DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0792; Directorate Identifier 2009-SW-19-AD; Amendment 39-16762; AD 2011-16-04]

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 Sikorsky Model S-92A helicopters. This action requires making pen and ink changes, inserting a copy of this AD, or inserting specified temporary revisions into the Limitations section of the Rotorcraft Flight Manual (RFM) limiting the maximum rolling groundspeed for a normal landing or takeoff from 65 knots to 50 knots for helicopters with a certain serial-numbered landing gear retract actuator (actuator). Instead of limiting the groundspeed, replacing the affected actuator with a modified actuator is terminating action for the requirements of this AD. This amendment is prompted by a report of a main landing gear that would not retract. The manufacturer reports that certain actuators were manufactured with down-lock keys that did not meet the specified minimum hardness requirements. This condition, if not corrected, could lead to a landing gear collapse following a roll-on landing that exceeds 50 knots groundspeed. These actions are intended to prevent collapse of a landing gear and subsequent loss of control of the helicopter.

DATES: Effective November 14, 2011.

Comments for inclusion in the Rules Docket must be received on or before December 27, 2011.

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

- Fax: 202-493-2251.
- 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 tsllibrary@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: 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.

SUPPLEMENTARY INFORMATION: This amendment adopts a new AD for Sikorsky Model S-92A helicopters. This action requires making pen and ink changes, inserting a copy of this AD, or inserting certain temporary revisions into the Limitations section of the RFM limiting the maximum groundspeed for a normal landing or takeoff to 50 knots for helicopters with a certain serial-numbered actuator installed. The temporary revisions to the Limitations section of the RFM also require replacing the actuators if the landing exceeds the 50 knot rolling groundspeed before further flight or before towing the helicopter; rolling ground taxi operations are permitted. Replacing the affected actuator with a modified actuator is terminating action for the requirements of this AD. The manufacturer states that it anticipates retrofitting the fleet with a modified actuator within 3 years. This amendment is prompted by a report that certain actuators were manufactured with a down-lock pin that does not meet the specified minimum hardness requirements, which could lead to a landing gear collapse following a roll-on landing that exceeds 50 knots. These actions are intended to prevent a landing gear collapse and subsequent loss of control of the helicopter.

We have reviewed Sikorsky Alert Service Bulletin No. 92-32-001, dated May 2, 2008 (ASB), which describes the unsafe condition, its cause, and the temporary operating restrictions intended to mitigate the unsafe condition until modified actuators are available. The ASB references and includes Embraer Liebherr Equipamentos do Brasil Service Bulletin No. 2392-0850-32-02 Change No. 1, dated May 15, 2008, which specifies procedures for replacing the down-lock key in the affected actuators.

This unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, this AD is being issued to limit the maximum rolling groundspeed for a normal landing or takeoff to 50 knots rolling groundspeed. If the limitation is exceeded on landing, the actuator must be replaced with a modified actuator before further flight or towing operation; rolling ground taxi operations are permitted. This AD requires making pen and ink changes, inserting a copy of this AD, or inserting the following temporary revisions into the Limitations section of the RFM: SA S92A-RFM-000, Revision 2; SA S92A-RFM-002, Revision 6; SA S92A-RFM-003, Revision 5; SA S92A-RFM-004, Revision 5; SA S92A-RFM-005, Revision 4; or SA S92A-RFM-006, Revision 3; all approved on January 7, 2011. Instead of limiting the groundspeed, replacing each actuator without the modification letter "B" stamped on the nameplate with an airworthy modified actuator with a letter "B" stamped on the nameplate constitutes terminating action for the requirements of this AD.

The short compliance time of before further flight is required because the previously described critical unsafe condition can adversely affect the structural integrity and controllability of the helicopter. Therefore, limiting the maximum groundspeed for normal landing or takeoff to 50 knots to reduce the likelihood of a landing gear collapse is required before further flight and 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 42 helicopters. It will take a minimal amount of time to make the limitation changes. If the operator replaces an affected actuator with a modified actuator, it will take about 8 work hours at an average labor rate of $85 per work hour. Required parts will cost about $7,841 per helicopter. Based on these figures, we estimate the total cost impact of the AD on U.S. operators to be $357,882, assuming all the helicopter operators install modified actuators.

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-2011-0792; Directorate Identifier 2009-SW-19-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:
Applicability: Model S-92A helicopters with landing gear retract actuator (actuator), part number (P/N) 92250-00800-103, with a serial number (S/N) 101-00026 through 101-00237, without the modification letter "B" stamped on the nameplate, certificated in any category.

Compliance: Before further flight, unless previously accomplished.

To prevent a landing gear collapse and subsequent loss of control of the helicopter, do the following:

(a) Revise the operating limitations, "Airspeed Limits" section of the rotorcraft Flight Manual (RFM) by one of the following methods:

   (1) Insert Sikorsky "Temporary Revisions" SA S92A-RFM-000, Revision 2; SA S92A-RFM-002, Revision 6; SA S92A-RFM-003, Revision 5; SA S92A-RFM-004, Revision 5; SA S92A-RFM-005, Revision 4; or SA S92A-RFM-006, Revision 3; all approved January 7, 2011; or

   (2) Insert a copy of this AD; or

   (3) Make pen and ink changes with the following limitations:

       "Maximum rolling groundspeed for normal takeoff or normal landing is 50 knots."

       "After a landing with a rolling groundspeed in excess of 50 knots, any further takeoffs or towing operation is prohibited. Rolling ground taxi operations of less than 50 knots are permitted."

(b) Following a landing with a rolling groundspeed in excess of 50 knots, or as an alternative to revising the operating limitations section of the RFM in compliance with this AD, before further flight, replace each affected actuator that does not have the modification letter "B" stamped on the nameplate with an airworthy actuator that has the modification letter "B" stamped on the nameplate.

(c) 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: Michael Schwetz, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

Note: Sikorsky Alert Service Bulletin No. 92-32-001, dated May 2, 2008, which is not incorporated by reference, contains additional information about the subject of this AD.

(d) The Joint Aircraft System/Component (JASC) Code is 3233: Landing Gear Actuator.

(e) This amendment becomes effective on November 14, 2011.

Issued in Fort Worth, Texas, on July 14, 2011.

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