

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0548; Directorate Identifier 2011-SW-025-AD; Amendment 39-16710; AD 2011-12-03]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft Corporation (Sikorsky) Model S-92A Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for the Sikorsky Model S-92A helicopters. This AD requires a nondestructive inspection (NDI), eddy current or fluorescent penetrant inspection (FPI), of each main gearbox (MGB) upper housing assembly rib on the left, right, and forward MGB mounting foot at specified intervals based on the MGB upper housing assembly hours time-in-service (TIS). If there is a crack, this AD requires replacing the MGB upper housing assembly with an airworthy MGB upper housing assembly. This AD is prompted by a report of a crack found on the MGB upper housing assembly left mounting foot forward rib that cannot be detected visually. We are issuing this AD to prevent loss of the MGB and subsequent loss of control of the helicopter.

DATES: This AD is effective June 17, 2011.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of June 17, 2011.

We must receive comments on this AD by August 1, 2011.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact 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>.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Michael Schwetz, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170, Michael.Schwetz@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We are adopting a new AD for the Sikorsky Model S-92A helicopters. This AD requires an NDI, eddy current or FPI, of each MGB upper housing assembly rib on the left, right, and forward MGB mounting foot for a crack because it cannot be detected visually. This AD is prompted by a report of a crack found on the MGB upper housing assembly left mounting foot forward rib during removal of an MGB that had reached its life limit of 1,000 hours TIS. The MGB mounting foot has a history of two types of cracks. The visual inspection for these two types of cracks is required in AD 2010-24-04 (75 FR 70812, November 19, 2010). The discovery of a third type of crack on the left mounting foot forward rib may not be reliably detected by visual inspection. This condition, if not detected and corrected, could result in loss of the MGB, and subsequent loss of control of the helicopter.

Relevant Service Information

We reviewed Sikorsky Alert Service Bulletin No. 92-63-025A, Revision A, dated May 12, 2011 (ASB). The ASB specifies a one-time NDI of the MGB assembly at the mounting foot ribs for cracks.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other helicopters of the same type design.

AD Requirements

This AD requires, at specified intervals based on the MGB upper housing assembly hours TIS, eddy current or FPI inspecting the left, right, and forward MGB upper housing mounting foot ribs for a crack. If there is a crack, the AD requires replacing the MGB upper housing assembly with an airworthy MGB upper housing assembly. This AD requires accomplishing the actions by following the specified portions in the ASB.

Differences Between the AD and the Service Information

We refer to "flight hours" as "hours TIS." This AD requires the inspection to be done by an ASNT Level 2 or equivalent inspector and this AD requires recurring inspections.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because of the short compliance time required to NDI certain MGB upper housing assembly mounting foot ribs for a crack. Therefore, we find that notice and opportunity for prior public comment are impracticable and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2011-0548 and Directorate Identifier 2011-SW-025-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

We estimate that this AD affects 29 helicopters of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per helicopter	Cost on U.S. operators
NDI of each left, right, and forward MGB mounting foot rib.	29 helicopters x 3.5 work-hours per inspection x 16 inspections per year x \$85 per work-hour = \$138,040. 1 x 56 work-hours x \$85 per work-hour = \$4,760, to replace 1 MGB.	\$286,000 for a MGB upper housing.	\$4,760 to do 16 NDI inspections per year.	\$428,800, assuming 1 replacement of the MGB upper housing assembly.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701: "General requirements." Under that section, Congress charges the FAA with

promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Does not warrant making distinction for intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):



2011-12-03 Sikorsky Aircraft Corporation (Sikorsky): Amendment 39-16710; Docket No. FAA-2011-0548; Directorate Identifier 2011-SW-025-AD.

Effective Date

(a) This AD is effective June 17, 2011.

Affected ADs

(b) None.

Applicability

(c) Model S-92A helicopters with main gearbox (MGB) upper housing assembly, part number (P/N) 92351-15110-042, -043, -044, -045, or -046, installed, certificated in any category.

Unsafe Condition

(d) This AD is prompted by a report of a crack found on the MGB left mounting foot forward rib that may not be found during a visual inspection. We are issuing this AD to prevent loss of a MGB and subsequent loss of control of the helicopter.

Compliance

(e) For each MGB upper housing assembly with 700 or more hours time-in-service (TIS), within 30 hours TIS, unless already done, or for each MGB upper housing assembly with more than 500 hours TIS but less than 700 hours TIS, within 50 hours TIS, unless already done, and for all helicopters thereafter at intervals not to exceed 50 hours TIS:

(1) Clean and Eddy Current inspect the forward, left, and right MGB mounting foot ribs for a crack by following the Accomplishment Instructions, paragraphs 3.C. through 3.D.(2)(d), of Sikorsky Alert Service Bulletin No. 92-63-025A, Revision A, dated May 12, 2011 (ASB); or

(2) Clean and fluorescent penetrant inspect (FPI) the MGB mounting foot ribs for a crack by following the Accomplishment Instructions, paragraphs 3.E.(1) through 3.E.(5), of the ASB.

(3) An inspector qualified to ASNT Level II or equivalent is required to perform the nondestructive inspection (NDI), by Eddy Current or FPI, of the left, right, and forward MGB mounting foot ribs for a crack.

(f) If there is a crack, before further flight, replace the MGB upper housing assembly with an airworthy MGB upper housing assembly.

Note: Sikorsky has developed a Phase III MGB upper housing assembly, P/N 92351-15310-041, is not subject to the "Applicability" of this AD.

Alternative Methods of Compliance (AMOCs)

(g)(1) The Manager, Boston Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested, using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Additional Information section of this AD.

(2) Before using any approved AMOC, we request that you notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

Additional Information

(h) For more information about this AD, contact Michael Schwetz, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170, E-mail Michael.Schwetz@faa.gov.

Material Incorporated by Reference

(i)(1) Inspect the MGB upper housing assembly mounting foot ribs for a crack by following the specified portions of Sikorsky Alert Service Bulletin No. 92-63-025A, Revision A, dated May 12, 2011. The Director of the Federal Register approved the incorporation by reference of the service information.

(2) For service information identified in this AD, contact Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop S581A, 6900 Main Street, Stratford, CT, telephone (203) 383-4866, e-mail address tslibrary@sikorsky.com, or at <http://www.sikorsky.com>.

(3) Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas, or at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Subject

(j) The Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code is 6320 Main Gearbox.

Issued in Fort Worth, Texas on May 24, 2011.

Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.