



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2009-0776; Directorate Identifier 2009-NE-32-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Dowty Propellers Propellers**

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

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

**SUMMARY:** We propose to revise an existing airworthiness directive (AD) that applies to all Dowty Propellers R408/6-123-F/17 model propellers. The existing AD currently requires initial applications of sealant between the bus bar assembly and the backplate assembly of certain line-replaceable units (LRUs), and repetitive applications of sealant on all R408/6-123-F/17 model propellers. Since we issued that AD, Dowty Propellers has introduced an optional terminating action to the applications of sealant. This proposed AD would add the optional terminating action. We are proposing this AD to prevent an in-flight double generator failure, which could result in reduced controllability of 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, 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 GL 29QN, 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>; 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, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7761; fax 781-238-7170; e- mail: 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-2009-0776; Directorate Identifier 2009-NE-32-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 August 5, 2010, we issued AD 2010-17-11, Amendment 39-16403 (75 FR 51656, August 23, 2010), for all Dowty Propellers R408/6-123-F/17 model propellers. That AD requires initial applications of sealant between the bus bar assembly and the backplate assembly of LRUs serial numbers below DAP0347, and repetitive applications of sealant on all R408/6-123-F/17 model propellers. That AD resulted from mandatory continuing airworthiness information issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We issued that AD to prevent an in-flight double generator failure, which could result in reduced controllability of the airplane.

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

Since we issued AD 2010-17-11 (75 FR 51656, August 23, 2010), Dowty Propellers introduced an optional terminating action to the repetitive applications of sealant. That action consists of replacing the bus bar assembly with a slip ring de-icer harness.

**Relevant Service Information**

We reviewed Dowty Propellers Service Bulletin (SB) No. D8400-61-94, Revision 3, dated October 23, 2012. The SB describes procedures for replacing the bus bar assembly with a slip ring de-icer harness.

**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 retain all the requirements of AD 2010-17-11 (75 FR 51656, August 23, 2010). This proposed AD would add an optional terminating action to the applications of sealant by replacing the bus bar assembly with a slip ring de-icer harness.

**Costs of Compliance**

We estimate that this proposed AD would affect about 104 propellers installed on airplanes of U.S. registry. We also estimate that it would take about 2 hours per propeller to apply sealant and required sealant would cost about \$20 per propeller. We also estimate that it would take about 3 hours to replace the bus bar with a de-icer slip ring harness and required parts would cost about \$1,200 per propeller. 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 \$171,080. Our cost estimate is exclusive of possible warranty coverage.

**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 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) 2010-17-11, Amendment 39-16403 (75 FR 51656, August 23, 2010), and adding the following new AD:

**Dowty Propellers (formerly Dowty Aerospace; Dowty Rotol Limited; and Dowty Rotol):** Docket No. FAA-2009-0776; Directorate Identifier 2009-NE-32-AD.

#### **(a) Comments Due Date**

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

#### **(b) Affected ADs**

This AD revises AD 2010-17-11, Amendment 39-16403 (75 FR 51656, August 23, 2010).

#### **(c) Applicability**

(1) This AD applies to Dowty Propellers R408/6-123-F/17 model propellers. These propellers are installed on, but not limited to, Bombardier, Inc. (formerly de Havilland Canada) models DHC-8-400, DHC-8-401, and DHC-8-402 series airplanes.

#### **(d) Unsafe Condition**

This AD was prompted by the need to add an optional terminating action to the applications of sealant. We are issuing this AD to prevent an in-flight double generator failure, which could result in reduced controllability of the airplane.

#### **(e) Compliance**

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

(1) For R408/6-123-F/17 model propellers with a hub, actuator, and backplate assembly line-replaceable unit serial numbers below DAP0347, do the following initial sealant application within 5,000 flight hours (FH) after September 27, 2010, or within 100 FH from the effective date of this AD, whichever occurs later:

(i) Apply sealant between the bus bar assemblies and the backplate assembly.

(ii) Use paragraph 3 of the Accomplishment Instructions of Dowty Propellers Alert Service Bulletin No. D8400-61-A66, Revision 5, dated June 16, 2010, to apply the sealant.

(2) Thereafter, re-apply sealant as specified in paragraphs (e)(1)(i) through (e)(1)(ii) of this AD within every additional 10,000 FH.

**(f) Installation Prohibition**

After the effective date of this AD, do not install any Dowty Propellers R408/6-123-F/17 propeller unless sealant has been applied between the bus bar assembly and the backplate assembly as specified by this AD, or unless the optional terminating action as specified in paragraph (i) of this AD, has been performed.

**(g) Differences Between This AD and the Service Information**

None.

**(h) Credit for Actions Accomplished in Accordance with Previous Service Information**

(1) Sealant applications performed before the effective date of this AD using Dowty Propellers Service Bulletin No. D8400-61-66, dated February 9, 2007, Revision 1, dated May 4, 2007, Alert Service Bulletin No. D8400-61-A66, Revision 2, dated August 19, 2009, Revision 3, dated November 10, 2009, Revision 4, dated January 19, 2010, or Revision 5, dated June 16, 2010, satisfy the initial sealant application requirement of this AD.

(2) Re-application of sealant within 10,000 FH since last application satisfies the reapplication requirement. However, unless you have incorporated the optional terminating action provided in this AD Revision, you must reapply the sealant per paragraph (e)(1)(i) of this AD.

(3) Replacement of the bus bar assembly with a slip ring de-icer harness before the effective date of this AD using paragraph 3.A. of the Accomplishment Instructions of Dowty Propellers Service Bulletin No. D8400-61-94, Revision 2, dated August 29, 2012, satisfies the optional terminating requirement of this AD.

**(i) Optional Terminating Action**

As optional terminating action to the sealant applications of this AD, replace the bus bar assembly with a slip ring de-icer harness. Use paragraph 3.A. of the Accomplishment Instructions of Dowty Propellers Service Bulletin No. D8400-61-94, Revision 3, dated October 23, 2012, to do the replacement.

**(j) 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.

**(k) Related Information**

(1) Refer to European Aviation Safety Agency AD 2009-0114R1 (correction: dated December 13, 2012) for related information.

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

(3) For service information identified in this AD, contact Dowty Propellers, Anson Business Park, Cheltenham Road East, Gloucester GL 29QN, 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.

Issued in Burlington, Massachusetts, on January 29, 2013.

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

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