	<b>AIRWORTHINESS DIRECTIVE</b> <b>No F-2006-027</b>	Distribution: <b>A</b>	Issue date: <b>February 01, 2006</b>	Page : <b>1/2</b>
Direction générale de l'aviation civile France  GSAC publication	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
	<b>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.</b>			
Corresponding foreign Airworthiness Directive(s): <b>Not applicable</b>		Airworthiness Directive(s) replaced: <b>2002-331-071 cancelled by its Revision 3</b>		
Person in charge of airworthiness: <b>EUROCOPTER</b>		Type(s): <b>AS 355 helicopters</b>		
Type certificate(s) No. <b>168</b> TCDS No <b>168</b>				
ATA chapter: <b>05, 63</b>	Subject: <b>Rotor drive(s) - Main gearbox - Lubrication pump</b>			

### 1. **EFFECTIVITY:**

AS 355 E, F, F1, F2 and N helicopters, equipped with main gear boxes fitted with lubrication pumps PN 355A32-0700-01:

- with serial numbers equal to or above 5731,
- or,
- with serial numbers below 5731 if they have been overhauled or repaired after June 1<sup>st</sup>, 1995,
- or,
- with serial number SAR 1, SAR 2 or SAR 5.

### 2. **REASONS:**

This Airworthiness Directive (AD) is issued following four reports of MGB lubrication pump deterioration. In time, the insufficiently lubricated power transmission assembly deteriorates until it causes the loss of the drive train for one or even both engines (deterioration of the combiner gearbox gears).


This AD replaces AD No. 2002-331-071 R2, cancelled by its Revision 3, and extends effectivity of the checks to lubrication pumps with serial number SAR 1, SAR 2 or SAR 5.

### 3. **MANDATORY ACTIONS AND COMPLIANCE TIMES:**

- 3.1.** Reminder of the measures rendered mandatory as from June 21, 2002 (the effective date of the original issue of AD F-2002-331-071) for lubrication pumps except those with serial number SAR 1, SAR 2 or SAR 5:

At each check after the last flight of the day (ALF) without exceeding 10 hours between two checks, inspect the MGB magnetic plug and oil sight, in compliance with the instructions specified in paragraph 2.B.1 of EUROCOPTER AS 355 Alert Service Bulletin (ASB) No. 05.00.40 R1 referenced below.

Depending on the results of the check, comply with the instructions specified in paragraph 2.B.2 of the ASB referenced below.

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**3.2.** The following measures are rendered mandatory as from the effective date of this AD for main gearboxes fitted with a lubrication pump with serial number SAR 1, SAR 2 or SAR 5:

- At each check after the last flight of the day (ALF) without exceeding 10 flying hours between two checks, inspect the MGB magnetic plug and oil sight, in compliance with the instructions specified in paragraph 2.B.1 of the ASB referenced below.
- Depending on the results of the check, comply with the instructions specified in paragraph 2.B.2 of the ASB referenced below.

**3.3.** Before installation on an aircraft, of a lubrication pump installed on a main gearbox and covered by paragraph 1, or of a separate lubrication pump covered by paragraph 1:

**3.3.1.** If the pump has logged flying hours since new, overhaul or repair:

- comply with paragraph 2.B.2. of the referenced ASB, and
- comply with paragraph 2.B.3. of the referenced ASB, according to the serial number of the lubrication pump (refer to the equipment log card (FME)).

**3.3.2.** If the pump is new or newly overhauled or repaired:

- leave as is,
- or
- comply with paragraph 2.B.3. of the referenced ASB, according to the serial number of the lubrication pump (refer to the equipment log card (FME)).

**4. REFERENCE PUBLICATION:**

EUROCOPTER AS 355 Alert Service Bulletin No. 05.00.40 R1  
(Any subsequent approved revision of this ASB is acceptable).

**6. EFFECTIVE DATE:**

Upon receipt as from February 1<sup>st</sup>, 2006.

**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 2006-0020 dated January 24, 2006.