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 350 (Ecureuil) Series Helicopters

AD/ECUREUIL/121 Oxygen Cylinders 11/2006 TX

Applicability: AS 350 B3 helicopters, all serial numbers, equipped with oxygen cylinders manufactured by Intertechnique having part number (P/N) GLF311-1, GLF312, GLF313, GLF316, GLF514 or GLD511.

Note 1: These types of oxygen cylinders are an optional equipment fit for use during operations at high altitudes or to provide respiratory aid for passengers.

Requirement: 1. Remove and empty the oxygen cylinder shells from the helicopter in accordance with the instructions in paragraph 2.B. of Eurocopter AS 350 Alert Service Bulletin (ASB) 05.00.54 dated 16 August 2006 or later EASA approved revision.

2. Oxygen cylinders with P/N GLF311-1, GLF312, GLF313, GLF316, GLF514 or GLD511 may not be installed on any helicopter as a replacement part unless the time in service (TIS) limitations specified in the Requirement 1 Compliance Statements are not exceeded.

Note 2: EASA Emergency AD 2006-0261-E refers.

Compliance: For Requirement 1:

a. Helicopters operated in normal climatic conditions - Upon accumulating 25 years TIS (since manufacture and installation on helicopters), or within 15 days after the effective date of this Directive if 25 years TIS has already been reached.

b. Helicopters operated in salt-laden atmospheric conditions - Upon accumulating 15 years TIS (since manufacture and installation on helicopters), or within 15 days after the effective date of this Directive if 15 years TIS has already been reached.

For Requirement 2 - As of effective date of this Directive.

This Airworthiness Directive becomes effective on 1 September 2006.
Background: Eurocopter has received from the oxygen cylinder manufacturer, Intertechnique, that the material characteristics of the alloy from which the cylinder shells are manufactured may deteriorate in the course of time and cause the cylinders to explode.

This Directive requires the TIS of the cylinders to be determined and, if necessary, their removal and emptying. Additionally, the Directive prevents the installation of time expired cylinders as replacement parts. These measures are designed to prevent the risk of explosion of time expired cylinders and subsequent likelihood of fire.

James Coyne
Delegate of the Civil Aviation Safety Authority

29 August 2006