[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3661; Directorate Identifier 2015-NE-24-AD]

RIN 2120-AA64

Airworthiness Directives; Dowty Propellers Constant Speed Propellers

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Dowty Propellers R352/6-123-F/1, R352/6-123-F/2, and R410/6-123-F/35 model propellers. This proposed AD was prompted by reports of dowel hole cracks in the face of the rear hub half. This proposed AD would require a records review to determine repair status and marking the affected propeller hubs as required. This proposed AD would also require installing dowel hole liners as necessary. We are proposing this AD to prevent loss of structural integrity of the propeller hub, which could result in damage to the propeller and damage to the airplane.

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 by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Dowty Propellers, 114 Powers Court, Sterling, VA 20166; phone: 703-421-4434; fax: 703-450-0087; email: technicalsupport@dowty.com; Internet: www.http://dowty.com/services/repair-and-overhaul. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. 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 by searching for and locating Docket No. FAA-2015-3661; 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 proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The 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, Engine & Propeller Directorate, 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 NPRM. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2015-3661; Directorate Identifier 2015-NE-24-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM based on 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 with FAA personnel concerning this NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2015-0158, dated July 30, 2015 (referred to hereinafter as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> Cracking around the hub location dowel holes in the face of the rear hub half has occurred sporadically. Previous investigations found no manufacturing defects in cracked hubs and concluded that the hub cracking was caused by damage to the dowel holes during propeller installation.
>
> Since that original SB was issued, three hubs have been found to show cracking around the location dowel holes. The hubs were all found cracked within a short period of time and all had low time since new.

> This condition, if not detected, can adversely affect the structural integrity of the propeller hub, with possible damage to the propeller and to the aeroplane.

You may obtain further information by examining the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-3661.

Related Service Information under 1 CFR Part 51

Dowty Propellers has issued Alert Service Bulletin (ASB) No. F50-61-A165, Revision 2, dated July 28, 2015. The service information describes procedures for installing liners in the hub location dowel holes in the face of the rear hub half and marking the hub with the repair number. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

Other Related Service Information

Dowty Propellers has issued Component Maintenance Manual, 61-10-34, Repair No. 53, dated May 15, 2013. The service information describes procedures for installing liners in the hub location dowel holes and marking the repair number on modified hubs.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of the United Kingdom, and is approved for operation in the United States. Pursuant to our bilateral agreement with the European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this NPRM because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This NPRM would require marking and inspecting the affected propeller hubs to determine repair status and installing dowel hole liners as necessary.

Costs of Compliance

We estimate that this proposed AD would affect 4 propellers installed on airplanes of U.S. registry. We also estimate that it would take about 5 hours per propeller to comply with this proposed AD. The average labor rate is $85 per hour. Required parts cost about $322 per propeller. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be $2,988.

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):

Dowty Propellers: Docket No. FAA-2015-3661; Directorate Identifier 2015-NE-24-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 Dowty Propellers R352/6-123-F/1, R352/6-123-F/2, and R410/6-123-F/35 model propellers, part numbers (P/Ns) 660715001, 660715004, and

660715005 **with hub** P/Ns 660715201, 660715255, 660720217, 660720241, 660720252, 660720260, and 660720288, installed.

(d) Reason

This AD was prompted by reports of dowel hole cracks in the face of the rear hub half. We are issuing this AD to prevent loss of structural integrity of the propeller hub, which could result in damage to the propeller and damage to the airplane.

(e) Actions and Compliance

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

(1) At the next removal of the propeller from the airplane, or within 7,500 flight hours (FHs), whichever occurs first, after the effective date of this AD do the following:

(i) Review propeller maintenance records to determine if the affected propeller hub has been repaired in accordance with Dowty Propellers Alert Service Bulletin (ASB) No. F50-61-A165 Revision 2, dated July 28, 2015.

(ii) If, during the maintenance records review required by paragraph (e)(1)(i) of this AD, an affected hub is found not repaired then, before next flight, install liners into the hub location dowel holes and mark the hub. Use Dowty Propellers ASB No. F50-61-A165 Revision 2, dated July 28, 2015 to install the liners and mark the hub.

(iii) If, during the maintenance records review required by paragraph (e)(1)(i) of this AD, an affected hub is found repaired then, before next flight, mark the hub using Dowty Propellers ASB No. F50-61-A165 Revision 2, dated July 28, 2015.

(f) Credit for Previous Actions

(1) You may take credit for maintenance records reviews and installations that are required by paragraph (e) of this AD if you performed these actions before the effective date of this AD using Dowty Propellers ASB No. F50-61-A165 Revision 1, dated May 12, 2015 or initial issue dated November 19, 2012.

(2) You may take credit for any maintenance records reviews or corrective actions that are required by paragraph (e) of this AD if you performed these actions before the effective date of this AD using Component Maintenance Manual (CMM) 61-10-34, Repair No. 53, dated August 11, 2008, which relates to repair scheme 650510057.

(g) 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.

(h) 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) Refer to MCAI European Aviation Safety Agency AD 2015-0158, dated July 30, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2015-3661.

(3) Dowty Propellers ASB No. F50-61-A165 Revision 2, dated July 28, 2015 and CMM 61-10-34, Repair No. 53, dated August 11, 2008 can be obtained from Dowty Propellers, using the contact information in paragraph (h)(4) of this proposed AD.

(4) For service information identified in this proposed AD, contact Dowty Propellers, 114 Powers Court, Sterling, VA 20166; phone: 703-421-4434; fax: 703-450-0087; email: technicalsupport@dowty.com; Internet: www.http://dowty.com/services/repair-and-overhaul.

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

Issued in Burlington, Massachusetts, on October 1, 2015.

Colleen M. D'Alessandro,
Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.
[FR Doc. 2015-25643 Filed: 10/9/2015 08:45 am; Publication Date: 10/13/2015]