



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-0262; Directorate Identifier 2013-NE-13-AD]

RIN 2120-AA64

Airworthiness Directives; Hamilton Standard Division and Hamilton Sundstrand Corporation Propellers.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for Hamilton Standard Division model 6/5500/F and 24PF and Hamilton Sundstrand Corporation model 14RF, 14SF, 247F, and 568F series propellers. This proposed AD was prompted by the amount of corrosion detected during major inspections (MIs). This proposed AD would require incorporating inspections, based on a calendar time, into the propeller maintenance schedule. We are proposing this AD to prevent corrosion that could result in propeller failure and loss of airplane control.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Hamilton Sundstrand Corporation, One Hamilton Road, Mail Stop 1A-3-C63, Windsor Locks, CT 06096-1010; or Hamilton Standard Division, One Hamilton Road, United Technologies Corporation, Mail Stop 1A-3-C63, Windsor Locks, CT 06096-1010; phone: 877-808-7575; fax: 860-660-0372; email: tech.solutions@hs.utc.com; Internet: <http://myhs.hamiltonsundstrand.com>.

You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7761; fax: 781-238-7170; email: michael.schwetz@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2013-0262; Directorate Identifier 2013-NE-13-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because 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 we receive about this proposed AD.

Discussion

We received reports about increased corrosion detected during MIs of Hamilton Standard Division model 6/5500/F and 24PF and Hamilton Sundstrand Corporation model 14RF, 14SF, 247F, and 568F series propellers. The propellers were found to accumulate fewer flight hours per year as they aged. The longer time between MIs contributes to an increased potential for corrosion to accumulate to critical limits. Hamilton Sundstrand developed, and we approved, six Airworthiness Limitations Sections (ALSs) of the applicable maintenance manuals to date. Each ALS establishes the new compliance times for MIs of the blades and hubs by adding a calendar time limit for the inspection. This condition, if not corrected, could result in propeller failure and loss of airplane control.

Relevant Service Information

We reviewed the Hamilton Sundstrand ALS in Maintenance Manual P5185, Revision 13, dated December 13, 2011; P5206, Revision 9, dated February 22, 2013; P5186, Revision 12, dated January 20, 2012; P5207, Revision 2, dated June 28, 2012; P5188, Revision 10, dated January 14, 2013; and P5189, Revision 8, dated March 26, 2013. The ALS in these maintenance manuals lists the MIs for the associated propellers

and prescribe a seven-year calendar time limit interval for MI of propeller blades and hubs.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require incorporating a seven-year calendar time limit, between MIs of propeller blades and hubs, into the propeller maintenance schedule, within 45 days after the effective date of the AD.

Differences Between the Proposed AD and the Service Information

The updated maintenance manuals require that an MI of the blades and hubs be performed at the published flight hours or no later than seven years since the date since installation (DSI). The DSI will begin at initial installation after the most recent MI or initial installation after production. This proposed AD would require that the Hamilton Sundstrand propeller models, with an approved update to the maintenance manual ALS, have 45 days after the effective date of the AD to incorporate the seven-year calendar time limit. These models/manuals are: 14RF-9/P5186, 14RF-21/P5189, 14SF-5/P5188, 14SF-7/P5185, 14SF-11E/P5207, and 568F-1/P5206. This proposed AD would also require that the Hamilton Sundstrand and Hamilton Standard propeller models, without approved updates to the maintenance manual ALS, incorporate the seven-year calendar time limit into the propeller maintenance schedule within one year after the effective date of the AD. These models/manuals are: Hamilton Standard 24PF/61-12-01 and 6/5500/F/P5190, and Hamilton Sundstrand 14RF-19/P5199, 14RF-37/P5209, 14SF-11/P5196, 14SF-15/P5197, 14SF-23/P5197, 14SF-17/P5198, 14SF-19/P5198, 247F-

1/P4202, 247F-1E/P5204, 247F-3/P5205, 568F-1/P5214, 568F-5/P5203, and 568F-7/P5211.

Costs of Compliance

We estimate that this proposed AD would affect about 1,044 propeller/hub combinations installed on airplanes of U.S. registry. We also estimate that it would take about 160 hours per propeller to perform one MI. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$14,198,400.

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

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed 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),
- (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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 adding the following new airworthiness directive (AD):

Hamilton Standard Division and Hamilton Sundstrand Corporation: Docket No. FAA-2013-0262; Directorate Identifier 2013-NE-13-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Hamilton Standard Division 6/5500/F and 24PF and Hamilton Sundstrand Corporation 14RF, 14SF, 247F, and 568F series propellers.

(d) Unsafe Condition

This AD was prompted by the amount of corrosion detected during major inspections (MI). We are issuing this AD to prevent corrosion that could result in propeller failure and loss of airplane control.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(f) MI for Blades and Hubs That Have an Updated Airworthiness Limitations Section (ALS)

For Hamilton Sundstrand Corporation propeller models 14RF-9, 14RF-21, 14SF-5, 14SF-7, 14SF-11E, and 568F-1, that have an approved update to the ALS, within 45 days after the effective date of this AD, perform an MI on the blades and hubs no later than seven years since the date since installation (DSI). The DSI will begin at initial installation after the most recent MI or initial installation after production. Guidance on the inspections can be found in the applicable Hamilton Sundstrand Corporation models/manuals 14RF-9/P5186, revision 12, January 20, 2012; 14RF-21/P5189, revision 8, March 26, 2013; 14SF-5/P5188, revision 10, dated January 14, 2013; 14SF-7/P5185, revision 13, dated December 13, 2011; 14SF-11E/P5207, revision 2, dated June 28, 2012; and 568F-1/P5206 revision 9, dated February 22, 2013.

(g) MI for Blades and Hubs That Do Not Have an Updated ALS

For Hamilton Standard Division model 6/5500/F and 24PF and Hamilton Sundstrand Corporation model 14RF-19, 14RF-37, 14SF-11, 14SF-15, 14SF-23, 14SF-17, 14SF-19, 247F-1, 247F-1E, 247F-3, 568F-1, 568F-5, 568F-7 propellers, that do not have an approved update to the ALS, within one year after the effective date of this AD,

perform an MI on the blades and hubs no later than seven years since the DSI. The DSI will begin at initial installation after the most recent MI or initial installation after production. Guidance on the inspections can be found in the applicable models/manuals for Hamilton Standard Division 6/5500/F/P5190 and 24PF/61-12-01, and Hamilton Sundstrand Corporation 14RF-19/P5199, 14RF-37/P5209, 14SF-11/P5196, 14SF-15/P5197, 14SF-23/P5197, 14SF-17/P5198, 14SF-19/P5198, 247F-1/P4202, 247F-1E/P5204, 247F-3/P5205, 568F-1/P5214, 568F-5/P5203, and 568F-7/P5211 propellers.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

(1) For more information about this AD, contact Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7761; fax: 781-238-7170; email: michael.schwetz@faa.gov.

(2) For service information identified in this AD, contact Hamilton Sundstrand Corporation, One Hamilton Road, Mail Stop 1A-3-C63, Windsor Locks, CT 06096-1010; or Hamilton Standard Division, United Technologies Corporation, One Hamilton Road, Mail Stop 1A-3-C63, Windsor Locks, CT 06096-1010; phone: 877-808-7575; fax: 860-660-0372; email: tech.solutions@hs.utc.com; Internet: <http://myhs.hamiltonsundstrand.com>.

(3) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on May 17, 2013

Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2013-12260 Filed 05/22/2013 at 8:45 am; Publication Date: 05/23/2013]