

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 99-NM-371-AD]

RIN 2120-AA64

**Airworthiness Directives; Bombardier Model DHC-8-100, -200, and -300 Series Airplanes****AGENCY:** Federal Aviation Administration, DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Bombardier Model DHC-8-100, -200, and -300 series airplanes. This proposal would require a one-time detailed visual inspection to detect damage of the ladder plates and access cover areas of the upper surface of the wings, repair, if necessary, and installation of new O-ring seals. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are intended to prevent damage of the upper wing ladder plates, which could result in displacement of the adjacent channel seals and consequent reduced lightning strike protection of the fuel tanks.

**DATES:** Comments must be received by March 13, 2000.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-371-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garrett Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York.

**FOR FURTHER INFORMATION CONTACT:**  
James E. Delisio, Aerospace Engineer,

Airframe and Propulsion Branch, ANE-171, FAA, Engine and Propeller Directorate, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256-7521; fax (516) 568-2716.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-371-AD." The postcard will be date stamped and returned to the commenter.

**Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-371-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on certain Bombardier Model DHC-8-100, -200, and -300 series airplanes. TCCA advises that, during maintenance, a sealing problem was detected in the access panels of the upper wing fuel tanks. Investigation revealed that the diameter of the O-ring seals installed during manufacture on certain airplanes may be too large for the grooves of the access panels of the upper wing fuel

tanks. The large diameter O-ring seals can prevent the fuel tank access panels from fitting properly to the upper wing ladder plates. This improper fit could lead to fretting and corrosion damage of the upper wing ladder plates. Such damage, if not detected and corrected, could result in displacement of the adjacent channel seals and consequent reduced lightning strike protection of the fuel tanks.

**Explanation of Relevant Service Information**

The manufacturer has issued Bombardier Service Bulletin S.B. 8-57-41, Revision 'A', dated July 28, 1999, which describes procedures for a one-time detailed visual inspection to detect damage (i.e., fretting and/or corrosion) of the ladder plates and access cover areas of the upper surface of the wings. The service bulletin also describes procedures for installing new 0.103 inch diameter O-ring seals. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition. TCCA classified this service bulletin as mandatory and issued Canadian airworthiness directive CF-99-20, dated July 20, 1999, in order to assure the continued airworthiness of these airplanes in Canada.

**FAA's Conclusions**

This airplane model is manufactured in Canada and is type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, TCCA has kept the FAA informed of the situation described above. The FAA has examined the findings of TCCA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

**Explanation of Requirements of Proposed Rule**

Since an unsafe condition has been identified that is likely to exist or develop on other airplanes of the same type design registered in the United States, the proposed AD would require accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

**Differences Between Proposed AD and Service Bulletin**

Operators should note that, although the Bombardier service bulletin specifies that the manufacturer may be

contacted for disposition of certain conditions, this proposal would require the repair of those conditions to be accomplished in accordance with a method approved by the FAA.

Additionally, operators should note that, the Bombardier service bulletin does not provide procedures for repair of damage within certain limits. However, this proposed AD would require the repair of damage that is determined to be within certain limits; the repair would be required to be accomplished in accordance with the Structure Repair Manual (SRM).

#### Cost Impact

The FAA estimates that 235 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 6 work hours per airplane to accomplish the proposed inspection and installation and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$84,600, or \$360 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

#### Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that 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); and (3) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

**Bombardier, Inc. (Formerly de Havilland, Inc.): Docket 99-NM-371-AD.**

**Applicability:** Model DHC-8-100, -200, and -300 series airplanes, having serial numbers 003 through 528 inclusive and 531; certificated in any category.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent damage of the upper wing ladder plates, which could result in displacement of the adjacent channel seals and consequent reduced lightning strike protection of the fuel tanks, accomplish the following:

(a) Within 60 days after the effective date of this AD, perform a one-time detailed visual inspection to detect damage (i.e., fretting and/or corrosion) of the ladder plates and access cover areas of the upper surface of the wings in accordance with paragraph III.A., III.B., or III.C., as applicable, of the Accomplishment Instructions of Bombardier Service Bulletin S.B. 8-57-41, Revision 'A', dated July 28, 1999.

**Note 2:** For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

(1) If no damage is detected, prior to further flight, install new 0.103-inch diameter O-ring seals in accordance with paragraph III.A., III.B., or III.C., as applicable, of the Accomplishment Instructions of the service bulletin.

(2) If any damage is detected that is within the limits specified in the Structure Repair Manual (SRM), prior to further flight, repair the damage in accordance with the SRM, and install new 0.103-inch diameter O-ring seals in accordance with paragraph III.A., III.B., or III.C., as applicable, of the Accomplishment Instructions of the service bulletin.

(3) If any damage is detected that is outside the limits specified in the SRM, prior to further flight, repair in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate, and install new 0.103-inch diameter O-ring seals.

#### Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York ACO.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York ACO.

#### Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

**Note 4:** The subject of this AD is addressed in Canadian airworthiness directive CF-99-20, dated July 20, 1999.

Issued in Renton, Washington, on February 4, 2000.

**Donald L. Riggan,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 00-3133 Filed 2-9-00; 8:45 am]

**BILLING CODE 4910-13-U**

#### DEPARTMENT OF TRANSPORTATION

#### Federal Aviation Administration

#### 14 CFR Part 39

**[Docket No. 98-NM-99-AD]**

**RIN 2120-AA64**

#### Airworthiness Directives; Airbus Model A320 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

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