	AIRWORTHINESS DIRECTIVE		Distribution:	Issue date:	Page :	
	No F-2004-106			Α	July 07, 2004	1/2
Direction générale de l'aviation civile France	This Airworthiness Directive is published by the DGAC: X on behalf of EASA, the Primary Airworthiness Au affected product. as the Registration Airworthiness Authority for the aircraft			Authority for the	Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.	
GSAC publication	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.					
Corresponding foreign Airworthiness Directive(s): Airv			irworthiness Directive(s) replaced:			
Not applicable			F-2003-418, cancelled by its Revision 1			
Person in charge of airworthiness: EUROCOPTER			Type(s): EC 155 helicopters			
Type certificate(s) No. 86						
TCDS No 159						
ATA chapter:		Subject:				
62 Rotor(s) - Main rotor blade / Ti				ip cap junc	etion	

1. **EFFECTIVITY**:

EUROCOPTER EC 155 helicopter versions B and B1, all serial numbers, fitted with main rotor blades, part number 365A11-0080-00.

2. REASONS:

Airworthiness Directive (AD) F-2003-418 was issued following the discovery of a crack in the main rotor blade tip cap attachment tenon. AD F-2003-418 required operators to make sure that there is no crack in the affected zone, and to monitor the blade in operation.

Crack growth can lead to the loss of the blade tip cap and make it impossible to control the helicopter.

The results of complementary investigations and fatigue tests, conducted since then, lead to the issue of a new AD that:

- covers the requirements of AD F-2003-418,
- introduces a reduction of the initial rotor blade service life limit from 20,000 flying hours (FH) to 10,000 FH,
- renders the checks, and if necessary the corrective actions, described in § 3, mandatory, according to the serial number (SN) of each blade,
- refers to Alert Service Bulletin (ASB) No. 62A006, which supersedes EUROCOPTER Alert Telex No. 05A004.

3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

The following measures are rendered mandatory from the effective date of this AD:

- 3.1. The service life of the blades specified in paragraph 1. above is reduced from 20,000 to 10,000 FH.
- 3.2. Blades with SN equal to or below 808:



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3.2.1. At the latest after the last flight of each day without exceeding 10 FH between 2 checks, check that the blade / tip cap junction is aligned in the flapping direction, in compliance with the instructions specified in § 2.B.4. of the referenced ASB.

- **3.2.2.** No later than within the next three months, perform the checks, and if necessary the corrective actions, in compliance with the instructions specified in § 2.B. of the referenced ASB.
 - **3.2.2.1.** If a non-compliant tenon filler wedge positioning is discovered:
 - A. Check the blade/tip cap junction for correct alignment in the flapping direction, in compliance with the instructions specified in § 2.B.4. of the referenced ASB, at the latest after the last flight of each day without exceeding 10 FH between 2 checks.
 - Comply with the instructions specified in § 2.B.1. and 2.B.5. of the referenced ASB and repeat this check at intervals of no more than 660 FH.
 - B. The affected blades must be removed from service at the latest by September 30, 2004.
 - 3.2.2.2. Blades fitted with a correctly positioned tenon filler wedge:

Check the condition of the tenon leading edge zone at the latest at 660 FH, then at intervals of no more than 660 FH, in compliance with the instructions specified in § 2.B.1. and 2.B.5. of the referenced ASB.

- **3.3.** Blades with SN equal to or above 809:
 - Check the condition of the tenon leading edge zone in compliance with the instructions specified in § 2.B.1. and 2.B.5. of the referenced ASB:
 - **3.3.1.** At the latest at 660 FH, then at intervals of no more than 660 FH for blades that have logged less than 660 FH at the effective date of this AD.
 - **3.3.2.** No later than within the next 100 FH, then at intervals of no more than 660 FH for blades that have logged more than 660 FH at the effective date of this AD.
- **3.4.** Prior to installing rotor blades referenced in § 1 above, held as spares, with SN equal to or below 808, on an aircraft, comply with the instructions specified in § 2.B. of the referenced ASB.

4. REFERENCE PUBLICATION:

EUROCOPTER EC 155 Alert Service Bulletin No. 62A006.

5. **EFFECTIVE DATE**:

July 17, 2004.

6. REMARK:

For any questions concerning the technical content of the requirements in this AD, please contact:

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7. APPROVAL:

This AD is approved under EASA reference No 2004-7031 dated June 29, 2004.