

EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE	
	<p>PAD No.: 12-055R1</p> <p>Date: 10 October 2012</p> <p>Note: This Proposed Airworthiness Directive (PAD) 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: EUROCOPTER		Type/Model designation(s): AS 350 helicopters
TCDS Number:	EASA.R.008	
Foreign AD:	Not Applicable	
Supersedure:	This AD supersedes EASA AD 2011-0237 dated 14 December 2011.	
ATA 67	Rotor Flight Controls – Twist Grip Assembly – Adjustment / Functional Check / Replacement / Modification	
Manufacturer(s):	Eurocopter, formerly Eurocopter France, Aerospatiale	
Applicability:	AS 350 B3 helicopters, all serial numbers, if equipped with the ARRIEL 2B engines.	
Reason:	<p>In 2006, a case was reported concerning an AS 350 B3 helicopter where, during an autorotation training procedure, the engine remained at idle rating although the twist grip had been turned back to the "FLIGHT" position. Analysis revealed that the cause of this occurrence was jamming of the "forced idle" microswitch (called microswitch in the text below) pin in the pushed-in position.</p> <p>This condition, if not corrected, can occur when the pilot turns the twist grip back to the "FLIGHT" position on completion of autorotation training, or when the pilot turns the grip in the low flow rate direction during training for governor failure.</p> <p>To address this potential unsafe condition, EASA issued AD 2006-0094, to require repetitive functional tests of the microswitch. The AD also established a life limit of 550 flight hours (FH) for the microswitch.</p> <p>Since AD 2006-0094 was issued, two new cases have been reported, one related to a microswitch jam (at 412 FH, i.e. below the life limit as defined in that AD) and another related to an incorrectly routed harness.</p> <p>Prompted by these findings, EASA issued AD 2011-0237, retaining the requirements of EASA AD 2006-0094, which was superseded, reducing the microswitch life limit to 330 Flight Hours (FH) and requiring an additional check of the collective lever for free travel, each time the microswitch was replaced.</p>	

	<p>Since AD 2011-0237 was issued, Eurocopter designed a new modification (MOD) 073357, which gives priority to the Hydro Mechanical Unit (HMU) flight position when the microswitch does not operate correctly at forced idle .</p> <p>However, this modification is only effective for helicopters that do not have an auto-pilot installed and those which have not been modified by Eurocopter MOD 073222 in production, or modified by Eurocopter AS 350 Alert Service Bulletin (ASB) No. 67.00.33 in service.</p> <p>For the reasons described above, this new AD retains the requirements of EASA AD 2011-0237, which is superseded, and requires the terminating action modification to the electrical operation of the twist grip for all helicopters, except those that have an auto-pilot installed, and except those which have been modified by Eurocopter Mod 073222 in production, or modified by Eurocopter AS 350 ASB No. 67.00.33 in service.</p>						
Effective Date:	[TBD: 14 days after final AD issue date]						
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 110 FH after 05 May 2006 [the effective date of EASA AD 2006-0094], adjust the microswitch and check it for correct operation (functional test) in accordance with the instructions of paragraphs 2.B.2 and 2.B.3 of Eurocopter AS 350 ASB No. 05.00.49. (2) Thereafter, at intervals not exceeding 110 FH, accomplish a functional test of the microswitch in accordance with the instructions of paragraph 2.B.3 of Eurocopter AS 350 ASB No. 05.00.49. (3) Initially, within the compliance time, in FH accumulated on 28 December 2011 [the effective date of EASA AD 2011-0237] by the microswitch since first installation on a helicopter, as specified in Table 1 of this AD, as applicable, and thereafter at intervals not exceeding 330 FH, replace the microswitch in accordance with the instructions of paragraph 2.B.4 of Eurocopter AS 350 ASB No. 05.00.49 Revision 2 (or later approved revisions). <p style="text-align: center;">Table 1 – Life Limit (Replacement)</p> <table border="1" data-bbox="568 1263 1398 1581"> <thead> <tr> <th data-bbox="568 1263 928 1357">FH accumulated by the microswitch</th> <th data-bbox="928 1263 1398 1357">Compliance time</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 1357 928 1424">Less than 275 FH</td> <td data-bbox="928 1357 1398 1424">Before accumulating 330 FH</td> </tr> <tr> <td data-bbox="568 1424 928 1581">275 FH or more</td> <td data-bbox="928 1424 1398 1581">Within 55 FH after 28 December 2011 [the effective date of EASA AD 2011-0237], without exceeding 550 FH (microswitch FH)</td> </tr> </tbody> </table> <ol style="list-style-type: none"> (4) Replacement of the microswitch on a helicopter, as required by paragraph (3) of this AD, does not constitute terminating action for the repetitive functional tests as required by paragraph (2) of this AD for that helicopter. (5) Within 660 FH after the effective date of this AD, modify the electrical operation of the twist grip in accordance with instructions of paragraph 3 of Eurocopter AS350 ASB No. 67.00.43 <p>This requirement does not apply to helicopters that have an auto-pilot installed, or those which have been modified by Eurocopter Mod 073222 in production, or have been modified by Eurocopter AS350 ASB No. 67.00.33 in service.</p> <ol style="list-style-type: none"> (6) Modification of a helicopter as required by paragraph (5) of this AD constitutes terminating action for the repetitive inspections of the microswitch as required by paragraph (2) of this AD and the repetitive 	FH accumulated by the microswitch	Compliance time	Less than 275 FH	Before accumulating 330 FH	275 FH or more	Within 55 FH after 28 December 2011 [the effective date of EASA AD 2011-0237], without exceeding 550 FH (microswitch FH)
FH accumulated by the microswitch	Compliance time						
Less than 275 FH	Before accumulating 330 FH						
275 FH or more	Within 55 FH after 28 December 2011 [the effective date of EASA AD 2011-0237], without exceeding 550 FH (microswitch FH)						

	replacements of the microswitch as required by paragraph (3) of this AD.
Ref. Publications:	<p>Eurocopter AS 350 ASB No. 05.00.49 Revision 3 dated 08 March 2012.</p> <p>Eurocopter AS 350 ASB No. 67.00.43 dated 08 March 2012, or Revision 1 dated 31 July 2012.</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. This Proposed AD will be closed for consultation on 07 November 2012. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: <p>EUROCOPTER (STDI) – Aéroport de Marseille Provence, 13725 Marignane Cedex, France ; téléphone +33 (4) 12 85 97 97 ; facsimile +33 (4) 85 99 66; E-mail: Directive.technical-support@eurocopter.com.</p>