DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0791; Project Identifier AD-2020-00676-R; Amendment 39-21438; AD 2021-04-16]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Sikorsky Aircraft Corporation (Sikorsky) Model S-92A helicopters. This AD was prompted by the manufacturer discovering nonconforming threads, resulting in a life limit reduction on multiple landing gear components including threaded hinge pins and main landing gear (MLG) and nose landing gear (NLG) actuator pins. This AD requires a one-time inspection of the landing gear for components with non-conforming threads and removal of any nonconforming threaded hinge pin and MLG and NLG actuator pin. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Sikorsky Aircraft Corporation, Commercial Systems and Services, 124 Quarry Road, Trumbull, CT, 06611, United States; phone: 203-416-4000; email: product_safety.gr-sik@lmco.com. Operators may also log on to the Sikorsky 360 website at website: https://www.sikorsky360.com/portal/public/index.html#!/welcome. 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. It is also available at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0791.

Examinaing the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0791; 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 final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Dorie Resnik, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7693; fax: 781-238-7199; email: dorie.resnik@faa.gov

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Sikorsky Model S-92A helicopters, with serial numbers (S/Ns) 920006 through 920334, inclusive. The NPRM published in the Federal Register on September 8, 2020 (85 FR 55388). The NPRM was prompted by the manufacturer discovering non-conforming threads, resulting in a life limit reduction on multiple landing gear components including threaded hinge pins and MLG and NLG actuator pins. In the NPRM, the FAA proposed to require a one-time inspection of the landing gear and the removal from service of certain serial-numbered threaded hinge pins part number (P/N) 92250-12281-101 and certain serial-numbered MLG and NLG actuator pins P/N 92250-12287-101 and 92250-12287-103. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final AD

Comments

The FAA received comments from three commenters. The following presents the comments received on the NPRM and the FAA’s response to each comment.
Support for the NPRM

An individual commenter supported the NPRM.

Comment Not Relevant to the NPRM

An individual commenter submitted information that was not relevant to the NPRM.

Request for the FAA to Change the Cost of Compliance of the AD

Request: Sikorsky requested the FAA revise the On-Condition Costs table.

Sikorsky stated the parts cost for P/N 92250-12281-101 should be revised to $4,535.

FAA Response: The FAA agrees. The FAA obtained the cost information provided in the NPRM from Sikorsky’s website at www.sikorsky360.com. However, as Sikorsky has indicated that the price of the part has increased, the cost information in this final rule is updated accordingly.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously. These changes are consistent with the intent of the proposals in the NPRM. The FAA also determined that these changes will not increase the scope of this AD.

Related Service Information under 1 CFR Part 51

The FAA reviewed Sikorsky Aircraft Corporation Alert Service Bulletin 92-32-008, Basic Issue, dated January 21, 2020 (the ASB). The ASB describes procedures for a one-time inspection and replacement of non-conforming components on the MLG and NLG. 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.

Differences Between this AD and the Service Information

This AD requires replacement of only affected hinge pins and MLG and NLG actuator pins. The ASB requires replacement of additional parts, such as the MLG and NLG crossbolt and the MLG and NLG upper nut. The FAA has determined that the MLG
and NLG crossbolt and the MLG and NLG upper nut fail in a safe and contained manner and therefore are not subject to this AD.

In addition, this AD requires the one-time inspection within 300 hours time in service after the effective date of this AD and any affected hinge pins and MLG and NLG actuator pins be removed from service before further flight. The ASB requires that the inspection and replacement of the affected hinge pins and MLG and NLG actuator pins occur no later than January 21, 2021.

**Costs of Compliance**

The FAA estimates that this AD affects 85 helicopters of U.S. registry. The FAA estimates the following costs to comply with this AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor Cost</th>
<th>Parts Cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visually inspect landing gear (right MLG assembly, left MLG assembly, and NLG kit)</td>
<td>1 work-hour x $85 per hour = $85 (per landing gear)</td>
<td>$0</td>
<td>$255 (three landing gear installed on each helicopter)</td>
<td>$21,675</td>
</tr>
</tbody>
</table>

The FAA estimates the following costs to do any necessary replacements that would be required based on the results of the proposed inspection. The FAA has no way of determining the number of helicopters that might need these replacements:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor Cost</th>
<th>Parts Cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace threaded hinge pin, P/N 92250-12281-101</td>
<td>1 work-hour x $85 per hour = $85</td>
<td>$4,535</td>
<td>$4,620</td>
<td></td>
</tr>
<tr>
<td>Replace MLG/NLG actuator pin, P/N 92250-12287-101</td>
<td>1 work-hour x $85 = $85</td>
<td>$557</td>
<td>$642</td>
<td></td>
</tr>
<tr>
<td>Replace MLG/NLG actuator pin, P/N 92250-12287-103</td>
<td>1 work-hour x $85 = $85</td>
<td>$609</td>
<td>$694</td>
<td></td>
</tr>
</tbody>
</table>
According to the manufacturer, some of the costs of this 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 its 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**

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) 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 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:

2021-04-16 Amendment 39-21438; Docket No. FAA-2020-0791; Project Identifier AD-2020-00676-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Sikorsky Aircraft Corporation (Sikorsky) Model S-92A helicopters, certificated in any category, with serial numbers (S/Ns) 920006 through 920334 inclusive.

(d) Subject

Joint Aircraft System Component (JASC) Code 3220, Nose/Tail Landing Gear; 3210, Main Landing Gear.

(e) Unsafe Condition

This AD was prompted by the manufacturer determining that because of non-conforming threads, due to a quality escape, the life limit of the threaded hinge pin and main landing gear (MLG) and nose landing gear (NLG) actuator pins is reduced. The FAA is issuing this AD to prevent failure of components on the MLG and NLG. The unsafe condition, if not addressed, could result in damage to the helicopter and reduced ability to control the helicopter during landing.
(f) Compliance

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

(g) Required Actions

Within 300 hours time in service after the effective date of this AD, visually inspect the components of the right MLG assembly, left MLG assembly, and NLG kit for threaded hinge pins, part number (P/N) 92250-12281-101, and actuator pins, P/N 92240-12287-101 and 92240-12287-103, with serial numbers (S/Ns) identified in Table 1 or 2 (threaded hinge pins) or in Table 1 (actuator pins), in Section 3, the Accomplishment Instructions, in the Sikorsky Aircraft Corporation Alert Service Bulletin (ASB) 92-32-008, Basic Issue, dated January 21, 2020 (the ASB).

Note 1 to the introductory text of paragraph (g): See Figures 1 and 2 in Section 3, the Accomplishment Instructions, in the ASB for guidance on performing the visual inspection.

(1) If there is any threaded hinge pin, P/N 92250-12281-101, with an S/N listed in Table 1 or 2 in the ASB, before further flight, remove the threaded hinge pin from service.

(2) If there is any MLG or NLG actuator pin, P/N 92250-12287-101 or P/N 92250-12287-103, with an S/N listed in Table 1 in the ASB, before further flight, remove the actuator pin from service.

(h) Installation Prohibition

As of the effective date of this AD, do not install any threaded hinge pin, P/N 92250-12281-101, or actuator pin, P/N 92240-12287-101 or 92240-12287-103, with an S/N listed in Table 1 or 2 in Section 3, the Accomplishment Instructions, in the ASB, on any helicopter.

(i) 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 (j)(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.

(j) Related Information

For more information about this AD, contact Dorie Resnik, Aerospace Engineer, Boston ACO Branch, Compliance & Airworthiness Division, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7693; fax: 781-238-7199; email: dorie.resnik@faa.gov. You may view the related 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.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.


   (ii) [Reserved]

(3) For Sikorsky service information identified in this AD, contact Sikorsky Aircraft Corporation, Commercial Systems and Services, 124 Quarry Road, Trumbull, CT, 06611; phone: 203-416-4000; email: product_safety.gr-sik@lmco.com. Operators may also log on to the Sikorsky 360 website at: https://customerportal.sikorsky.com.

(4) 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.
(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on February 9, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-04940 Filed: 3/9/2021 8:45 am; Publication Date: 3/10/2021]