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.

Kawasaki BK 117 Series Helicopters

AD/JBK 117/36

Pressure Altitude Limitation and Max N1 Check

25/2010

Applicability: Kawasaki BK117C-1 and C-2 helicopters.

Requirement: Fuel Control Units which have not been Modified in accordance with Turboméca

Service Bulletin No.292 73 0358 (TU358) must not be installed in any helicopter.

Note: JCAB AD TCD-7000-1-2008 refers.

Compliance: After the effective date of this Directive.

This Airworthiness Directive becomes effective on 24 December 2010.

Background:

During supplementary testing the "MAX N1 CHECK" at maximum certification altitude, a few helicopters could not reach the specified N1 power threshold value. The cause was identified as an engine acceleration limitation due to a delivered fuel flow lower than the engine fuel flow demand to achieve the OEI rating at high altitude. The fuel flow is limited by the FCU acceleration law in those cases. This limitation could potentially occur at altitudes exceeding 10,000 feet, depending on the engine and FCU characteristics.

Turboméca has now developed a modification (TU358) that will, when accomplished on both engines installed on the helicopter, cancel the required checks and allow the removal of the placard and flight manual changes.

David Villiers

Delegate of the Civil Aviation Safety Authority

9 December 2010