[Federal Register Volume 78, Number 48 (Tuesday, March 12, 2013)]
[Rules and Regulations]
[Pages 15599-15602]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2013-05503]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-0689; Directorate Identifier 2009-SW-065-AD; Amendment 39-17301; AD 2012-26-06]

RIN 2120-AA64

Airworthiness Directives; Sikorsky Aircraft-Manufactured Model S-64F Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Sikorsky Aircraft Corporation-manufactured Model S-64F helicopters, now under the Erickson Air-Crane Incorporated (Erickson) Model S-64F type certificate. This AD supersedes an existing AD which requires inspections, rework, and replacement, if necessary, of the main gearbox (MGB) second stage lower planetary plate (plate). Since we issued that AD, the manufacturer has conducted a configuration review and analysis, and a review of the service history of certain components. The actions of this AD are intended to establish life limits for certain components, remove various parts from service, and require consistency in the part numbers of certain four bladed tail rotor (T/R) assemblies to prevent fatigue cracking, failure from static overload, and subsequent loss of control of the helicopter.

DATES: This AD is effective April 16, 2013.

ADDRESSES: For service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson/Compliance Officer, 3100 Willow Springs Rd., P.O. Box 3247, Central Point, OR 97502, telephone (541) 664-5544, fax (541) 664-2312, email address 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, any incorporated-by-reference service information, 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, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, Fort Worth, Texas 76137, telephone (817) 222-5170, email 7-avs-asw-170@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On June 29, 2012, at 77 FR 38744, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Sikorsky Aircraft Corporation-manufactured Model S-64F helicopters, now under the Erickson Air-Crane Incorporated Model S-64F type certificate. That NPRM proposed to supersede existing AD 97-10-15 (62 FR 28321, May 23, 1997), to require reducing or establishing the life limits for certain flight-critical components, removing other parts with service difficulties from service, and require that T/R blade assembly, P/N 65160-00001-048, be installed only as a set of four and not be installed with another part-numbered blade. The proposed requirements were intended to prevent a fatigue crack in a flight critical component, which could result in component failure from static overload and subsequent loss of control of the helicopter.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (77 FR 38744, June 29, 2012).

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 helicopters of the same type design and that air safety and the public interest require adopting the AD requirements as proposed except for minor editorial changes to meet current publication requirements. These minor editorial changes are consistent with the intent of the proposals in the NPRM (77 FR 38744, June 29, 2012) and will not increase the economic burden on any operator nor increase the scope of the AD.

Related Service Information

Erickson Service Bulletin No. 64F General-1, Rev. 17, contains the Airworthiness Limitations Schedule for the Model S-64F helicopter and lists the parts and assemblies with their specified retirement lives.

Costs of Compliance

We estimate that this AD will affect 7 helicopters of U.S. Registry and estimate, at an average labor rate of $85 per hour, the following costs for removing from service the parts listed in Table 2 of this AD:

- Reviewing helicopter records to determine if an affected part is installed will require approximately 2 work-hours, for a cost per helicopter of $170 and a fleet cost of $1,190.
- Replacing the rotary rudder spindle assembly will require 10 work-hours and a parts cost of $2,787, for a cost per helicopter of $3,637 and a fleet cost of $25,459.

- Replacing the plate will require 40 work-hours and a parts cost of $43,750, for a cost per helicopter of $47,150 and a fleet cost of $330,050.
- Replacing the main servo bracket assembly will require 2 work-hours and a parts cost of $5,223, for a cost per helicopter of $5,393 and a fleet cost of $37,751.
- Replacing the primary servo link assembly of the M/R tandem servo will require 10 work-hours and a parts cost of $14,533, for a cost per helicopter of $15,383 and a fleet cost of $107,681.
- Replacing the T/R shoulder bolt will require 10 work-hours and a parts cost of $571, for a cost per helicopter of $1,421 and a fleet cost of $9,947.
- Replacing the T/R Blade Assembly will require 8 work-hours and a parts cost of $125,765 for a cost per helicopter of $126,445 and a fleet cost of $885,115.
- The total cost to replace the parts that are required to be removed from service is estimated to be $199,599 per helicopter and a fleet cost of $1,397,193.

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 Amendment 39-10028 (62 FR 28321, May 23, 1997) and adding the following new airworthiness directive (AD):

2012-26-06 ERICKSON AIR-CRANE INCORPORATED: Amendment 39-17301; Docket No. FAA-2012-0689; Directorate Identifier 2009-SW-065-AD.

(a) Applicability

This AD applies to Sikorsky Aircraft Corporation-manufactured Model S-64F helicopters, now under the Erickson Air-Crane Incorporated Model S-64F type certificate, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a fatigue crack in a flight critical component. This condition could result in component failure from static overload and subsequent loss of control of the helicopter.

(c) Other Affected ADs

This AD supersedes AD 97-10-15, Amendment 39-10028 (62 FR 28321, May 23, 1997).

(d) Effective Date

This AD becomes effective April 16, 2013.

(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:

(i) Remove from service any part with a number of hours time-in-service (TIS) equal to or greater than the part's retirement life as stated in Table 1 to Paragraph (f) of this AD.

Table 1 to Paragraph (f)–Parts With New or Revised Life Limits

Part name	Part No. (P/N)	Retirement life
Main Rotor (M/R) Blade Assembly	6415-20601-045	13,280 hours TIS.
Main Transmission Support Beam Assembly, LH	6420-62363-045	9,300 hours TIS.
Main Transmission Support Beam Assembly, RH	6420-62363-046	9,300 hours TIS.
Left Splice Fitting (Transition Fitting), Rotary, Rudder Boom.	6420-66341-101	8,300 hours TIS.
Right Splice Fitting (Transition Fitting), Rotary, Rudder Boom.	6420-66341-102	8,300 hours TIS.

M/R Drive Shaft	6435-20536-101	2,200 hours TIS.
Pressure Plate Assembly, Rotary Wing Head	65101-11016-042	8,800 hours TIS.
Horn and Liner Assembly	65102-11047-041	1,140 hours TIS.
Lower Hub Plate Assembly	65103-11009-041	15,500 hours TIS.
Horizontal Hinge Pin, Rotary Wing Head	65103-11020-103	5,100 hours TIS.
Damper Bracket Assembly, Rotary Wing Head	65103-11032-043	20,000 hours TIS.
Hub Subassembly, Rotary Wing	65103-11310-043	21,600 hours TIS.
Shaft Assembly, Pitch Control Tail Gearbox	65358-07035-043	9,400 hours TIS.
Rod End Assembly, Primary Servo Assembly	65652-11212-041	20,800 hours TIS.

Note 1 to Table 1 to Paragraph (f) of this AD: The list of parts in Table 1 to Paragraph (f) of this AD contains only a portion of the life-limited parts for this model helicopter and is not an all-inclusive list.

(ii) Revise the retirement life of each part as shown in Table 1 to Paragraph (f) of this AD by making pen and ink changes or by inserting a copy of this AD into the Airworthiness Limitations section of the maintenance manual.

(iii) Record on the component history card or equivalent record the retirement life for each part as shown in Table 1 to Paragraph (f) of this AD.

(2) Before further flight, remove from service any part with a P/N listed in Table 2 to Paragraph (f) of this AD, regardless of the part's TIS. The P/Ns listed in Table 2 to Paragraph (f) of this AD are not eligible for installation on any helicopter.

Table 2 to Paragraph (f)–Parts To Be Removed From Service

Part name	P/N
Spindle Assembly, Rotary Rudder	6410-30302-041.
Main Gearbox Second Stage Lower Planetary Plate	6435-20516-101 or 6435-20516-102.
Bracket Assembly, Main Servo	6435-20527-041 or 6435-20527-042.
Primary Servo Link, Tandem Servo, M/R	6465-62161-042.
Shoulder Bolt, Tail Rotor (T/R)	65111-07001-102.
T/R Blade Assembly	65161-00001-041.

(3) Before further flight, if a T/R blade assembly, P/N 65160-00001-048, is installed, remove any of the other three T/R blade assemblies that have a different P/N and replace it with a T/R blade assembly, P/N 65160-00001-048. The T/R blade assembly, P/N 65160-00001-048, must be installed in sets of four only.

(g) 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, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, 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.

(h) Additional Information

Erickson Service Bulletin No. 64F General-1, Revision 17, dated August 17, 2010, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson/Compliance Officer, 3100 Willow Springs Rd, P.O. Box 3247, Central Point, OR 97502, telephone (541) 664-5544, fax (541) 664-2312, email address 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.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6300: Main Rotor Drive System and 6400: Tail Rotor System.

Issued in Fort Worth, Texas, on March 1, 2013.
Kim Smith,
Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.