



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0920; Project Identifier AD-2020-00662-R]**

**RIN 2120-AA64**

**Airworthiness Directives; Sikorsky Aircraft and Sikorsky Aircraft Corporation Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** The FAA proposes to adopt a new airworthiness directive (AD) for all Sikorsky Aircraft Model S-61L, S-61N, S-61NM, and S-61R helicopters and Sikorsky Aircraft Corporation Model S-61A, S-61D, S-61E, and S-61V restricted category helicopters. This proposed AD was prompted by the manufacturer determining that there may be arm assemblies in service that have accumulated 15,000 or more hours time-in-service (TIS), which exceeds the service life limit for this component. This proposed AD would require reviewing the mixer unit component log card or equivalent record and, depending on the number of hours TIS, calculating the remaining life of the arm assembly or removing the arm assembly from service. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Sikorsky Aircraft Corporation, 6900 Main Street, P.O. Box 9729, Stratford, CT 06615; phone: 203-386-4000. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

### **Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0920; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Neil Doh, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7757; fax: 781-238-7199; email: [neil.doh@faa.gov](mailto:neil.doh@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0920; Project Identifier AD-2020-00662-R” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting

data. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

Except for Confidential Business Information as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposal.

### **Confidential Business Information**

Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Neil Doh, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The FAA proposes to adopt a new AD for Sikorsky Aircraft Model S-61L, S-61N, S-61NM, and S-61R helicopters and Sikorsky Aircraft Corporation Model S-61A, S-61D, S-61E, and S-61V restricted category helicopters, with an arm assembly, part number S6140-62614-009, installed. The FAA learned from Sikorsky Aircraft

Corporation that Sikorsky S-61 Helicopter Alert Service Bulletin (ASB) 61B General-1, Revision No. Z, dated November 13, 2018, which is applicable to Sikorsky Model S-61L, S-61N, S-61NM, and S-61R helicopters, failed to include the life limit of the redesigned arm assembly. As a result, Sikorsky Aircraft Corporation determined that there may be arm assemblies in service with 15,000 or more hours TIS, which exceeds the service life limit for this component. The proposed actions are intended to prevent an arm assembly from remaining in service beyond its life limit. This condition, if not addressed, could result in reduced or loss of tail rotor control and reduced control of the helicopter.

#### **FAA's Determination**

The FAA is issuing this NPRM because the agency has determined that the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **Related Service Information under 1 CFR part 51**

The FAA reviewed Sikorsky S-61 Helicopter ASB 61B40-11, Basic Issue, dated March 2, 2020 ("the ASB"). The ASB describes procedures for a one-time inspection of the mixer unit component log card to verify the arm assembly life limit and, if the life limit has been exceeded, to replace the arm assembly for Sikorsky Model S-61L, S-61N, and S-61NM helicopters. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Other Related Service Information**

The FAA reviewed Sikorsky S-61 Helicopter ASB 61B General-1, Revision AA, dated February 24, 2020. This service information summarizes and lists parts with mandatory retirement times and inspections for Sikorsky Model S-61L, S-61N, and S-61NM helicopters.

**Proposed AD Requirements in this NPRM**

This proposed AD would require reviewing the mixer unit component log card or equivalent record and, depending on the hours time-in-service of the arm assembly, calculating the remaining life of the arm assembly or removing the arm assembly from service.

**Differences Between this Proposed AD and the Service Information**

The ASB is effective only for Sikorsky Aircraft Model S-61L, S-61N, and S-61NM helicopters. In addition to these helicopters, the applicability of this proposed AD also includes Sikorsky Aircraft Model S-61R helicopters and Sikorsky Aircraft Corporation Model S-61A, S-61D, S-61E, and S-61V restricted category helicopters. The FAA is proposing to expand the applicability to prevent the installation of arm assemblies that have exceeded their life limits on helicopters with a similar type design as those helicopters affected by the ASB.

**Costs of Compliance**

The FAA estimates that this AD, as proposed, would affect 13 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

**Estimated costs**

<b>Action</b>	<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Review mixer unit component log or equivalent record	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$1,105

The FAA estimates the following costs to do any necessary log entry or replacement that would be required based on the results of the proposed mixer unit component log or equivalent record review. The FAA has no way of determining the number of helicopters that might need this log entry or replacement:

### On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Add arm assembly entry and determine remaining life	1 work-hour x \$85 per hour = \$85	\$0	\$85
Replace arm assembly	9 work-hours x \$85 per hour = \$765	\$5,035	\$5,800

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in the cost estimate.

#### 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.

The FAA is 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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, 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.

### **List of Subjects in 14 CFR Part 39**

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

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

**Sikorsky Aircraft and Sikorsky Aircraft Corporation:** Docket No. FAA-2020-0920;  
Project Identifier AD-2020-00662-R.

### **(a) Comments Due Date**

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

### **(b) Affected ADs**

None.

### **(c) Applicability**

This AD applies to Sikorsky Aircraft Model S-61L, S-61N, S-61NM, and S-61R helicopters and Sikorsky Aircraft Corporation Model S-61A, S-61D, S-61E, and S-61V

helicopters, certificated in any category including restricted, with an arm assembly, part number S6140-62614-009, installed.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 6720, Tail Rotor Control System.

**(e) Unsafe Condition**

This AD was prompted by the manufacturer determining that there may be arm assemblies in service with 15,000 or more hours time-in-service (TIS), which exceeds the life limit for this component. The FAA is issuing this AD to prevent reduced or loss of tail rotor control. This unsafe condition, if not addressed, could result in reduced control of the helicopter.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Action**

(1) Within 90 days after the effective date of this AD, review the mixer unit component log card or equivalent record to determine if the affected arm assembly is entered with the appropriate 15,000 hours TIS life limit.

(2) If the affected arm assembly is not included on the mixer unit component log card or equivalent record, within 90 days after the effective date of this AD, add the arm assembly entry to the mixer unit component log card or equivalent record and determine the remaining life of the arm assembly using the Accomplishment Instructions, Section 3.A.(3) of Sikorsky S-61 Helicopter Alert Service Bulletin (ASB) 61B40-11, Basic Issue, dated March 2, 2020 (“the ASB”).

(3) If, based on the review required by paragraphs (g)(1) and (2) of this AD, the arm assembly has accumulated 15,000 or more hours TIS, before further flight, remove the arm assembly from service. If the hours TIS for the affected arm assembly cannot be determined, before further flight, remove the affected arm assembly from service.

(4) For arm assemblies that have not accumulated 15,000 or more hours TIS, thereafter, continue to determine the remaining life of the arm assembly and remove the arm assembly from service before it accumulates 15,000 hours TIS.

**(h) Credit for Previous Actions**

You may take credit for adding the arm assembly entry to the mixer unit component log card or equivalent record and determining the remaining life of the arm assembly required by paragraphs (g)(1) and (2) of this AD if you performed these actions before the effective date of this AD using Sikorsky S-61 Helicopter ASB 61B General-1, Revision AA, dated February 24, 2020.

**(i) Special Flight Permit**

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are subject to the requirements of paragraph (g)(3) of this AD. Operators who are prohibited from further flight due to exceeding the life limit in paragraph (g)(3) of this AD, may only perform a maintenance check or a one-time ferry flight to a location where the affected arm assembly can be removed from service. This ferry flight must be performed with only essential flight crew.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Boston ACO Branch, 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 certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD.

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

**(k) Related Information**

(1) For more information about this AD, contact Neil Doh, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7757; fax: 781-238-7199; email: neil.doh@faa.gov.

(2) For service information identified in this AD, contact Sikorsky Aircraft Corporation, 6900 Main Street, P.O. Box 9729, Stratford, CT 06615; phone: 203-386-4000. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

Issued on October 14, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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