

EMERGENCY AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

www.faa.gov/aircraft/safety/alerts/

DATE: March 23, 2009

AD #: 2009-07-53

This Emergency Airworthiness Directive (AD) is prompted by the failure of 2 main gearbox filter bowl assembly mounting studs (studs) that were found broken during a fatal accident investigation in Canada. Prior to the accident, the manufacturer was investigating a July 2008 incident that also involved broken studs. In both cases, the broken studs resulted in rapid loss of oil. The failures have been tied to fretting and galling of the original titanium studs; therefore, we are requiring the removal of all titanium studs and replacement with steel studs. We are issuing this Emergency AD to prevent failure of a stud which could result in rapid loss of oil, failure of the main gearbox, and subsequent loss of control of the helicopter.

We have reviewed Sikorsky Alert Service Bulletin No. 92-63-014A, Revision A, dated March 20, 2009, which describes procedures for removing the main gearbox bowl assembly titanium mounting studs and replacing them with steel mounting studs.

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD requires, before further flight, replacing titanium studs with steel studs. The actions must be accomplished by following specified portions of the alert service bulletin described previously.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

2009-07-53 SIKORSKY AIRCRAFT CORPORATION: Directorate Identifier 2009-SW-08-AD.

Applicability: Model S-92A helicopters with a main gearbox housing assembly, part number (P/N) 92351-15110-042, -043, or -044, that is not marked with "TS-062-01" near the P/N, certificated in any category.

Compliance: Required before further flight, unless accomplished previously.

To prevent failure of a main gearbox filter bowl assembly mounting stud (stud), which could result in rapid loss of oil, failure of the main gearbox, and subsequent loss of control of the helicopter, accomplish the following:

(a) Remove the titanium studs by following the Accomplishment Instructions in Sikorsky Alert Service Bulletin No. 92-63-014, Rev. A, dated March 20, 2009 (ASB), paragraph 3.A.

Note: Figure 1 of the ASB contains guidance for removal and installation of the studs.

(b) Visually inspect the tapped holes and the main gearbox housing lockring counterbore for damage. If you find damage in the tapped holes or in the main gearbox housing lockring counterbore, contact the Boston Aircraft Certification Office for an approved repair.

(c) Install steel studs and mark the main gearbox housing as "TS-062-01" near the P/N by following the Accomplishment Instructions in the ASB, paragraph 3.C.

(d) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, ATTN: Kirk Gustafson, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7190, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

(e) Special flight permits will not be issued.

(f) Copies of the applicable service information may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT, telephone (203) 383-4866, e-mail address tsslibrary@sikorsky.com, or at <http://www.sikorsky.com>.

(g) Emergency AD 2009-07-53, issued March 23, 2009, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7190, fax (781) 238-7170.

Issued in Fort Worth, Texas, on March 23, 2009.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.