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**AIRWORTHINESS DIRECTIVE**

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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.

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**Sikorsky S-92 Series Helicopters****AD/S-92/4****Tail Gear Box****2/2007  
TX**

**Applicability:** Sikorsky Model S-92A helicopters, with a gear box output housing, part number (P/N) 92358-06109-043, installed.

**Requirement:**

1. Unless previously accomplished, replace each tail gear box output housing, P/N 92358-06109-043, with 600 or more hours time-in-service (TIS) with an airworthy tail gear box housing with less than 600 hours TIS.

*Note 1: Sikorsky Maintenance Manual SA S92A-AWL-000, Airworthiness Limitations and Inspection Requirements, Chapter 4, dated March 3, 2005, contains the limitation for the tail gear box output housing.*

2. Unless previously accomplished, revise the Airworthiness Limitations section of the maintenance manual by reducing the life limit of the tail gear box output housing from 4500 hours TIS to 600 hours TIS.

*Note 2: FAA AD 2005-13-13 Amdt 39-14150 dated 10 June 2005 refers.*

**Compliance:** Before further flight after the effective date of this AD.

This Airworthiness Directive becomes effective on 18 December 2006.

## Sikorsky S-92 Series Helicopters

AD/S-92/4 (continued)

Background: This AD requires, before further flight, replacing tail gear box output housing, part number (P/N) 92358-06109-043, that has 600 or more hours TIS with an airworthy gear box output housing with less than 600 hours TIS. Also, this AD revises the Airworthiness Limitations section of the maintenance manual by reducing the life limit of the tail gear box output housing from 4500 hours TIS to 600 hours TIS. This is prompted by the premature failure of the tail gear box output housing during fatigue testing by the manufacturer. The follow-on investigation indicated the manufacturing process created an oxide skin defect in the housing, making it necessary to reduce the life limit of the gear box housing from 4500 hours TIS to 600 hours TIS. The manufacturer is reviewing its processes on the output housing to determine methods, including a material change, to prevent the oxide skin defect.



James Coyne  
Delegate of the Civil Aviation Safety Authority

13 December 2006