

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [62 FR 28321 NO. 100 05/23/97]

[Docket No. 95-SW-34-AD; Amendment 39-10028; AD 97-10-15]

RIN 2120-AA64

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

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to Sikorsky Aircraft-manufactured Model S-64F helicopters, that requires inspections, and replacement, if necessary, of the main gearbox second stage lower planetary plate (plate). This amendment is prompted by two incidents in which the plate was found cracked. The actions specified by this AD are intended to prevent failure of the plate due to fatigue cracking, which could lead to failure of the main gearbox and subsequent loss of control of the helicopter.

DATES: Effective June 27, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 27, 1997.

ADDRESSES: The service information referenced in this AD may be obtained from Erickson Air-Crane Co., 3100 Willow Springs Rd., P.O. Box 3247, Central Point, Oregon 97502. This information may be examined at the FAA, Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Mr. Uday Garadi, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5114, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that is applicable to Sikorsky Aircraft-manufactured Model S-64F helicopters was published in the Federal Register on October 11, 1996 (61 FR 53337). That action proposed to require an inspection, prior to the first flight of each day, of the main oil filter for the main gearboxes containing a plate with more than 2,000 hours time-in-service (TIS) for magnesium

contamination and, if magnesium contamination is present, replacement of the main gearbox assembly. For main gearbox assemblies containing a plate with more than 2,000 hours TIS, that action also proposed to require an inspection of the plate within the next 100 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 500 hours TIS; and replacement of the plate if necessary. Finally, that action proposed to require, at the next overhaul of the main gearbox assembly, inspection and rework of plates that are not cracked.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed with minor editorial changes, and a correction to the estimated cost impact to include the number of work hours to inspect the main gearbox oil filter pack and the number of work hours to rework the plate. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that 6 helicopters of U.S. registry will be affected by this proposed AD, that it will take approximately 8 work hours per helicopter to accomplish the borescope inspection, 1 work hour to inspect the main gearbox oil filter pack, 140 work hours to remove and replace the main gearbox assembly, if necessary, and 20 work hours to rework the plate; and that the average labor rate is \$60 per work hour. Required parts will cost \$8,000 per helicopter. Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be \$108,480; \$2,880 to accomplish the borescope inspections, and \$105,600 to replace the plate in the main gearbox assembly in all 6 helicopters, if necessary. Daily preflight inspections of the main gearbox oil filter pack will cost \$60 per helicopter for each day flight is conducted.

The regulations adopted herein will not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (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); 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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

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 USC 106(g), 40113, 44701.

§ 39.13 - [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive (AD) to read as follows:

SUPERSEDED

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

97-10-15 ERICKSON AIR-CRANE CO: Amendment 39-10028. Docket No. 95-SW-34-AD.

Applicability: Sikorsky Aircraft-manufactured Model S-64F helicopters, with main gearbox second stage lower planetary plate, part number (P/N) 6435-20516-101, installed, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (c) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any helicopter from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the main gearbox second stage lower planetary plate (plate) due to fatigue cracking, which could lead to failure of the main gearbox and subsequent loss of control of the helicopter, accomplish the following:

(a) For main gearbox assemblies containing plate, P/N 6435-20516-101, with 2,000 hours time-in-service (TIS) or more:

(1) Prior to the first flight of each day, inspect the main oil filter for magnesium contamination. If magnesium contamination is discovered, replace the main gearbox assembly.

(2) Within the next 100 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 500 hours TIS, inspect, and, if necessary, replace the main gearbox assembly in accordance with the Accomplishment Instructions of Section 2,

Paragraph B, of Erickson Service Bulletin No. 64F35-2A dated November 8, 1995.

(b) At the next overhaul of the main gearbox assembly, inspect and rework the plate, P/N 6435-20516-101, in accordance with Section 2, Paragraphs C(1) and (3) through (11) of Erickson Service Bulletin No. 64F35-2A, dated November 8, 1995.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Rotorcraft Certification Office, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Rotorcraft Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Rotorcraft Certification Office.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.

(e) The inspection and rework shall be done in accordance with Erickson Air-Crane Co. Service Bulletin No. 64F35-2A, dated November 8, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Erickson Air-Crane Co., 3100 Willow Springs Rd., P.O. Box 3247, Central Point, Oregon 97502. Copies may be inspected at the FAA, Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on June 27, 1997.