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.

Bell Helicopter Textron 427 Series Helicopters

AD/BELL 427/5 Tail Rotor Gearbox Case Oil Feed Gallery 10/2006

Applicability: Bell Helicopter Textron Canada (BHTC) Model 427 Helicopters serial number (S/N) 56001 through 56031, 58001 and 58002, equipped with tail rotor gearbox case, part number (P/N) 406-040-406-109.

Requirement:

1. Unless previously accomplished, identify the tail rotor gearbox case installed on the helicopter and, if applicable, check for the presence of the oil feed gallery as per instructions provided in Part I of BHTC ASB 427-03-09, or later Transport Canada approved revisions. If the oil feed gallery is present, re-identify the case assembly as per instructions in BHTC ASB 427-03-09. If the oil feed gallery is not present, proceed to requirement 2 of this AD.

2. Create the oil feed gallery as per instruction provided in Part II of BHTC ASB 427-03-09 or later Transport Canada approved revisions.

3. For affected tail rotor gearbox cases held as spares, accomplish requirements 1 and 2 of this AD, if applicable.

Note: Transport Canada AD CF 2003-11 dated 28 April 2003 refers.

Compliance:

1. At the next gearbox disassembly or within 1800 hours time in service after the last overhaul of the gearbox, whichever occurs first after the effective date of this AD.

2. Before further flight after completion of requirement 1 of this AD.

3. Prior to the installation on the helicopter.

This Airworthiness Directive becomes effective on 28 September 2006.

Background: Transport Canada has informed that a number of tail rotor gearboxes are lacking the required oil feed gallery. This situation reduces the oil supply to duplex bearing P/N 406-040-432-103, which could lead to bearing failure.

Bell Helicopter Textron 427 Series Helicopters

AD/BELL 427/5 (continued)

It has been determined that the splash lubrication of the duplex bearing without the oil feed gallery is sufficient to prevent abnormal wear up to the 1800 hours overhaul period.

James Coyne
Delegate of the Civil Aviation Safety Authority

14 August 2006