# 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 117/33**

### **Long Drive Shaft Rivets**

11/2009 DM

Applicability: Kawasaki BK 117 C-2 helicopters.

Requirement:

- 1. Inspect the long T/R drive shaft in accordance with the instructions of Kawasaki Service Bulletin (SB) No. KSB-117-306 dated 16 June May 2009 or later JCAB approved revision.
- 2. If, during the inspection detailed in Requirement 1 of this AD, blind rivets are found to be installed on the long T/R drive shaft, replace the affected T/R drive shaft assembly with a serviceable unit in accordance with the instructions of SB No. KSB-117-306 or later JCAB approved revision.
- 3. Do not repair any long T/R drive shaft in accordance with the instructions of Aircraft Maintenance Manual (AMM) Chapter 65-11-00, 8-3; and

Do not install on a helicopter any long T/R drive shaft that has been repaired in accordance with AMM Chapter 65-11-00, 8-3.

Note: Japan Civil Aviation Bureau (JCAB) AD No. TCD-7496-2009 dated 1 July 2009 refers.

Compliance:

For Requirements 1 and 2 - Before further flight after the effective date of this AD.

For Requirement 3 - From the effective date of this AD.

This Airworthiness Directive becomes effective on 1 September 2009.

Background:

During a recent review of the Aircraft Maintenance Manual it was discovered that this document erroneously allowed the replacement of the solid rivets on the long T/R drive shaft with blind rivets.

This condition, if not corrected, could lead to a significant reduction of the lifetime of the long T/R drive shaft, potentially resulting in failure of the T/R drive shaft and consequent loss of control of the helicopter.

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### Kawasaki BK 117 Series Helicopters

AD/JBK 117/33 (continued)

This AD requires a one-time inspection of all long T/R drive shafts to verify that correct (solid) rivets are installed and, if blind rivets are found, the replacement of the T/R drive shaft assembly. In addition, this AD prohibits any further application of the erroneous AMM (which will be revised) repair instructions for long T/R drive shafts.

James Coyne

Delegate of the Civil Aviation Safety Authority

19 August 2009