
(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425–227–1221 or 425–227–1152.

(4) You may also review service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

### Table 4—Material Incorporated by Reference

<table>
<thead>
<tr>
<th>Service Bulletin</th>
<th>Revision level</th>
<th>Date</th>
</tr>
</thead>
</table>

Issued in Renton, Washington, on August 26, 2009.

Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.

[F Docket E9–21408 Filed 9–8–09; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Bombardier Model DHC–8–400 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Four aircraft have experienced a dual AC [alternating current] generator shutdown, caused by a broken propeller de-ice bus bar which short-circuited with the backplate assembly.

* * * A short circuit can cause a dual AC generator shutdown that, in particular, in conjunction with an engine failure in icing conditions, could result in reduced controllability of the aircraft.

* * * * *

Reduced controllability of the airplane in certain operating conditions affects continued safe flight and landing. We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective October 14, 2009.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of October 14, 2009.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov. You may also examine this AD docket at the U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on June 10, 2009 (74 FR 27476). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

Four aircraft have experienced a dual AC [alternating current] generator shutdown, caused by a broken propeller de-ice bus bar which short-circuited with the backplate assembly.

It was subsequently determined that any friction or contact between a propeller de-ice bus bar and the backplate assembly can cause an intermittent short circuit. Such a short circuit can cause a dual AC generator shutdown that, in particular, in conjunction with an engine failure in icing conditions, could result in reduced controllability of the aircraft.

This [Transport Canada Civil Aviation] directive mandates revision of the Airplane Flight Manual (AFM) to introduce a procedure that restores AC power following a failure of No. 1 and No. 2 AC generators with propeller de-ice on. Additionally, in order to prevent similar dual AC generator shutdowns, it mandates the application of sealant as insulation between the propeller de-ice bus bars and the backplate assembly.

Reduced controllability of the airplane in certain operating conditions affects continued safe flight and landing. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a Note within the AD.

Costs of Compliance

We estimate that this AD will affect 62 products of U.S. registry. We also estimate that it will take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is $80 per work-hour. Based on these figures, we estimate the
List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment
■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

§ 39.13 [Amended]
■ 2. The FAA amends § 39.13 by adding the following new AD:


Effective Date
(a) This airworthiness directive (AD) becomes effective October 14, 2009.

Affected ADs
(b) None.

Applicability
(c) This AD applies to Bombardier Model DHC–8–400, DHC–8–401, and DHC–8–402 series airplanes, certificated in any category, serial numbers 4001, 4003, 4004, 4006, and 4008 through 4154 inclusive.

Subject
(d) Air Transport Association (ATA) of America Code 61: Propellers/Propulsors.

Reason
(e) The mandatory continuing airworthiness information (MCAI) states: Four aircraft have experienced a dual AC [alternating current] generator shutdown caused by a broken propeller de-ice bus bar which short-circuited with the backplate assembly.

It was subsequently determined that any friction or contact between a propeller de-ice bus bar and the backplate assembly can cause an intermittent short circuit. Such a short circuit can cause a dual AC generator shutdown that, particularly in conjunction with an engine failure in icing conditions, could result in reduced controllability of the aircraft.

This [Transport Canada Civil Aviation] directive mandates revision of the Airplane Flight Manual (AFM) to introduce a procedure that restores AC power following a failure of No. 1 and No. 2 AC generators with propeller de-ice on. Additionally, in order to prevent similar dual AC generator shutdowns, it mandates the application of sealant as insulation between the propeller de-ice bus bars and the backplate assembly. Reduced controllability of the airplane in certain operating conditions affects continued safe flight and landing.

Actions and Compliance
(f) Unless already done, do the following actions.

(1) Within 30 days after the effective date of this AD, revise the Limitations Section of the Bombardier Dash 8 Q400 AFM, PSM 1–84–1A, by inserting a copy of Bombardier Dash 8 Q400 Temporary Amendment (TA) 14, Issue 1, dated May 10, 2006. When the information in Bombardier TA 14, Issue 1, dated May 10, 2006, is included in the general revisions of the AFM, the general revisions may be inserted in the AFM and the TA may be removed.

(2) Within 5,000 flight hours after the effective date of this AD: Apply sealant between the bus bar assemblies and the backplate assembly by incorporating Bombardier DHC–8–400 Modification Summary 4–163047, Revision B, dated August 22, 2008, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84–61–03, Revision ‘A’, dated September 18, 2007.

(3) Incorporating Bombardier DHC–8–400 Modification Summary Package 4–163047 before the effective date of this AD in accordance with Bombardier Service Bulletin 84–61–03, dated April 27, 2007, is considered acceptable for compliance with the requirements of paragraph (f)(2) of this AD.

FAA AD Differences

Note 1: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to: Attention: Wing Chan, Aerospace Engineer, Systems and Flight Test Branch, ANE–172, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228–7311; fax (516) 794–5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120–0056.
SUMMARY: We are superseding an existing airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

A recent design review has been carried out on the F28 Mark 0070/0100 fuel system in accordance with the guidelines related to FAA SFAR 88 [Special Federal Aviation Regulation No. 88] (Fuel Tank Safety Program) and JAA [Joint Aviation Authorities] INT/POL/25/12. The review revealed that under certain failure conditions, prolonged dry running of the fuel transfer pumps may result in an ignition source in the centre wing fuel tank. This condition, if not corrected, could lead to ignition of flammable fuel vapors, resulting in fuel tank explosion and consequent loss of the aircraft.

To address and correct this unsafe condition, new software (version V13.55) has been developed for the Flight Warning Computer (FWC). This software update introduces a decreased time delay of the centre wing fuel tank low pressure alert from 15 minutes to 60 seconds, to stop prolonged dry running of the fuel transfer pumps.

For the reasons described above, this EASA Airworthiness Directive (AD) requires the replacement of the FWC with a modified unit, incorporating software version V13.55.

The corrective actions include revising the airplane flight manual (AFM) to change certain indications and warnings; installing new software for the multifunction display unit (MFDU); and installing a new rater in the thrust reverser indicator and control system, or an improved thrust reverser unlock indication relay. You may obtain further information by examining the MCAI in the AD docket.

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a note within the AD.