


EASA	NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE
	<p>PAD No.: 15-106</p> <p>Date: 03 August 2015</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: AIRBUS HELICOPTERS	Type/Model designation(s): AS 355 NP helicopters
TCDS Number:	EASA.R.146
Foreign AD:	Not applicable
Supersedure:	None
ATA 63	Rotor Drive – Main Gearbox Main and Bottom Casings – Inspection / Replacement
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter)
Applicability:	AS 355 NP helicopters, all serial numbers, if equipped with main gearbox (MGB) main casing Part Number (P/N) 350A32-3121-07, or if equipped with MGB bottom casing (sump) P/N 350A32-3119-03 or P/N 350A32-3119-05.
Reason:	<p>The application of an optimized stress calculation by Airbus Helicopters (AH) to the MGB main casing and the MGB bottom casing (sump) as installed on AS 355 NP helicopters revealed critical areas not previously identified in these components.</p> <p>This condition, if not detected and corrected, could lead to cracks propagating in the MGB housing or in the mounting pad, possibly resulting in failure of the mounting pad and consequent loss of the helicopter.</p> <p>To address this potential unsafe condition, AH issued Alert Service Bulletin (ASB) AS355-01.00.55 (hereafter referred to as 'the ASB' in this AD) to provide inspection instructions.</p> <p>For the reason described above, this AD requires repetitive inspections of the MGB main casing and bottom casing for oil leakage and cracks and, depending on findings, accomplishment of applicable corrective action(s). This AD also requires the reporting of all inspection results (including no findings) to the design approval holder.</p>
Effective Date:	[TBD: 14 days after final AD issue date]

<p>Required Action(s) and Compliance Time(s):</p>	<p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> (1) Within 165 flight hours (FH) or 6 months, whichever occurs first after the effective date of this AD, determine the total service life in number of FH and torque cycles (TC) accumulated by the MGB main casing and bottom casing, in accordance with the instructions of paragraph 1.E.2 of the ASB. (2) If the total service life of the MGB main casing or MGB bottom casing, determined as required by paragraph (1) of this AD, was estimated by conversion of FH into TC, mark a "V" after the serial number of the concerned casing in accordance with the instructions of paragraph 1.E.2 of the ASB. <p>For the MGB Main Casing:</p> <ol style="list-style-type: none"> (3) Within 10 FH inspection after accumulating 65 400 TC if the total service life determined as required by paragraph (1) was calculated through the cycle follow-up carried out for other MGB components, or during the next 10 FH inspection if the total service life determined as required by paragraph (1) was estimated by conversion of FH into TC, and thereafter in either case during each 10 FH inspection, inspect the MGB main casing in accordance with the instructions of paragraph 1.E.2 of the ASB. (4) If, during any inspection as required by paragraph (3) of this AD, any oil leakage is detected, before next flight, replace the MGB main casing with a serviceable part in accordance with the instructions of the ASB. (5) Unless already accomplished as required by paragraph (4) of this AD, during the next repair or next scheduled overhaul of the MGB main module after accumulating 65 400 TC and before exceeding 88 200 TC, replace the MGB main casing with a serviceable part in accordance with the instructions of the ASB. <p>For the MGB Bottom Casing (Sump):</p> <ol style="list-style-type: none"> (6) If the total service life, determined as required by paragraph (1) of this AD, was calculated through the cycle follow-up carried out for other MGB components, within 1 000 TC after accumulating 75 800 TC, or within 1 000 TC after the determination as required by paragraph (1) of this AD, whichever occurs later, inspect each attachment lug of the MGB bottom casing in accordance with the instructions of paragraph 3.B.2 of the ASB. (7) If the total service life, determined as required by paragraph (1) of this AD, was estimated by conversion of FH into TC, within 1 000 TC after the determination as required by paragraph (1) of this AD, and, thereafter, at intervals not to exceed 22 800 TC, inspect each attachment lug of the MGB bottom casing in accordance with the instructions of paragraph 3.B.2 of the ASB. (8) If, during any inspection as required by paragraph (6) or (7) of this AD, as applicable, any crack is detected, before next flight, replace the MGB bottom casing in accordance with the instructions of the ASB. (9) Unless already accomplished as required by paragraph (8) of this AD, during the next repair or scheduled overhaul of the MGB main module after having reached 76 800 TC or after the first inspection as required by paragraph (6) or (7) of this AD, whichever occurs later, but before exceeding 99 600 TC, replace the MGB bottom casing with a serviceable part in accordance with the instructions of the ASB. (10) Replacement of a MGB main casing or a MGB bottom casing on a helicopter as required by this AD does not constitute terminating action for the repetitive inspections as required by paragraph (3) or (7) of this AD, as applicable, for that helicopter. (11) Within 30 days after each inspection as required by this AD, report the result (including no findings) to AH in accordance with the instructions of
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	the ASB.
Ref. Publications:	AH ASB AS355-01.00.55 Revision 2 dated 28 July 2015 The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks:	<ol style="list-style-type: none"> 1. This Proposed AD will be closed for consultation on 31 August 2015. 2. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 3. For any question concerning the technical content of the requirements in this PAD, please contact: Airbus Helicopters (ESBESB) – Aeroport de Marseille Provence, 13725 Marignane Cedex, France Telephone: +33 (4) 12 85 97 97; Fax: +33 (4) 85 99 66 E-mail: directive.technical-support@airbus.com.