

2009-25-10

SIKORSKY AIRCRAFT CORP.

Amendment 39-16130

Docket No. FAA-2009-1130; Directorate Identifier 2009-SW-40-AD

PREAMBLE

Applicability: Model S-92A helicopters, serial numbers 920006 through 920109, certificated in any category.

Compliance: Required as indicated, unless done previously.

To prevent complete loss of oil from the main gearbox (MGB), failure of the MGB, and subsequent loss of control of the helicopter, do the following:

- (a) Within 7 days, inspect the MGB lube system filter assembly for damage to the primary and secondary oil filters by following the Accomplishment Instructions, paragraphs 3.A.(4) and through 3.A.(6) of Sikorsky Alert Service Bulletin (ASB) No. 92-63-018, dated July 1, 2009 (ASB No. 92-63-018). For purposes of this AD, "damage" is the presence of those conditions described in paragraphs 3.A.(5) and 3.A.(8) of the Accomplishment Instructions of ASB No. 92-63-018.
- (b) If you find damage in the primary oil filter element (part number (P/N) 70351-38801-102) as follows: "wavy pleats" as depicted in Figure 1, internal buckling or a crack as depicted in Figure 2, or indented dimples as depicted in Figure 3 of ASB No. 92-63-018 or damage in the secondary oil filter element (P/N 70351-38801-103) as follows: "wavy pleats" as depicted in Figure 4 or an elongated cup as depicted in Figure 5 of ASB No. 92-63-018, replace both the primary and secondary filters, packings, and filter bowl mounting studs, service the transmission and perform a functional test before further flight by following the Accomplishment Instructions, paragraphs 3.C.(1) through 3.C.(23), of ASB No. 92-63-018, except this AD does not require you to return removed studs to HSI nor does it require you to contact the manufacturer. If you find damage in the tapped holes or in the MGB housing lockring counterbore, contact the Boston Aircraft Certification Office for an approved repair.
- (c) If you find no damage in the primary or secondary oil filter element, before further flight, replace the packings, service the transmission, and perform a functional test by following the Accomplishment Instructions, paragraphs 3.B.(1) through 3.B.(4) of ASB No. 92-63-018.
- (d) For those helicopters on which the primary or secondary oil filter element and filter bowl mounting studs were replaced as required by paragraph (b) of this AD:
- (1) Before the first flight of each day until the oil filter bowl, P/N AAC367-16D2A, is replaced, inspect the MGB lube system filter assembly for any oil leak.
 - (2) Before further flight after any oil leak is detected as required by paragraph (d)(1) of this AD or within 30 days, whichever is earlier, replace the oil filter bowl.

NOTE

Sikorsky ASB No. 92-63-019, dated July 1, 2009, pertains to the subject of this AD.

(e) 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, FAA, ATTN: Kirk Gustafson, Aviation Safety Engineer, Engine and Propeller Directorate, FAA, 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.

(f) The Joint Aircraft System/Component (JASC) Code is 6300: Main Rotor System.

(g) Inspecting and replacing the main gearbox lube system assembly parts shall be done by following the specified portions of Sikorsky Alert Service Bulletin (ASB) No. 92-63-018, dated July 1, 2009. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. Copies 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>. 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 NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(h) This amendment becomes effective on December 21, 2009.

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 November 25, 2009.

Lance T. Gant, *Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.*

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-1130; Directorate Identifier 2009-SW-40-AD; Amendment 39-16130; AD 2009-25-10]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for the Sikorsky Model S-92A helicopters. This action requires a one-time visual inspection of the main gearbox (MGB) lube system filter assembly for oil filter damage. This action also requires if either the primary or secondary oil filter is damaged, replacing both filters, all packings, and the studs before further flight. This AD also requires replacing the oil filter bowl within 30 days after replacing a damaged filter and a daily leak inspection for an oil leak (no oil leaks allowed) during that 30-day interim period. This amendment is prompted by three reports of damaged oil filters or packings resulting from installing the filter assembly with an oversized packing possibly because of incorrect part numbers in the maintenance manual. Based on a previous accident investigation, failure of the oil filter bowl or mounting studs can result in sudden and complete loss of oil from the MGB. The actions specified in this AD are intended to prevent complete loss of oil from the MGB, failure of the MGB, and subsequent loss of control of the helicopter.

DATES: Effective December 21, 2009.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 21, 2009.

Comments for inclusion in the Rules Docket must be received on or before February 2, 2010.

ADDRESSES: Use one of the following addresses to submit comments on this AD:

- 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, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, 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.

You may get the service information identified in this AD from 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>.

Examining the Docket: You may examine the docket that contains the AD, any comments, and other information 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 Docket Operations office (telephone (800) 647-5527) is located in Room W12-140 on the ground floor of the West Building at the street address stated in the ADDRESSES section. Comments will be available in the AD docket shortly after 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.

SUPPLEMENTARY INFORMATION: This amendment adopts a new AD for the Sikorsky Model S-92A helicopters. This action requires a one-time visual inspection of the MGB lube system filter assembly for oil filter damage. This action also requires if either the primary or secondary oil filter is damaged, replacing both filters, all packings, and the studs before further flight. This action also requires replacing the oil filter bowl within 30 days after replacing a damaged filter and a daily inspection for an oil leak (no oil leaks allowed) during that 30-day interim period. This amendment is prompted by three reports of damaged oil filters or packings resulting from operating with an oversized packing possibly because of incorrect part numbers in the maintenance manual. Sikorsky has issued a temporary revision, T-Rev 63-19, to the maintenance manual to correct any errors. Installing the filter assembly with an oversized packing (also known as an O-ring) in the oil filter double bypass valve can produce excessive assembly and fatigue loads in the oil filter bowl or the mounting studs that secure the oil filter bowl to the MGB. Based on rig testing, these conditions can result in reduced fatigue life in the studs and the oil filter bowl. Based on information from a previous accident investigation, failure of the oil filter bowl or mounting studs can result in sudden and complete loss of oil from the MGB. This condition, if not corrected, could result in complete loss of oil from the MGB, failure of the MGB, and subsequent loss of control of the helicopter.

We have reviewed Sikorsky Alert Service Bulletin (ASB) No. 92-63-018, dated July 1, 2009, and No. 92-63-019, dated July 14, 2009. ASB No. 92-63-018 specifies a one-time visual inspection for a damaged oil filter element. ASB No. 92-63-019 specifies replacing the MGB filter bowl on those helicopters that have previously been found to have a damaged MGB oil filter. ASB No. 92-63-019 also requires a daily visual inspection of the MGB lube system filter assembly for oil leaks (no leaks allowed) until the oil filter bowl is replaced.

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD is being issued to prevent complete loss of oil from the MGB, failure of the MGB, and subsequent loss of control of the helicopter. This AD requires visually inspecting the oil filter for damage and replacing any filter, packings, and mounting studs before further flight if the filter is damaged. The AD also requires replacing the oil filter bowl within 30 days after a damaged filter has been replaced. Do the actions by following specified portions of the service bulletin described previously.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability or structural integrity of the helicopter. Therefore, a one-time visual inspection of the oil filter within 7 days is required. If the visual inspection finds a damaged filter, replacing the damaged filter, packings, and filter bowl mounting studs before further flight are also required. Also, a one-time replacement of the oil filter bowl is required within 30 days

after replacing a damaged oil filter. All of these are very short compliance times. Therefore, this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

We estimate that this AD will affect 44 helicopters. Assuming a one-time inspection shows no damage to 39 of the helicopters, it will take about 1.5 work hours to remove, inspect, and reinstall each oil filter assembly and packing for 39 helicopters. Assuming oil filter damage is discovered in 5 helicopters, the additional required actions will take about:

- 1.5 work hours to remove, inspect, and reinstall each filter assembly and packing, and
- 3 work hours to replace the mounting studs.

Assuming the bowl replacement is deferred on all 5 helicopters for 30 days, it will take about:

- 15 work hours for 30 daily (.5 work hour each) inspections for leakage, and
- 1 work hour to replace the oil filter bowl.

The average labor rate is \$80 per work hour. Required parts will cost about \$817 for the oil filter assembly, \$81 for the filter bowl mounting studs, and \$4,568 for the filter bowl per helicopter. Based on these figures, we estimate the total cost impact of the AD on U.S. operators to be \$40,210.

Comments Invited

This AD is a final rule that involves requirements that affect flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "Docket No. FAA-2009-1130; Directorate Identifier 2009-SW-40-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the AD. We will consider all comments received by the closing date and may amend the AD in light 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 with FAA personnel concerning this AD. Using the search function of our docket Web site, you can find and read the comments to any of our dockets, including the name of the individual who sent the comment. You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78).

Regulatory Findings

We have determined that 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 the regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. 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.

We prepared an economic evaluation of the estimated costs to comply with this AD. See the AD docket to examine the economic evaluation.

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.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding a new airworthiness directive to read as follows: