	<b>AIRWORTHINESS DIRECTIVE</b> <b>No F-2006-042</b>		Distribution: <b>A</b>	Issue date: <b>July 19, 2006</b>	Page : <b>1/2</b>
	Direction générale de l'aviation civile France GSAC publication	This Airworthiness Directive is published by the DGAC as the Airworthiness Authority of the State of Registry for the affected aircraft.		<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>F-2004-115, UF-2006-042</b>		
Person in charge of airworthiness: <b>EUROCOPTER</b>			Type(s): <b>EC 155, AS 365N helicopters</b>		
Type certificate(s) No. <b>86</b> TCDS No <b>159</b>					
ATA chapter: <b>29</b>		Subject: <b>Hydraulic power - Check of flexible hydraulic pipes and their attachment clamps</b>			

**Note:** This AD has been the subject of an Emergency diffusion on February 10, 2006. This AD is again issued, without change of the technical contents, for a regularization under the format existing prior to February 2006. This AD keeps the same EASA approval reference.

### 1. **EFFECTIVITY:**

- EC 155 B and B1 helicopters, delivered before July 01, 2004, not modified per MOD 0729B65 or per drawing 365A08842800,
- SA 365 N and N1, AS 365 N2 and N3, not modified per MOD 0729B67.

### 2. **REASONS:**

This Airworthiness Directive (AD) is issued following an incident on the hydraulic power system of an EC 155 B1 helicopter in flight which led to illumination of the "HYD" warning light, with no further consequence, a leak was found in the pressure pipe of the LH hydraulic pump.

The analysis carried out by EUROCOPTER has revealed damage to the silicone protection of an attachment clamp, due to contact with hydraulic fluid. The damage caused the clamp to chafe against the pipe, which led to wear and subsequent perforation of the pipe.


Consequently, in order to prevent any wear of the hydraulic pipes, this AD states that you must check the condition of the attachment clamps and pipes at regular intervals, pending the installation of clamps protected with acrylonitrile butadiene or polychloroprene (as an alternative for AS 365 helicopters). This type of protection retains its mechanical characteristics in a hydraulic environment.

This AD replaces AD No. F-2004-115, which is cancelled by its revision 1, and extends effectivity to versions SA 365 N and N1 as well as to AS 365 N2 and N3 helicopters manufactured prior to January 01 1998.

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

**3.1.** Reminder of the measures that are mandatory as from the effective date of AD No. F 2004-115, i.e. as from July 31, 2004.

**3.1.1.** For EC 155 B and B1 helicopters:

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**3.1.1.1.** Within 50 flying hours, then at intervals not exceeding 110 flying hours or one month, the first limit reached is applicable:

Comply with EUROCOPTER EC 155 Alert Service Bulletin (ASB) No. 29A001 paragraph 2.B.2 ("Check of the condition of the attachment clamps and hydraulic pipes"), on all clamps not modified, until compliance is ensured with paragraph 2.B.3 ("Installation of modified attachment clamps") of referenced ASB No. 29A001.

**3.1.1.2.** No later than within 660 flying hours or within 1 year, the first limit reached is applicable:

Comply with paragraph 2.B.3 of referenced ASB No. 29A001.

**3.1.2.** For AS 365 N2 and N3 helicopters delivered after January 01, 1998:

**3.1.2.1.** Within 50 flying hours or within one month, the first limit reached is applicable:

Comply once with paragraph 2.B.2 ("Check for conformity of the attachment clamps") of referenced ASB No. 29.00.08.

**3.1.2.2.** If one or more non-compliant attachment clamps are found:

Pending compliance with paragraph 2.B.4 ("Bringing the attachment clamps up to standard"), of referenced ASB No. 29.00.08, comply with ASB No. 29.00.08 paragraph 2.B.3 ("Check of the condition of non-compliant attachment clamps and hydraulic pipes"), on a routine basis, every 110 flying hours or every month, the first limit reached is applicable.

**3.1.2.3.** No later than within 660 flying hours or within 1 year, the first limit reached is applicable:

Comply with paragraph 2.B.4 of referenced ASB No. 29.00.08.

**3.2.** The following measures are rendered mandatory as from the effective date of this AD:

For AS 365 N2 and N3 helicopters (delivered prior to January 01, 1998) and SA 365 N and N1 helicopters:

No later than within 660 flying hours without exceeding 26 months, comply with the instructions specified in paragraph 2.B.5 of referenced ASB No. 29.00.08.

#### **4. REFERENCE PUBLICATIONS:**

Alert Service Bulletin EUROCOPTER EC 155 No. 29A001  
Alert Service Bulletin EUROCOPTER AS 365 No. 29.00.08  
(Any later approved revision of these ASBs is acceptable).

#### **5. EFFECTIVE DATE:**

Upon receipt of the emergency AD issued on February 10, 2006

#### **6. REMARK:**

For questions concerning the technical contents of this AD's requirements, 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](mailto:Directive.technical-support@eurocopter.com)

#### **7. APPROVAL:**

This AD is approved under EASA reference No 2006-0042-E dated February 10, 2006.