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.

Sikorsky S-92 Series Helicopters

AD/S-92/3     Main Gearbox Upper Housing     2/2007 TX

Applicability: Sikorsky Model S-92A helicopter, with main gearbox (MGB) upper main housing assembly (housing assembly), part number 92351-15110-042, installed.

Requirement: Replace each MGB housing with 2700 or more hours time-in-service (TIS) with an airworthy MGB housing with less than 2700 hours TIS.

Revise the Airworthiness Limitations section of the maintenance manual by establishing a new retirement life for the MGB housing assembly of 2700 hours TIS.


Compliance: Before further flight.

This Airworthiness Directive becomes effective on 18 December 2006.

Background: This action requires, before further flight, replacing a certain MGB upper main housing assembly (housing assembly) that has 2700 or more hours time-in-service (TIS) with an airworthy part. This action also requires, before further flight, revising the Airworthiness Limitations section (ALS) of the maintenance manual by establishing a new retirement life for the MGB housing assembly of 2700 hours TIS. This amendment is prompted by testing of the MGB housing assembly that resulted in premature fatigue failure due to a manufacturing process creating an oxide skin defect in the housing. The actions specified in this AD are intended to prevent fatigue failure of the MGB housing, loss of MGB lube oil, loss of main and tail rotor drive, and subsequent loss of control of the helicopter.

James Coyne
Delegate of the Civil Aviation Safety Authority

13 December 2006