## **EASA EMERGENCY AIRWORTHINESS DIRECTIVE** EAD No.: 2006-0362-E Date: 30 November 2006 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: SA 365 N, AS 365 N, SA 366 and SA 365 C **EUROCOPTER** helicopters TCDS Number: FRANCE 159 Foreign AD: Not applicable. Supersedes: Not applicable. ATA 05,62 Rotor (s) – Main Rotor Head Frequency Adapters – Modification (65 for SA 365 C) Manufacturer(s): EUROCOPTER (Formerly EUROCOPTER FRANCE, AEROSPATIALE). All Model SA 365 N, SA 365 N1, AS 365 N2, AS 365 N3, SA 366 G1, SA 365 C, SA 365 C1, SA 365 C2 and SA 365 C3 helicopters, all serial numbers, if a main rotor head (MRH) fitted with frequency adapters and frequency adapter bushes is installed, as referenced below: pre MOD 0762C39 and used in hot climatic conditions and / or in tropical and damp atmosphere, or post MOD 0762C39. The Part Numbers (P/N) of the affected frequency adapters and frequency adapter bushes are listed in § 2.B.2.v and § 2.B.5 of the referenced Applicability: EUROCOPTER Alert Service Bulletin (ASB) corresponding to the helicopter version. Note 1: The use of a helicopter in tropical and damp atmosphere is defined as follows: Helicopter operated in climatic conditions with outside air temperatures from +28°C upward combined with relative humidity from 75 % upward. Note 2: The use of a helicopter in hot climatic conditions is defined as follows: Helicopter operated in areas with high solar radiation temperatures

above 40°C.

Reason:	This Emergency Airworthiness Directive is issued following some reports of deterioration and two reports of failure of Starflex star arm ends. These deteriorations generated high-amplitude vibrations in flight, compelling the pilot to carry out a precautionary landing, in each of these cases.  The failure of the Starflex star arm end could make it impossible to control the helicopter.  These deteriorations are due to the strong effect of temperature on the strength of the bush-to-Starflex star arm end attachment. Consequently, this EAD requires modification (MOD 0762C39) of the frequency adapters and the frequency adapter bushes, in order to improve the ventilation in the area on the star arm end, on helicopters operated in hot climatic conditions and/or tropical and damp atmosphere.
Effective Date:	02 December 2006
Compliance:	Required as indicated, unless accomplished previously:  (1) MRH fitted with frequency adapters pre MOD 0762C39 and operated in hot climatic conditions and / or in tropical and damp atmosphere:  Within 110 flight hours (FH) after the effective date of this directive, modify the frequency adapters and frequency adapter bushes per MOD 0762C39, in accordance with the instructions specified in paragraphs 2.B.1, 2.B.2 and 2.B.3 of the referenced EUROCOPTER ASB corresponding to the helicopter version.  (2) MRH fitted with frequency adapters post MOD 0762C39:  Within 10 FH after application of modification MOD 0762C39; or within 10FH after the effective date of this directive, whichever occurs later, and thereafter at intervals not exceeding 10 FH, check that the lockwire is in place and that the holes in the frequency adapters and in the frequency adapter bushes are not blocked, in accordance with the instructions specified in paragraph 2.B.6. of the referenced EUROCOPTER ASB corresponding to the helicopter version.  (3) Interpretation of the inspection results:  - If the lockwire is in place on the trailing edge of the frequency adapter and if the 4 holes are not blocked, flights may be resumed.  - If the lockwire is not in place, before next flight, re-position the bush if it has turned and fit the lockwire.  - If one hole or more is/are blocked, before next flight, unblock the hole(s).  (4) After the effective date of this directive, no person may install any of the following equipment held as spares and intended for use in hot climatic conditions and/or in tropical and damp atmosphere:  - MRHs fitted with frequency adapters  - Frequency adapter assemblies  - Non-drilled frequency adapter bushes  on a helicopter as a replacement part, unless it has been modified (MOD 0762C39) in accordance with the instructions specified in paragraph 2.B.2 or 2.B.4 or 2.B.5 of the referenced ASB corresponding to the helicopter version.

Ref. Publications:	EUROCOPTER AS 365 Alert Service Bulletin No. 62.00.24. EUROCOPTER SA 366 Alert Service Bulletin No. 62.14 EUROCOPTER SA 365 Alert Service Bulletin No. 65.45. or later approved revisions of these documents.
Remarks:	<ol> <li>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.</li> <li>The safety assessment has requested not to implement the full consultation process and an immediate publication and notification.</li> <li>Enquiries regarding this AD should be addressed to AD Focal Point, Certification Directorate, EASA; E-mail: ADs@easa.europa.eu</li> </ol>
	<ol> <li>For any questions concerning the technical content of the requirements in this AD, please contact: EUROCOPTER (STDI) - Aéroport de Marseille Provence 13725 Marignane Cedex - France.</li> <li>Tel.: 33 (0) 4 42 85 97 97 - Fax: 33 (0) 4 42 85 99 66.</li> <li>E-mail: <u>Directive.technical-support@eurocopter.com</u></li> </ol>