EASA AIRWORTHINESS DIRECTIVE AD No.: 2007-0211 Date: 07 August 2007 No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry. Type/Model designation(s): Type Approval Holder's Name: **EUROCOPTER** EC 120 B helicopters TCDS Number: DGAC FRANCE No.189 Foreign AD: Not applicable Supersedure: DGAC France AD F-2005-076 (EASA approval number 2005-3955) Tail Rotor Drive - Rear Drive Shaft Friction Ring - Inspection / **ATA 65** Replacement Manufacturer(s): **EUROCOPTER** Applicability: EC 120 B helicopters, all serial numbers that are fitted with tail rotor drive shafts Part Number (P/N) C651A3102051 and C651A3102052. Reason: DGAC France issued Airworthiness Directive (AD) F-2005-076 following a bonding failure and displacement of the damper friction ring on the rear element of the tail rotor drive shaft discovered in service. This incorrect positioning caused the two half-clamps to wear which with time, may lead to the failure of the rear drive shaft and loss of the tail rotor drive. The present AD is a supersedure of DGAC France AD F-2005-076 whose requirements are retained, and mandates EC 120 Alert Service Bulletin (ASB) No.05A006, conversion of EUROCOPTER Alert Telex No. 05A006, without affecting the overall technical content itself but clarifying that repetitive inspections must be continued whether the rear shaft element is replaced or simply rotated by 180° in order to use the second friction ring let available on the shaft as a spare. 21 August 2007

Effective Date:

Compliance:	Required as indicated, unless accomplished previously:
	After 11 May 2005 (the effective date of DGAC France AD F-2005-076):
	(1) For helicopters having accumulated less than 90 Flight Hours (FH), Total Time since new:
	Upon accumulating a total of 110 FH since new and thereafter at intervals not to exceed 110 FH, make sure, by visual or/and tactile check, that the friction ring has not moved on the tail rotor rear drive shaft, in accordance with instructions given in paragraph 2.B.1 of EUROCOPTER EC120 Alert Service Bulletin (ASB) No. 05A006 initial issue or later approved revision;
	(2) For helicopters having accumulated 90 FH Total Time since new or more:
	Within the next 20 FH and thereafter at intervals not to exceed 110 FH, make sure, by visual or/and tactile check, that the friction ring has not moved on the tail rotor rear drive shaft, in accordance with instructions given in paragraph 2.B.1 of EUROCOPTER EC120 ASB No. 05A006 initial issue or later approved revision.
	(3) Results and further mandatory actions after accomplishment of paragraphs (1) and (2) of this directive:
	(a) If the friction ring has not moved, leave as it is and resume flights;
	(b) If the friction ring has moved, or if in doubt, comply with instructions given in paragraph 2.B.2 of EUROCOPTER EC120 ASB No. 05A006 initial issue or later approved revision, in order to ensure any ring actually found unstuck cannot move further freely when trying to move it by hand;
	- if the unstuck friction ring moves further, before resuming flights, replace the rear element of the tail rotor drive shaft;
	 if the unstuck friction ring does not move further, before resuming flights, turn the rear element of the tail rotor drive shaft by 180°, provided that it has never been turned during previous compliance with aircraft maintenance tasks, otherwise replace this rear shaft element;
	- thereafter, continue inspections every 110 FH as specified in paragraphs (1) and (2) of this directive.
Ref. Publications:	EUROCOPTER EC120 Alert Service Bulletin No. 05A006 initial issue or later approved revision.
Remarks :	If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.
	 This AD was posted for consultation on 27 June 2007 as PAD 07-108 until 11 July 2007. No comments were received during the consultation period.
	 Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADS@easa.europa.eu.
	 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; Tel: 33(0)4 42 85 97 97 – Fax: 33(0) 4 42 85 99 66; E-mail: Directive.technical-support@eurocopter.com