

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2013-0191-E</p> <p>Date: 22 August 2013</p> <p>Note: This Emergency 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>		
Design Approval Holder's Name: EUROCOPTER		Type/Model designation(s): AS 350 and EC 130 helicopters
TCDS Number:	EASA.R.008	
Foreign AD:	Not Applicable	
Supersedure:	This AD supersedes EASA AD 2013-0061 dated 11 March 2013.	
ATA 76	Engine controls – Switches 53Ka, 53Kb and 65K – Inspection / Modification	
Manufacturer(s):	Eurocopter (formerly Eurocopter France)	
Applicability:	<p>AS 350 B3 helicopters, all serial numbers, if equipped with an ARRIEL 2B1 engine incorporating the two-channel FADEC (MOD 073254), and embodying modification MOD 073261 (new twist grip).</p> <p>EC 130 B4 helicopters, all serial numbers, equipped with an ARRIEL 2B1 engine incorporating the two-channel FADEC, and embodying modification MOD 073773 (new twist grip).</p>	
Reason:	<p>During trouble-shooting analysis performed by Eurocopter, a dormant failure risk was identified for one of the two switches, 53Ka or 53Kb, following the introduction of MOD 073261 (AS 350 B3) or MOD 073773 (EC 130 B4).</p> <p>This condition, if not detected and corrected, would, in case of failure of the other switch, prevent the pilot to switch from "IDLE" to "FLIGHT" mode during training of autorotation landing, which would make aborting the autorotation impossible and compel the pilot to continue autorotation until touchdown.</p> <p>To address this potential unsafe condition, EASA issued AD 2009-0256 to require, pending the development of a modification, repetitive inspections of the switches 53Ka and 53Kb for correct opening and closing and, depending on findings, corrective action(s).</p> <p>Since that AD was issued, Eurocopter designed a new modification intended, in case of simultaneous failure of switches 53Ka and 53Kb, to recover engine "FLIGHT" mode when the pilot operates the twist grip. Newly built helicopters are fitted with this modification, identified as MOD 074263. Installation of that modification on in-service helicopters was made possible through Eurocopter</p>	

	<p>Alert Service Bulletins (ASB) No. AS350-80.00.09 and -ASB No. EC130-80A005, as applicable to helicopter type.</p> <p>Consequently, EASA issued AD 2013-0061, retaining the requirements of EASA AD 2009-0256, which was superseded, to require a modification of in-service helicopters which consisted in improving the twist grip operational logic and constituted terminating action for the repetitive inspections.</p> <p>However, after that AD was issued, Eurocopter found an error in the modification installation procedure as presented in Eurocopter ASB No. AS350-80.00.09 and ASB No. EC130-80A005. As a consequence of this error, helicopters modified in-service in accordance with the instructions of those ASBs are not in conformity with the approved modification design. The error identified in the ASBs does not affect helicopters with MOD 074263 installed on the assembly line.</p> <p>Additionally, in the course of investigation into causes of a recent accident of an AS350B3 helicopter operated offshore, involving engine power loss in flight, it has been found that operation of switches in the engine "IDLE" / "FLIGHT" control system could be affected by corrosive effects of salt laden operating atmosphere, leading potentially to engine power loss. These effects are not prevented by installation of MOD 074263.</p> <p>For the reasons described above, this Emergency AD supersedes EASA AD 2013-0061 and requires periodical inspections for corrosion, installation of protection against corrosive environment, and testing for insulation and operation of the switches in the engine "IDLE" / "FLIGHT" control system as well as corrective action(s), depending on findings. Additionally, this AD requires that in-service helicopters are fitted with improved twist grip operational logic (MOD 074263) in conformity with the approved design.</p> <p>Finally, this new AD amends the status of MOD 074263, which is no longer considered terminating action for the required repetitive maintenance actions.</p>						
Effective Date:	23 August 2013						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 10 flight hours (FH) or 7 days, whichever occurs first after the effective date of this AD, and, thereafter, at intervals not to exceed the values specified in Table 1 of this AD, inspect, protect and test the IDLE and FLIGHT controls on the pilot's and co-pilot's twist grips in accordance with the instructions of paragraph 3 of Eurocopter AS350 Emergency ASB No. 05.00.61 Revision 2, or EC130 Emergency ASB No. 05A009 Revision 2, as applicable to helicopter type.</p> <p style="text-align: center;">Table 1 – Repetitive Inspection/Test</p> <table border="1"> <thead> <tr> <th>Helicopter operating conditions:</th> <th>Interval (not to exceed)</th> </tr> </thead> <tbody> <tr> <td>For helicopters which operate or have operated in salt laden conditions since previous accomplishment of instructions as required by paragraph (1) of this AD</td> <td>330 FH or 6 months, whichever occurs first</td> </tr> <tr> <td>For helicopters which do not operate and have not operated in salt laden conditions since previous accomplishment of instructions as required by paragraph (1) of this AD</td> <td>660 FH or 12 months, whichever occurs first</td> </tr> </tbody> </table> <p>Note: Salt laden conditions persist when an aircraft is ship-based, based less than 1 km from the coast or performs an offshore flight at altitude below 1000 feet.</p>	Helicopter operating conditions:	Interval (not to exceed)	For helicopters which operate or have operated in salt laden conditions since previous accomplishment of instructions as required by paragraph (1) of this AD	330 FH or 6 months, whichever occurs first	For helicopters which do not operate and have not operated in salt laden conditions since previous accomplishment of instructions as required by paragraph (1) of this AD	660 FH or 12 months, whichever occurs first
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	<p>(2) If, during any inspection or test as required by paragraph (1) of this AD, discrepancies are detected, before next flight, accomplish the applicable corrective action(s), depending on findings, in accordance with the instructions of paragraph 3 of Eurocopter AS350 Emergency ASB No. 05.00.61 Revision 2, or EC130 Emergency ASB No. 05A009 Revision 2, as applicable to helicopter type.</p> <p>(3) Within 6 months after the effective date of this AD, except for helicopters that embody modification MOD 074263 as installed on the assembly line, modify the twist grip operational logic in accordance with the instructions of paragraph 3, excluding paragraph 3.B.2.a.2, of Eurocopter ASB No. AS350-80.00.09 Revision 1, or ASB No. EC130-80A005 Revision 1, as applicable to helicopter type.</p> <p>(4) For helicopters already modified before the effective date of this AD in accordance with the instructions of Eurocopter ASB No. AS350-80.00.09, or ASB No. EC130-80A005 at original issue, within 6 months after the effective date of this AD, modify the twist grip operational logic in accordance with the instructions of paragraph 3, excluding paragraph 3.B.2.a.1, of Eurocopter ASB No. AS350-80.00.09 Revision 1, or ASB No. EC130-80A005 Revision 1, as applicable to helicopter type.</p> <p>(5) Modification of a helicopter as required by paragraph (3) or paragraph (4) of this AD, as applicable, does not constitute terminating action for the repetitive maintenance actions as required by paragraph (1) of this AD for that helicopter.</p>
Ref. Publications:	<p>Eurocopter AS350 Emergency ASB No.05.00.61 and EC130 Emergency ASB No.05A009, Revision 2 dated 13 August 2013 (published as single document).</p> <p>Eurocopter ASB No. AS350-80.00.09 Revision 1 dated 13 August 2013.</p> <p>Eurocopter ASB No. EC130-80A005 Revision 1 dated 13 August 2013.</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. The results of the safety assessment have indicated the need for immediate publication and notification, without the full public consultation process. 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: EUROCOPTER (STDI) - Aéroport de Marseille Provence 13725 Marignane Cedex, France. Telephone +33 (0) 4 42 85 97 97, Fax +33 (0) 4 42 85 99 66. E-mail: Directive.technical-support@eurocopter.com.