AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/EC 120/3 Amdt 3 and issues the following 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 EC 120 Series Helicopters

AD/EC 120/3 Amdt 4 — Reinforced Coupling Tube Assembly — 9/2004

Applicability: All Eurocopter EC 120B helicopters fitted with engine-to-main gearbox (MGB) coupling tube Part Number (P/N) C631A1101101 and/or fitted with the engine mount comprising the parts detailed in paragraph 1.A. of Eurocopter EC 120 Alert Service Bulletin (ASB) No. 04A005.

Requirement:

1. EC120B helicopters not incorporating an engine mount block modified in accordance with Eurocopter EC120 ASB No. 71.003 AND prior to serial number 1170 AND not incorporating Eurocopter EC120 Service Bulletin (SB) No. 71.005:

   a. Perform a visual inspection of the engine to MGB coupling tube in accordance with Paragraph 2.B of Eurocopter EC120 ASB No. 05A003; and

   b. Remove from service, MGB coupling tube P/N C631A1101101 assemblies found to be cracked; and

   c. Remove from service, MGB coupling tube P/N C631A1101101 assemblies.

2. EC120B helicopters prior to serial number 1170 and not incorporating an engine mount modified in accordance with Eurocopter EC120 SB No. 71.003:

   a. Remove from service, engine mount components detailed in Paragraph 1.A of Eurocopter EC120 ASB No. 04A005.

3. EC120B helicopters serial number 1170 and higher and EC120B helicopters incorporating an engine mount modified in accordance with Eurocopter EC120 SB No. 71.003, but not modified in accordance with Eurocopter EC120 SB No. 71.005:

   a. Perform a visual inspection of the engine to MGB coupling tube in accordance with Paragraph 2.B of Eurocopter ASB 05A003; and

   b. Remove from service, MGB coupling tube P/N C631A1101101 assemblies found to be cracked; and

   c. Remove from service, MGB coupling tube P/N C631A1101101 assemblies.

Eurocopter EC 120 Series Helicopters

AD/EC 120/3 Amdt 4 (continued)

4. EC120B helicopters all serial numbers which have modified in accordance with Eurocopter EC120 SB No. 71.005:

   a. Remove from service, MGB coupling tube P/N C631A1101101 assemblies.

5. For MGB coupling tube P/N C631A1101101 assemblies held as spares:

   a. Perform a dye penetrant inspection of the MGB coupling tube in accordance with paragraph 2.B of Eurocopter SB 71.005.

The inspection detailed in Requirement 1 (a) and Requirement 3 (a) of this directive may be carried out and certified by the pilot provided the pilot has completed an approved training program.

Note : DGAC Airworthiness Directive F-2003-325 R1 refers.

Compliance: Requirement 1.

a. Unless previously accomplished, prior to further flight; and thereafter at intervals not to exceed 5 flight hours from last inspection or following the last flight of the day, whichever occurs first.

b. Before further flight.

c. Prior to exceeding 1,000 hours time in service (TIS) for the MGB coupling tube.

Requirement 2.

a. Remains unchanged as detailed in Amendment 3 of this Directive, prior to 30 June 2004.

Requirement 3.

a. Unless previously accomplished, within 25 flight hours from the effective date of this directive and thereafter at intervals not to exceed 25 flight hours.

b. Before further flight.

c. Prior to exceeding 20,000 hours TIS for the MGB coupling tube.

Requirement 4.

a. Prior to exceeding 20,000 hours TIS for the MGB coupling tube.

Eurocopter EC 120 Series Helicopters

AD/EC 120/3 Amdt 4 (continued)

Requirement 5:

a. Before fitment to a helicopter modified in accordance with Eurocopter EC120 SB No. 71.005 and where the coupling tube was previously fitted to a helicopter not modified in accordance with Eurocopter EC120 SB No. 71.005.

This Amendment becomes effective on 2 September 2004.

Background: This Directive was originally issued to address a report of cracks being found in a reinforced engine to MGB coupling tube assembly. The investigation of that report has determined a certain engine mount configuration may induce excessive loading on the coupling tube. In response, the manufacturer has released an improved engine mount, revised the reinforced coupling tube inspection procedures and revised the life limits for the reinforced coupling tube assembly. This Amendment introduces terminating action of the inspections for helicopters modified by Eurocopter EC120B SB 71.005.

Amendment 3 of this Airworthiness Directive became effective on 25 December 2003

Amendment 2 of this Airworthiness Directive became effective on 16 May 2002.

Amendment 1 of this Airworthiness Directive became effective on 15 November 2000.

The original issue of this Airworthiness Directive became effective on 3 May 2000.

Bernard Malcolm Hole
Delegate of the Civil Aviation Safety Authority

23 July 2004

The above AD is notified in the *Commonwealth of Australia Gazette* on Gazette Date.