[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0556; Directorate Identifier 2007-SW-30-AD; Amendment 39-17662; AD 2013-23-07]

RIN 2120-AA64

Airworthiness Directives; Erickson Air-Crane Incorporated Helicopters (Type Certificate previously held by Sikorsky Aircraft Corporation)

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are superseding airworthiness directive (AD) 90-26-12 for Sikorsky Aircraft Corporation (Sikorsky) Model S-64E helicopters. AD 90-26-12 required checks of the main rotor blades for a crack. This new AD retains the actions required by AD 90-26-12, reflects that the type certificate (TC) for this model helicopter has been transferred to Erickson Air-Crane Incorporated (Erickson), and expands the applicability to include the similar Erickson Model S-64F helicopters. This AD is prompted by a need to expand the applicability to include Model S-64F helicopters and clarify the applicable main rotor blades by part number. These actions are intended to detect a crack in the main rotor blade and prevent blade separation and subsequent loss of control of the helicopter.

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

ADDRESSES: For service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson, Director of Regulatory Compliance, 3100 Willow Springs Rd., PO Box 3247, Central Point, OR 97502; telephone (541) 664-5544; fax (541) 664-2312; email cerickson@ericksonaircrane.com. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth Texas 76137.

Examining the AD Docket

You may examine the AD docket 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 AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170; email 7-AVS-ASW-170@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 90-26-12, Amendment 39-6841 (55 FR 51406, December 14, 1990) (AD 90-26-12), which applied to Sikorsky Model S-64E helicopters. The NPRM

published in the Federal Register on July 3, 2013 (78 FR 40063). Since we issued AD 90-26-12, cracks were detected on the main rotor blades of Model S-64F helicopters, which are are similar to the main rotor blades used on the Model S-64E helicopter. Also, on February 13, 1992, Sikorsky transferred TC H6EA for Model S 64E and S 64F helicopters to Erickson. We also determined that the primary temperatures listed in the Required Actions section of this AD should be converted from degrees Celsius to degrees Fahrenheit for increased clarity.

As a result, the NPRM proposed to retain the same checks and procedures as those required by AD 90-26-12, but in a revised format to meet current publication requirements and to expand the applicability to include both the Erickson S-64E and S-64F helicopters. The NPRM also proposed to require recurring checks of the Blade Inspection Method (BIM) indicator on each blade to determine whether the BIM indicator is signifying that the blade pressure may have been compromised by a blade crack.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (78 FR 40063, July 3, 2013).

FAA's Determination

We have reviewed the relevant information and determined that an unsafe condition exists and is likely to exist or develop on other products of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

Erickson issued Service Bulletin (SB) No. 64F15-2, Revision A, dated July 14, 1999, for the Model S-64F and SB No. 64B15-4, Revision 5, dated September 17, 2013, for the Model S-64E. Erickson released both service bulletins to provide operation and check procedures for BIM blades installed on the Model S-64E and S-64F helicopters. Several blade spars with a crack emanating from corrosion pits and other damage have been found because of BIM pressure indications. The checks in SB No. 64F15-2 for the Model S-64F are the same as those required by AD 90-26-12 for the Model S-64E helicopters.

Costs of Compliance

We estimate that this AD affects 27 helicopters of U.S. Registry. We estimate that operators will incur the following costs in order to comply with this AD. Each visual BIM pressure indicator color check will take about 0.1 work-hour at an average labor rate of $85 per work-hour. Based on these figures, each visual BIM pressure indicator color check will cost about $9 per helicopter or $230 for the fleet. Each BIM pressure indicator function check will take about 0.25 work-hour, and cost about $21, or $574 for the fleet.

If a main rotor blade must be replaced, it will take about 2 work-hours and required parts cost about $125,000. Based on these figures, it will cost about $125,170 per helicopter to replace a main rotor blade.

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.

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) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) 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 and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

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

Adoption of 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 removing Airworthiness Directive (AD) 90-26-12, Amendment 39-6841 (55 FR 51406, December 14, 1990), and adding the following new AD:

2013-23-07 **ERICKSON AIR-CRANE INCORPORATED (TYPE CERTIFICATE PREVIOUSLY HELD BY SIKORSKY AIRCRAFT CORPORATION):**

Amendment 39-17662; Docket No. FAA-2013-0556; Directorate Identifier 2007-SW-30-AD.

(a) Applicability

This AD applies to Erickson Air-Crane Incorporated (Erickson) Model S-64E and S-64F helicopters, with rotary wing blade assembly (main rotor blade), part number 6415-20201-043, -045, -047, -048, -049, -050, or -051; or 6415-20601-041, -042, -043,

-044, -045, -046, -047, -048, -049, -050, -051, or -052, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the main rotor blade (blade), which could result in blade separation and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD 90-26-12, Docket No. 90-ASW-27, Amendment 39-6841 (55 FR 51406, December 14, 1990).

(d) Effective Date

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

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

(1) Before further flight, visually check the Blade Inspection Method (BIM) pressure indicators of the main rotor blades for a black or red color indication.

(2) Before further flight, replace any blade with a black or red color indication in a BIM pressure indicator with an airworthy part of the same part number unless the black or red color indication is determined to be the result of BIM system malfunction.

Note 1 to paragraph (f)(2) of this AD: Paragraphs (f)(4)(i-iv) of this AD specify how to determine if a BIM system is functioning correctly.

(3) Repeat the visual BIM pressure indicator check required by paragraph (f)(1) of this AD prior to the first flight of each day and thereafter at intervals not to exceed:

(i) Three hours time-in-service (TIS) from the last check for helicopters engaged in seven or more external lifts per hour; or

(ii) Five hours TIS from the last check for helicopters engaged in either less than seven external lifts per hour or operation without external cargo.

(4) Prior to the first flight of each day, check the BIM pressure indicator for proper function as follows:

(i) Press in and hold the manual test lever (grenade-type handle) on the raised area of the handle over the pin-type actuation plunger. Do not handle the indicator glass bulb since the heat of the hand may change the internal reference pressure and result in an erroneous indicator reading.

(ii) Depress the actuation plunger fully to shut off the pressure completely from the blade into the indicator. If necessary, press with the thumbs of both hands to overcome the plunger spring force.

Note 2 to paragraph (f)(4)(ii) of this AD: If pressure is applied to the end of the lever on the flat area, the actuation plunger will not fully depress.

(iii) Verify proper operation of the indicator by observing that a full-black or full-red (unsafe) indication appears in not less than 10 or more than 30 seconds after depressing the plunger for a temperature of 20 degrees F (-6.7 degrees C) or above. At lower temperatures, extend the upper limit to the corresponding time as follows:

(A) 19 to 0 degrees F (-7.2 to -17.8 degrees C); upper limit of 35 seconds.

(B) -1 to -20 degrees F (-18.3 to -28.9 degrees C); upper limit of 40 seconds.

(C) -21 to -40 degrees F (-29.4 to -40.0 degrees C); upper limit of 50 seconds.

(D) -41 to -60 degrees F (-40.5 to -51.1 degrees C); upper limit of 60 seconds.

(iv) Release the lever and observe that the black or red indication snaps back immediately, leaving an all-white or all-yellow (safe) indication.

(v) If the indicator does not meet the specified requirements, then either identify and correct the BIM indicator malfunction or replace the suspect main rotor blade with an airworthy blade of the same part number prior to further flight.

(5) The checks required by paragraphs (f)(1) and (f)(4)(i-iv) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR §§ 43.9 (a)(1)-(4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR §§ 91.417, 121.380, or 135.439.

(g) Special Flight Permits

Special flight permits will not be issued.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170; email 7-AVS-ASW-170@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or

certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(i) Additional Information

Erickson Air-Crane Incorporated Service Bulletins No. 64B15-4, Revision 5, dated September 17, 2013 for the Model S-64E and No. 64F15-2, Revision A, dated July 14, 1999 for the Model S-64F, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson, Director of Regulatory Compliance, 3100 Willow Springs Rd, PO Box 3247, Central Point, OR 97502; telephone (541) 664-5544; fax (541) 664-2312; email cerickson@ericksonaircrane.com. You may review a copy of this information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6210, Main Rotor Blades.

Issued in Fort Worth, Texas, on October 30, 2013.

Kim Smith,

Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

[FR Doc. 2013-27635 Filed 11/21/2013 at 8:45 am; Publication Date: 11/22/2013]