EASA	AIRWORTHINESS DIRECTIVE
	AD No : 2007-0220 **Date: 13 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 Approval Holder's Name :	**Type/Model designation(s) :**
EUROCOPTER	SA 365 N and AS 365 N helicopters

TCDS Number: France No.159

Foreign AD: Not applicable

Supersedure: None

ATA 65	**Tail Rotor Drive – Tail Rotor Blade Pitch Control Shafts – Identification/Replacement**
Manufacturer(s):	EUROCOPTER (Formerly EUROCOPTER FRANCE, AEROSPATIALE).
Applicability:	SA 365 N1, AS 365 N2 and AS 365 N3 helicopters, all serial numbers, equipped with an aluminium Tail Rotor Blade Pitch Control Shaft with Part Number (P/N) 365A33.6161.20 or 365A33.6161.21
Reason:	During a recent incident, the pilot of a Model AS 365 N2 helicopter noticed loss of control of the Tail Rotor. A decision was made to continue the flight to the nearest airport and an uneventful run-on landing was made. Subsequent investigation showed that the Tail Rotor Blade Pitch Control Shaft P/N 365A33.6161.21 had broken. This failure occurred in the main section of shaft sliding area, which appeared to have been damaged by peening. For that reason the origin of the crack, which developed under fatigue loading, could not be determined. Most likely, accidental damage (e.g. shock impact) is thought to have caused the initiation of a crack in the hard tungsten-carbide deposit on the shaft. Damage of this kind cannot be detected through normal inspection methods. This condition, if not corrected, could lead to further cases of control shaft failure and consequent loss of tail rotor control EUROCOPTER has developed a steel control shaft, P/N 365A33.6214.20, that is less sensitive to shock-induced damage. For this reason, the present AD requires replacement of the affected aluminium control shafts and the withdrawal from service of all remaining spares.

Effective Date:	27 August 2007
Compliance:	(1) Not later than 31 December 2007, replace all P/N 365A33.6161.20 and 365A33.6161.21 aluminium Tail Rotor Blade Pitch Control Shafts with a steel P/N 365A33.6214.20 shaft in accordance with Eurocopter AS365 Alert Service Bulletin (ASB) 01.00.59; (2) After 31 December 2007, no person may install P/N 365A33.6161.20 and 365A33.6161.21 aluminium Tail Rotor Blade Pitch Control Shafts on any helicopter. All units held as spares must be scrapped or returned to Eurocopter for disposal.
Ref. Publications:	EUROCOPTER AS365 Alert Service Bulletin (ASB) 01.00.59 dated 21 June 2007 or later approved revisions.
Remarks :	1. 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. 2. This AD was posted for consultation on 11 July 2007 as PAD 07-103 until 08 August 2007. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the AD Focal Point - 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: 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.