## COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

## AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

## **Eurocopter AS 332 (Super Puma) Series Helicopters**

AD/S-PUMA/72 Fuselage - TGB Attachment Fittings 2/2008

DM

Applicability: AS 332 C, C1, L, L1 and L2 helicopters with serial numbers below S/N 2680 and

helicopters with serial numbers from S/N 9000 (inclusive) to S/N 9009 (inclusive),

and equipped with tail gear box (TGB) attachment fittings, all part numbers.

Requirement: Action in accordance with the technical requirements of French DGAC Airworthiness

Directive (AD) UF-2007-027.

Compliance: As specified in the requirements document with a revised effective date of the

12 December 2007.

This Airworthiness Directive becomes effective on 12 December 2007.

Background: This AD follows the discovery of interference between the end of the threaded section

of the TGB aft attachment bolt and the structure fitting during schedule maintenance

check (750-hour inspection).

The interference is due to a manufacturing anomaly of the fittings: the blind hole which provides clearance for the bolt in the structure fitting is missing. Such interference does not enable correct axial tightening of the TGB casing, even if the

torque load applied to the attachment screw is correct.

Insufficient tightening can cause damage to the TGB attachment and give rise to crack initiation under the head of the attachment bolt before the TBO of the TGB is reached. A crack can finally lead to the loss of the TGB and then involve the risk of

losing the helicopter during take-off and landing phases.

**David Villiers** 

Delegate of the Civil Aviation Safety Authority

10 December 2007