

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2008-1088; Directorate Identifier 2008-NE-15-AD]

RIN 2120-AA64

**Airworthiness Directives; Dowty Propellers** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to revise airworthiness directive (AD) 2008-21-07 that applies to certain Dowty Propellers model R408/6-123-F/17 propellers. AD 2008-21-07 requires initial and repetitive inspections of the blade bonded metallic leading edge (L/E) guards for correct bonding until they accumulate more than 1,200 flight hours (FH) time in service. Since we issued AD 2008-21-07, Dowty Propellers has introduced updated service bulletins that identify terminating action to the requirements of AD 2008-21-07. This proposed AD would maintain the inspection and replacement requirements of AD 2008-21-07, provide an optional terminating action to those requirements, and add a new part number to the list of affected parts. We are proposing this AD to prevent the loss of the bonded metallic L/E guard of the propeller, which could result in damage to the propeller or to the airplane, or injury to personnel.

**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 AD, contact Dowty Propellers, Anson Business Park, Cheltenham Road East, Gloucester GL2 9QN, UK; phone 44 (0) 1452 716000; fax 44 (0) 1452 716001. 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-2008-1088; 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 mandatory continuing airworthiness information, 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, 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 proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2008-1088; Directorate Identifier 2008-NE-15-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**

On October 3, 2008, we issued AD 2008-21-07, Amendment 39-15691 (73 FR 61346, October 16, 2008), ("AD 2008-21-07"), for all Dowty Propellers model R408/6-123-F/17 propellers. AD 2008-21-07 requires initial and repetitive inspections of the blade bonded metallic L/E guards for correct bonding until they accumulate more than 1,200 FH time in service. AD 2008-21-07 resulted from three in-service occurrences of

blades losing the bonded metallic L/E guard. We issued AD 2008-21-07 to prevent the loss of the bonded metallic L/E guard of the propeller, which could result in damage to the propeller or to the airplane, or injury to personnel.

## **Actions Since Existing AD Was Issued**

Since we issued AD 2008-21-07, Dowty Propellers has introduced updated service bulletins that identify terminating action to the repetitive inspection requirements of AD 2008-21-07. Dowty has also informed us of the need to add blade part number 697071278-18 to the list of affected parts. Also since we issued AD 2008-21-07, the European Aviation Safety Agency (EASA) has issued AD 2007-0223R4, dated September 30, 2013, which requires repetitive inspections of the affected propellers and clarifies terminating action.

#### **Relevant Service Information**

We reviewed Dowty Propellers Alert Service Bulletin (ASB) No. D8400-61-A69, Revision 1, dated September 18, 2007. The ASB describes procedures for initial and repetitive inspections of blade bonded metallic L/E guards, and repair or replacement of blades that fail inspection. We also reviewed Service Bulletin (SB) No. D8400-61-70, Revision 3, dated June 3, 2013, and SB No. D8400-61-83, Revision 4, dated June 3, 2013, which provide optional terminating action for the repetitive inspection requirement of this proposed AD.

#### **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 maintain the initial and repetitive inspections of the propeller blade bonded metallic L/E guards required by AD 2008-21-07 (73 FR 61346, October 16, 2008). This proposed AD would also provide an optional terminating action to the repetitive inspection requirements of AD 2008-21-07, and would add a new part number to the list of affected parts.

### **Costs of Compliance**

We estimate that this proposed AD would affect 174 propellers installed on airplanes of U.S. registry. We also estimate that it would take about 4 hours per propeller to comply with this proposed AD. The average labor rate is \$85 per hour. Required parts cost about \$352 per product. Based on these figures, we estimate the total cost of this proposed AD to U.S. operators is \$120,408.

## **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 proposed 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 have 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 that the 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 removing airworthiness directive (AD) 2008-21-07, Amendment 39-15691 (73 FR 61346, October 16, 2008), and adding the following new AD:

**Dowty Propellers (formerly Dowty Aerospace Propellers)**: Docket No. FAA-2008-1088; Directorate Identifier 2008-NE-15-AD.

#### (a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

This AD revises AD 2008-21-07, Amendment 39-15691 (73 FR 61346, October 16, 2008).

# (c) Applicability

(b) Affected ADs

This AD applies to Dowty Propellers model R408/6-123-F/17 propellers with blades, part numbers 697071200-18, 697071210-18, 697071227-18, 697071240-18, 697071245-18, 697071257-18, or 697071278-18, installed.

#### (d) Unsafe Condition

This AD was prompted by three in-service occurrences of blades losing the bonded metallic leading edge (L/E) guard. We are issuing this AD to prevent the loss of the bonded metallic L/E guard of the propeller, which could result in damage to the propeller or to the airplane, or injury to personnel.

## (e) Compliance

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

- (1) Within the next 50 flight hours (FH) or within 30 days after the effective date of this AD, whichever occurs first, inspect all affected blade assemblies where the bonded metallic L/E guard has accumulated 1,200 FH time in service or less since installation, in accordance with the instructions of Dowty Propellers Alert Service Bulletin (ASB) No. D8400-61-A69, Revision 1, dated September 18, 2007.
- (2) Within 50 FH or 30 days, whichever occurs first, after installing a replacement blade, inspect the affected blade assembly where the bonded metallic L/E guard has accumulated 1,200 FH time in service or less since installation, in accordance with the instructions of Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18, 2007.
- (3) Thereafter, at intervals not to exceed 100 FH, repeat the inspection of the affected blade assemblies in accordance with the instructions of Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18, 2007, until the blade bonded metallic L/E guard has accumulated more than 1,200 FH time in service since installation.
- (4) If, during any of the inspections required by this AD, disbonding is found, apply the criteria in Appendix A of Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18, 2007 and, within the associated time period, repair or replace the affected blade assembly in accordance with Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18, 2007.

(5) Blades that were repaired within the first 101.6 mm (4.0 inches) of the tip of the blade as specified in Appendix D of Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18, 2007, are eligible to continue in service for another 500 FH after accomplishment of the repair. Repair does not terminate the repetitive inspection requirements of paragraph (e)(3) of this AD.

## (f) Optional Terminating Action

As optional terminating action to the repetitive inspection requirements of paragraph (e)(3) of this AD, modify the affected propeller using Dowty Propellers Service Bulletin (SB) No. D8400-61-70, Revision 3, dated June 3, 2013, or SB No. D8400-61-83, Revision 4, dated June 3, 2013, as applicable.

## (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, Engine & Propeller Directorate, 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 2007-0223R4, dated September 30, 2013, for more information. You may examine the MCAI in the AD docket on the Internet at <a href="http://www.regulations.gov/#!docketDetail;">http://www.regulations.gov/#!docketDetail;</a>D=FAA-2008-1088.
- (3) Dowty Propellers SB No. D8400-61-70, Revision 3, dated June 3, 2013, and SB No. D8400-61-83, Revision 4, dated June 3, 2013, which are not incorporated by

reference in this AD, can be obtained from Dowty Propellers, using the contact

information in paragraph (h)(5) of this AD.

(4) Dowty Propellers ASB No. D8400-61-A69, Revision 1, dated September 18,

2007, pertains to the subject of this AD and can be obtained from Dowty Propellers,

using the contact information in paragraph (h)(5) of this AD.

(5) For service information identified in this AD, contact Dowty Propellers,

Anson Business Park, Cheltenham Road East, Gloucester GL2 9QN, UK; phone:

44 (0) 1452 716000; fax: 44 (0) 1452 716001.

(6) 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 December 11, 2013.

Frank P. Paskiewicz,

Acting Director,

Aircraft Certification Service.

[4910-13-P]

[FR Doc. 2013-30882 Filed 12/24/2013 at 8:45 am; Publication Date: 12/26/2013]

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