(2) EMBRAER Model ERJ 190–100 ECJ, –100 LR, –100 IGW, –100 STD, –200 STD, –200 LR, and –200 IGW airplanes, equipped with outboard slat skew sensor P/N 1702286A or 1702288A.

Subject

(d) Air Transport Association (ATA) of America Code 57: Wings.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

"It has been found the occurrence of outboard slat skew sensor failure in open or closed position. The combination of an outboard slat skew sensor failed closed, an outboard slat actuator structural failure (rupture) and its adjacent actuator torque limiter failing high (allows higher loads to the panel structure) occurring in the same slat surface, under normal flight loads, may lead [the] slat surface to detach from the wing with the possibility of hitting and damaging the horizontal stabilizer and elevator, which may affect the airplane controllability."

* * * * *

Corrective actions include repetitive operational tests of the outboard slat skew sensor, and replacement with a serviceable outboard slat skew sensor if necessary.

Actions and Compliance

(f) Unless already done, do the following actions.

(1) At the applicable compliance time in paragraph (f)(1)(i) or (f)(1)(ii) of this AD: Perform an operational test (OPT) of any outboard slat skew sensor having P/N 1702286A or P/N 1702288A. If any outboard slat skew sensor fails the test, replace the sensor with a serviceable sensor before further flight. Do the actions using a method approved by either the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; or the Agência Nacional de Aviação Civil (ANAC) (or its delegated agent).

(i) For Model ERJ 170 airplanes: Within 1,320 flight hours after the effective date of this AD.

(ii) For Model ERJ 190 airplanes: Within 1,320 flight hours or 12 months after the effective date of this AD, whichever occurs first.

Note 1: Guidance on performing the OPT required by paragraph (f)(1) of this AD can be found in Task 27–83–01–710–801–A, "Outboard Slat Skew Sensor—Operational Test," dated October 28, 2008, of the Embraer 170/175 or 190 Aircraft Maintenance Manual (AMM).

Note 2: For the purpose of this AD, an OPT is "A task to determine if an item is fulfilling its intended purpose. Since it is a failure-finding task, it does not require quantitative tolerances."

Note 3: For the purpose of this AD, a serviceable sensor is one that has passed the OPT required by paragraph (f)(1) of this AD.

(2) Repeat the OPT required by paragraph (f)(1) of this AD thereafter at intervals not to exceed 1,320 flight hours.

FAA AD Differences

Note 4: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Kenny Kaulia, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057–3356; telephone (425) 227–2848; fax (425) 227–1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) *Airworthy Product:* For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) *Reporting Requirements:* For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.

Related Information

(h) Refer to MCAI Brazilian Airworthiness Directives 2009–02–02 and 2009–02–03, both effective February 16, 2009, for related information.

Material Incorporated by Reference

(i) None.

Issued in Renton, Washington, on April 28, 2010.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2010–10900 Filed 5–12–10; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2006–24587; Directorate Identifier 2006–SW–05–AD; Amendment 39–16281; AD 2010–10–02]

RIN 2120–AA64

Airworthiness Directives; Sikorsky Aircraft Corporation Model S–76A, B, and C Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for Sikorsky Aircraft Corporation (Sikorsky) Model S–76A, B, and C helicopters that requires inspecting each installed Woodward HRT (formerly HR Textron) main rotor servo actuator (servo actuator) for a high rate of leakage and replacing each affected servo actuator with a servo actuator containing a newly re-designed servo actuator piston. This amendment is prompted by a National Transportation Safety Board (NTSB) Safety Recommendation issued in response to an accident involving a Model S–76C helicopter. In the NTSB Safety Recommendation, the performance of a servo actuator piston upon reaching 3,000 hours time-in-service (TIS) was questioned as a result of piston head seal leakage and piston head plasma spray flaking. The actions specified by this AD are intended to prevent degraded servo actuator performance as a result of piston head seal leaking and plasma spray flaking, which could result in subsequent loss of control of the helicopter.

DATES: Effective June 17, 2010.

ADDRESSES: You may get the service information identified in this AD from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, 6900 Main Street, Stratford, Connecticut, phone (203) 383–4866, e-mail address *tsslibrary@sikorsky.com.*

Examining the Docket: You may examine the docket that contains this AD, any comments, and other information on the Internet at *http://www.regulations.gov,* or at the Docket Operations office, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Terry Fahr, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park,

Burlington, MA 01803, telephone (781) 238–7155, fax (781) 238–7170.

SUPPLEMENTARY INFORMATION: A revised proposal to amend 14 CFR part 39 to include an AD for Sikorsky Model S–76A, B, and C helicopters was published in the **Federal Register** on February 11, 2009 (74 FR 6835). That action, a supplemental notice of proposed rulemaking (SNPRM), proposed to require inspecting each installed servo actuator for a high rate of leakage, and if there is a high rate of leakage, replacing the servo actuator piston or replacing the servo actuator. The SNPRM also proposed replacing each affected servo actuator piston, part number (P/N) 41004321 or RW41004321, upon reaching 3,000 hours TIS, with a newly-designed servo actuator piston, P/N 41012001, or replacing an affected servo actuator with a servo actuator containing a newly-designed servo actuator piston. That action revised our previous proposal, issued on April 21, 2006, which was published in the **Federal Register** on May 2, 2006 (71 FR 25783), and which proposed to require inspecting the hydraulic fluid for contamination; removing the requirement to reduce the interval for overhauling an affected servo actuator from 3,000 to 2,000 hours TIS; revising the initial inspection time; and removing the 600 hours TIS repetitive hydraulic fluid leak inspection.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the three comments received in response to the SNPRM. Comments submitted in response to the NPRM were addressed in the SNPRM.

One commenter, Copterline Oy, states through their law firm that the design of the overhauled servo actuator piston head has not been approved by the FAA and is therefore not airworthy. They state that the cause of an accident involving a Sikorsky Model S–76 helicopter, which occurred on August 10, 2005, was plasma flaking from the piston head of the pistons in the forward servo actuator, which quickly led to a deterioration of the seals that are intended to prevent leakage. The commenter also states that "testing for leakage at 500 or even 100 hour intervals will not provide any assurance that the servo actuator will function even few hours after the test has been performed." They conclude that "all unairworthy servo actuators with plasma coating lapped over and across the head of the piston should be removed from service immediately", and that "helicopters with these servo actuators should not be designated as airworthy and, accordingly, should be grounded and not permitted to operate."

We do not agree with the commenter that helicopters with the overhauled servo pistons in the servo actuator should be grounded because that makes them unairworthy. The overhaul of the pistons was accomplished under the authority of the repair station of the Sikorsky servo piston supplier using overhaul data acceptable to the FAA. The plasma coating work performed on the overhauled piston was a maintenance activity performed under the Woodward HRT (formerly HR Textron) overhaul procedures approved by Sikorsky and according to acceptable practices. The purpose of these overhaul procedures was to restore the piston head to its original design specifications. Our review of the service history of the Model S–76 helicopters prior to the August 2005 accident found no incidents of loss of control of a helicopter as a result of servo actuator leakage or plasma spray flaking. However, because of safety concerns surrounding the overhaul of these two servo pistons and the plasma spray flaking, this AD requires phasing these overhauled pistons out of service. No later than 3,000 hours TIS or upon discovering fluid leakage exceeding 700 cc per minute, any overhauled piston must be replaced with a non-overhauled piston—either P/N 41012001–001, that has improved bonding qualities, or P/N 41012001. When these non-overhauled pistons are installed, the –109 and –110 servo actuators must be re-identified as either Sikorsky or Woodward HRT –111 servo actuators. It is our intent that, although the servo actuator piston may no longer be overhauled, the servo actuator may be overhauled using a non-overhauled piston. Thus, the –109 and –110 servo actuators are being phased out along with overhauled servo pistons.

A second commenter, the NTSB, states: "When checking servo actuators for contamination and leakage, the inspections must be redundant enough and the inspection intervals short enough to ensure that missing a problem during any single inspection does not result in a potential catastrophic failure of the aircraft." They state that we should require overhauling any affected servo actuator at intervals of 2,000 hours TIS, and require a 600 hours TIS repetitive hydraulic fluid leak inspection, as stated in the proposed AD that we issued on April 21, 2006 (71 FR 25783, May 2, 2006).

We do not agree. Our review of the Model S–76 helicopter service history data prior to the August 2005 accident found no evidence of a helicopter control issue associated with servo actuator leakage or plasma spray flaking. Therefore, we believe that requiring an additional leakage rate inspection at 1,500 hours TIS, and, if leakage exceeding 700 cc per minute is found, requiring replacement of the servo actuator piston or replacement of the servo actuator with an airworthy servo actuator is sufficient to prevent degraded servo actuator performance as a result of piston head seal leaking and plasma spray flaking.

A third commenter, Sikorsky, states that they support "the majority of this SNPRM." However, they suggest that we replace "HR Textron" with their new name, "Woodward HRT"; include, "reworked piston", P/N RW41004321, for removal; and add replacement piston, Woodward HRT P/N 4102001–001. Our understanding is that a "reworked piston" is the same as an "overhauled piston." We agree and have made those changes.

Sikorsky further states that the 1,500 hours check represents a new restrictive requirement to Chapter 4 of the Airworthiness Limitations and Inspection Requirements (ALIR). The 1,500 hours time-since-new (TSN) or time-since-overhaul (TSO) action in the AD is an "inspection" that must be performed by a mechanic, not a "check" that we sometimes allow a pilot to perform. We agree that this revises the airworthiness limitations of the maintenance manual, and we have placed a statement indicating that in the AD. Further, Sikorsky states that this "check" should be performed in accordance with the maintenance manual. Because we have not specified an alternative manner for performing this "inspection", you must use a procedure that is acceptable to the FAA, which most probably will be the procedures stated in the maintenance manual. This is true of any maintenance action on all products. It is generally understood, and need not be stated in every AD. Therefore, no change is being made to the AD based on this comment. The substance of other general comments by Sikorsky has been addressed in the SNPRM.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule, with the previously stated changes.

We estimate that this AD will affect 300 helicopters (900 servo actuators) of U.S. registry. We also estimate that the leakage rate inspection will take about 1 work hour per servo actuator at an

average labor rate of $85 per work hour, and the two leakage rate inspections on 900 servo actuators will cost about $153,000. We estimate that 6 servo actuators, Sikorsky P/N 76650–09805–109 or –110, will need to be replaced with servo actuators, Sikorsky P/N 76650–09805–111. Assuming an estimated 8 work hours per servo actuator for installation and a cost of $57,000 per servo actuator, the total cost of installing these servo actuators will be $346,080. We estimate that the cost of replacing the pistons in the remaining 894 servo actuators will cost $7,321,860, assuming 14 work hours to replace the pistons and install the servo actuator, and a cost of $3,500 per piston (2 pistons per servo). Therefore, the total estimated cost of this AD is $7,820,940.

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, 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:

2010–10–02 Sikorsky Aircraft Corporation: Amendment 39–16281. Docket No. FAA–2006–24587; Directorate Identifier 2006–SW–05–AD.

Applicability: Model S–76A, B, and C helicopters, with a main rotor servo actuator (servo actuator), Sikorsky Aircraft Corporation (Sikorsky) part number (P/N) 76650–09805–109 or –110 (also marked as HR Textron or Woodward HRT P/N 3006760–109 or –110), installed, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect leaking in a servo actuator, which could lead to degraded servo actuator performance and subsequent loss of control of the helicopter, do the following:

(a) For a servo actuator with 1,500 or less hours time since new (TSN) or time since overhaul (TSO), determine the leakage rate on or before reaching 1,500 hours TSN or TSO. This 1,500 hour TSN or TSO inspection revises the airworthiness limitations section of the applicable maintenance manual.

(b) For a servo actuator with 2,250 or less hours TSN or TSO, but more than 1,500 hours TSN or TSO, determine the leakage rate on or before reaching 2,250 hours TSN or TSO.

(c) If the leakage rate in any servo actuator exceeds 700 cc per minute when performing the leakage rate inspection specified in paragraph (a) or (b) of this AD, then:

(1) Replace that servo actuator piston, HR Textron or Woodward HRT P/N 41004321 or P/N RW41004321, with a servo actuator piston, P/N 41012001 or P/N 41012001–001, and re-identify the servo actuator on the servo actuator data plate as Sikorsky P/N "76650–09805–111" and Woodward HRT P/N "3006760–111" using a metal stamp method; or

(2) Replace the servo actuator with an airworthy servo actuator, Sikorsky P/N 76650–09805–111, Woodward HRT P/N 3006760–111.

(d) On or before 3,000 hours TSN or TSO, whichever occurs first, replace each servo actuator piston and re-identify the servo actuator as specified in paragraph (c)(1) of this AD or replace each servo actuator as specified in paragraph (c)(2) of this AD.

(e) Modifying and re-identifying each servo actuator as specified in paragraph (c)(1) of this AD or replacing each servo actuator as specified in paragraph (c)(2) of this AD is terminating action for the requirements of this AD for the modified and re-identified or replaced servo actuator.

(f) 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: Terry Fahr, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238–7155, fax (781) 238–7170, for information about previously approved alternative methods of compliance.

(g) The Joint Aircraft System/Component (JASC) Code is 6730: Rotorcraft Servo System.

(h) This amendment becomes effective on June 17, 2010.

Issued in Fort Worth, Texas, on April 27, 2010.

Mark R. Schilling,

Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 2010–10588 Filed 5–12–10; 8:45 am]

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