


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2015-0195</p> <p>Date: 23 September 2015</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 EU 1321/2014 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 [EU 1321/2014 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: AIRBUS HELICOPTERS</p>	<p>Type/Model designation(s): AS 350 and AS 355 helicopters</p>
TCDS Number:	EASA R.008 and EASA R.146
Foreign AD:	Not applicable
Supersedure:	This AD supersedes DGAC France AD 98-173-073(A), and AD 82-078-005(A)R5, both dated 22 April 1998.
ATA 65	Tail Rotor Drive – Drive Shaft Bearings – Inspection / Replacement
Manufacturer(s):	Airbus Helicopters (formerly Eurocopter, Eurocopter France, Aerospatiale)
Applicability:	AS 350 B, BA, BB, B1, B2, B3 and D helicopters, and AS 355 E, F, F1, F2, N and NP helicopters, all serial numbers, if equipped with tail rotor (TR) drive shaft bearings as indicated in Table 1 of this AD.
Reason:	<p>DGAC France issued AD 98-173-073 (previously AD 82-077-025) and AD 82-078-005 (currently Revision 5) to require certain periodical inspections and corrective actions described in Eurocopter AS350 Service Bulletin (SB) 05.00.08 and AS355 SB 05.00.02. These actions were prompted by reports of in-service failure of tail rotor (TR) drive shaft rear section bearings.</p> <p>This condition, if not detected and corrected, could lead to loss of TR drive, possibly resulting in loss of control of the helicopter.</p> <p>Since those ADs were issued, inconsistencies have been identified between, on the one hand, the inspections and maintenance actions for TR drive shaft bearings as required by DGAC France AD 98-173-073 (AS350) and AD 82-078-005R5 (AS355) and, on the other hand, the same actions specified in the applicable Airworthiness Limitation Section (ALS), as currently required (for AS350) by EASA AD 2015-0132 and (for AS355) EASA AD 2013-0130.</p> <p>Prompted by these findings, Airbus Helicopter (AH) published Alert Service Bulletin (ASB) AS350-01.00.70 and ASB AS355-01.00.57 to ensure replacement of four (4) different bearings currently available for installation with a single bearing, Part Number (P/N) 593404 (manufacturer P/N (MPN) 704A33-651-181), and to provide inspection instructions for that new bearing.</p>

	For the reasons described above, this AD retains the requirements of DGAC France AD 98-173-073 and AD 82-078-005R5, which are superseded, requires replacement of the existing 4 P/N bearings with bearings having P/N 593404 and introduces repetitive inspections for these bearings.															
Effective Date:	07 October 2015															
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>Note: For the purpose of this AD, affected TR drive shaft bearings are those identified by P/N and MPN in Table 1.</p> <p style="text-align: center;">Table 1 – Affected TR Drive Shaft Bearings</p> <table border="1" data-bbox="568 573 1460 846"> <thead> <tr> <th data-bbox="568 573 619 622"></th> <th data-bbox="619 573 911 622">AH P/N</th> <th data-bbox="911 573 1460 622">MPN (bearing manufacturer)</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 622 619 667">1</td> <td data-bbox="619 622 911 667">6007-2RS1MT47CA</td> <td data-bbox="911 622 1460 667">704A33-651-010, non-regreasable (SKF)</td> </tr> <tr> <td data-bbox="568 667 619 719">2</td> <td data-bbox="619 667 911 719">P9107NPP7</td> <td data-bbox="911 667 1460 719">704A33-651-111, regreasable (FAFNIR)</td> </tr> <tr> <td data-bbox="568 719 619 797">3</td> <td data-bbox="619 719 911 797">83A851BC3 and 83A851B-1C3</td> <td data-bbox="911 719 1460 797">704A33-651-143, regreasable (KOYO)</td> </tr> <tr> <td data-bbox="568 797 619 846">4</td> <td data-bbox="619 797 911 846">593404</td> <td data-bbox="911 797 1460 846">704A33-651-181, regreasable (FAG)</td> </tr> </tbody> </table> <p>Re-statement (summarised) of the requirements of DGAC France AD 98-173-073 (AS350) and AD 82-078-005R5 (AS355):</p> <ol style="list-style-type: none"> (1) For helicopters equipped with affected TR drive shaft bearings, identified in Table 1 of this AD as 1, 2 or 3: accomplish the actions as required by paragraphs (1.1), (1.2) and (1.3) of this AD, as applicable, in accordance with the instructions of Eurocopter AS350 SB 05.00.08 or AS355 SB 05.00.02, as applicable. <ol style="list-style-type: none"> (1.1) Inspect and grease each regreasable bearing within 100 flight hours (FH) after 2 March 1991 [the effective date of DGAC France AD 82-077-025 (AS350) and AD 82-078-005 (AS350), both at Revision 2]. (1.2) Inspect each non-regreasable bearing within 50 FH after 22 April 1998 [the effective date of DGAC France AD 98-173-073 (AS350) and AD 82-078-005 (AS350) at Revision 5]. (1.3) After the initial action as required by paragraph (1.1) or (1.2) of this AD, as applicable, repeat these actions at intervals not to exceed the value(s) as specified in Eurocopter AS350 SB 05.00.08 or AS355 SB 05.00.02, as applicable. (2) If, during any inspection as required by paragraph (1) of this AD, any discrepancies are detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of Eurocopter AS350 SB 05.00.08, or AS355 SB 05.00.02, as applicable. (3) Corrective action(s) on a helicopter, as required by paragraph (2) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter. <p>New requirements of this AD:</p> <ol style="list-style-type: none"> (4) Within 10 months after the effective date of this AD, replace each affected TR shaft bearing, identified in Table 1 of this AD as 1, 2 and 3, with a serviceable TR shaft bearing having P/N 593404 (MPN 704A33-651-181), identified in Table 1 of this AD as 4. (5) After modification of a helicopter as required by paragraph (4) of this AD, do not install any affected TR shaft bearings, identified in Table 1 of this AD as 1, 2 or 3, on that helicopter. Modification of a helicopter as required 		AH P/N	MPN (bearing manufacturer)	1	6007-2RS1MT47CA	704A33-651-010, non-regreasable (SKF)	2	P9107NPP7	704A33-651-111, regreasable (FAFNIR)	3	83A851BC3 and 83A851B-1C3	704A33-651-143, regreasable (KOYO)	4	593404	704A33-651-181, regreasable (FAG)
	AH P/N	MPN (bearing manufacturer)														
1	6007-2RS1MT47CA	704A33-651-010, non-regreasable (SKF)														
2	P9107NPP7	704A33-651-111, regreasable (FAFNIR)														
3	83A851BC3 and 83A851B-1C3	704A33-651-143, regreasable (KOYO)														
4	593404	704A33-651-181, regreasable (FAG)														

	<p>by paragraph (4) of this AD constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that helicopter.</p> <p>(6) For helicopters equipped with affected TR drive shaft bearings identified in Table 1 of this AD as 4, within 165 FH after the last inspection of the bearings, or within 165 FH after modification of the helicopter as required by paragraph (4) of this AD, as applicable, and, thereafter, at intervals not to exceed 165 FH, visually inspect each bearing P/N 593404 (MPN 704A33-651-181) in accordance with the instructions of paragraph 1.E.2.(b) of AH ASB AS350-01.00.70 or ASB AS355-01.00.57, as applicable.</p> <p>(7) If, during any inspection as required by paragraph (6) of this AD, any discrepancy is detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of paragraph 1.E.2.(b) of AH ASB AS350-01.00.70, or ASB AS355-01.00.57, as applicable.</p> <p>(8) Corrective action on a helicopter, as required by paragraph (7) of this AD, does not constitute terminating action for the repetitive inspections as required by paragraph (6) of this AD for that helicopter.</p>
Ref. Publications:	<p>Eurocopter AS350 SB 05.00.08 Revision 5 dated 02 February 1998.</p> <p>Eurocopter AS355 SB 05.00.02 Revision 5 dated 02 February 1998.</p> <p>Airbus Helicopters ASB AS350-01.00.70 original issue dated 06 July 2015, or Revision 1 dated 21 September 2015.</p> <p>Airbus Helicopters ASB AS355-01.00-57 original issue dated 06 July 2015, or Revision 1 dated 21 September 2015.</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, Certification 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 (EBSESB) – Aeroport de Marseille Provence, 13725 Marignane Cedex, France Telephone +33 (0)4 42 85 97 97, Fax +33 (4) 85 99 66 E-mail: directive.technical-support@airbus.com.