# 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 39.1 (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 355 (Twin Ecureuil) Series Helicopters**

## AD/AS 355/77

#### **Rear Structure Junction Frame**

5/2004

Applicability: Model AS 355 E, F, F1, F2, and N helicopters:

- pre-Mod 073215, or

- not equipped with the four reinforcement angles, part numbers 350A08.2493.20 / .21 / .22 / .23, following the repair carried out in accordance with MRM Work Card 53.10.22.772.

Requirement:

Action in accordance with Eurocopter Alert Service Bulletin No. 05.00.42 original issue, or Revision 1.

Note: DGAC AD F-2004-036 refers.

Compliance:

As specified in the Requirement document, with the effective date of this Directive substituted for receipt date of the Requirement document.

This Airworthiness Directive becomes effective on 13 May 2004.

Background:

Reports were received by the manufacturer of cracks in the rear structure / tail boom junction frame during unscheduled inspections. In some cases, the crack lengths were significant and were not visible externally on the tail boom skin. Undetected cracking combined with a high thrust load from the tail rotor, may result in failure due to insufficient strength margins of the junction frame.

**David Villiers** 

Delegate of the Civil Aviation Safety Authority

2 April 2004