to helicopter model.</p> <p><b>Table 1 – Threshold to Determine Initial Inspection</b></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>54 250 FC or 27 125 FH</td></tr> <tr> <td>SA 365 N1</td><td>50 650 FC or 25 325 FH</td></tr> <tr> <td>AS 365 N2</td><td>45 650 FC or 22 825 FH</td></tr> <tr> <td>AS 365 N3</td><td>44 150 FC or 22 075 FH</td></tr> <tr> <td>SA 366 G1</td><td>46 850 FC or 23 425 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>Within 75 FH after the effective date of this AD and, thereafter, at interval not to exceed 75 FH, inspect the upper part of the 9° frame in accordance with the instructions of paragraph 3 of Airbus Helicopters ASB AS365 05.00.68 or ASB SA366 05.43, as applicable to helicopter model.</p> <p>(3) If, during any inspection as required by paragraph (1) or (2) of this AD any crack is detected, before next flight contact Airbus Helicopters for approved repair instructions and accomplish those instructions accordingly.</p> <p>(4) Accomplishment of a repair as required by paragraph (3) of this AD does not constitute terminating action for the repetitive inspections as required by paragraph (1) or (2) of this AD, as applicable.</p>	Model	Service Life Accumulated Since First Flight (FH or FC, whichever occurs first)	SA 365 N	54 250 FC or 27 125 FH	SA 365 N1	50 650 FC or 25 325 FH	AS 365 N2	45 650 FC or 22 825 FH	AS 365 N3	44 150 FC or 22 075 FH	SA 366 G1	46 850 FC or 23 425 FH
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Ref. Publications:	<p>Airbus Helicopters AS365 ASB 05.00.68 original issue dated 07 April 2014,</p> <p>Airbus Helicopters SA366 ASB 05.43 original issue 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"><li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li><li>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.</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 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: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a>.</li></ol>
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