

[Federal Register: May 11, 2004 (Volume 69, Number 91)]
[Rules and Regulations]
[Page 26025-26027]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr11my04-18]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NM-153-AD; Amendment 39-13612; AD 2000-02-07 R1]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model DHC-7-100 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment revises an existing airworthiness directive (AD), applicable to all Bombardier Model DHC-7-100 series airplanes, that currently requires repetitive high frequency eddy current inspections to detect cracks on the locking pin fittings of the baggage door and locking pin housings of the fuselage; repetitive detailed inspections to detect cracks of the inner door structure on all four door locking attachment fittings; and corrective actions if necessary. In lieu of accomplishing the corrective actions, that amendment also provides a temporary option, for certain cases, for revising the Airplane Flight Manual and installing a placard. That AD was prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by that AD are intended to detect and correct fatigue cracking of the baggage door fittings and the support structure, which could result in structural failure, and consequent rapid decompression of the airplane during flight. This amendment extends the compliance time of the repetitive inspections based on test evidence and is intended to address the identified unsafe condition.

DATES: Effective June 15, 2004.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 15, 2004.

ADDRESSES: The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York; or 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.

FOR FURTHER INFORMATION CONTACT: David Lawson, Aerospace Engineer, Airframe and Propulsion Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York 11590; telephone (516) 228-7327; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by revising AD 2000-02-07, amendment 39-11526 (65 FR 4354, January 27, 2000), which is applicable to all Bombardier Model DHC-7-100 series airplanes, was published in the Federal Register on January 29, 2004 (69 FR 4257). The action proposed to require repetitive high frequency eddy current inspections to detect cracks on the locking pin fittings of the baggage door and locking pin housings of the fuselage; repetitive detailed inspections to detect cracks of the inner door structure on all four door locking attachment fittings; and corrective actions, if necessary. In lieu of accomplishing the corrective actions, that amendment also provides a temporary option, for certain cases, for revising the Airplane Flight Manual (AFM), and installing a placard. That action was prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by that AD are intended to detect and correct fatigue cracking of the baggage door fittings and the support structure, which could result in structural failure, and consequent rapid decompression of the airplane during flight.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Change to Final Rule

We have changed paragraphs (b)(1) and (b)(2) of this final rule to specify that the actions shall be done in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate, or the Transport Canada Civil Aviation (or its delegated agent). In addition, the de Havilland Dash 7 Maintenance Manual PSM 1-7-2 is listed as one approved method of compliance for accomplishment of the actions.

Conclusion

After careful review of the available data, we have determined that air safety and the public interest require the adoption of the rule with the change described previously. This change will neither increase the economic burden on any operator nor increase the scope of the AD.

Changes to 14 CFR Part 39/Effect on the AD

On July 10, 2002, we issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs our airworthiness directives system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance (AMOCs). However, for clarity and consistency in this final rule, we have retained the language of the NPRM regarding that material.

Cost Impact

The changes in this action add no additional economic burden. The current costs for this AD are repeated for the convenience of affected operators, as follows:

We estimate that 32 airplanes of U.S. registry will be affected by this AD, that it will take about 3 work hours per airplane to accomplish the inspections, and that the average labor rate is \$65 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$6,240, or \$195 per airplane, per inspection cycle.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein will 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 final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) 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 final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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 removing amendment 39-11526 (65 FR 4354, January 27, 2000), and by adding a new airworthiness directive (AD), amendment 39-13612, to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

AD 2000-02-07 R1 Bombardier, Inc. (Formerly de Havilland, Inc.): Amendment 39-13612.
Docket 2003-NM-153-AD. Revises AD 2000-02-07, Amendment 39-11526.

Applicability: All Model DHC-7-100 series airplanes, 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 (d) 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 detect and correct fatigue cracking in the baggage door fittings and the support structure, which could result in structural failure, and consequent rapid decompression of the airplane during flight, accomplish the following:

Repetitive Inspections

(a) At the latest of the times specified in paragraphs (a)(1) and (a)(2) of this AD, perform a high frequency eddy current inspection to detect fatigue cracks of the locking pin fittings of the baggage door and locking pin housings of the fuselage; and a detailed inspection to detect fatigue cracks of the inner door structure on all four locking attachment fittings of the baggage door; in accordance with Havilland Temporary Revision (TR) 5-101, dated August 17, 2001, for Supplementary Inspection Task 52-1 to the de Havilland Dash 7 Maintenance Manual PSM 1-7-2. Thereafter, repeat the inspections at intervals not to exceed 10,000 flight cycles.

(1) Inspect prior to the accumulation of 12,000 total flight cycles.

(2) Inspect within 600 flight cycles or 3 months after March 2, 2000 (the effective date of AD 2000-02-07, amendment 39-11526), whichever occurs later.

Note 2: For the purposes of this AD, a detailed 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."

Corrective Actions

(b) If any crack is detected during any inspection required by paragraph (a) of this AD, prior to further flight, accomplish the requirements of paragraphs (b)(1) and (b)(2) of this AD, as applicable, except as provided in paragraph (c) of this AD. For operators that elect to accomplish the actions specified in paragraph (c) of this AD: After accomplishment of the replacement required by paragraph (b)(1) or (b)(2) of this AD, the Airplane Flight Manual (AFM) revision and placard required by paragraph (c) of this AD may be removed.

(1) If a crack is detected in a baggage door locking pin fitting or fuselage locking pin housing: Replace the fitting or housing with a new fitting or housing, as applicable, in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate, or the Transport Canada Civil Aviation (or its delegated agent). The de Havilland Dash 7 Maintenance Manual PSM 1-7-2 is one approved method.

(2) If a crack is detected in the inner baggage door structure at the locking attachment fittings: Replace the structure with a new support structure or repair in accordance with a method approved by the Manager, New York Aircraft Certification Office (ACO), FAA, Engine and Propeller Directorate, or the Transport Canada Civil Aviation (or its delegated agent). For a repair method to be approved by the Manager, New York ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD. The de Havilland Dash 7 Maintenance Manual PSM 1-7-2 is one approved method.

(c) For airplanes on which only one baggage door stop fitting or its support structure is found cracked at one location, and on which the pressurization system "Dump" function is operational: Prior to further flight, accomplish the requirements of paragraphs (c)(1) and (c)(2) of this AD. Within 1,000 flight cycles after accomplishment of the requirements of paragraphs (c)(1) and (c)(2) of this AD, accomplish the requirements of paragraph (b)(1) or (b)(2) of this AD, as applicable.

(1) Revise the Limitations Section of the DHC-7 AFM, PSM 1-71A-1A, to include the following statement. This AFM revision may be accomplished by inserting a copy of this AD into the AFM.

"Flight is restricted to unpressurized flight below 10,000 feet mean sea level (MSL). The airplane must be operated in accordance with DHC-7 AFM, PSM 1-71A-1A, Supplement 20."

(2) Install a placard on the cabin pressure control panel or in a prominent location that states the following:

"DO NOT PRESSURIZE THE AIRCRAFT UNPRESSURIZED FLIGHT PERMITTED ONLY IN ACCORDANCE WITH DHC-7 AFM PSM 1-71A-1A, SUPPLEMENT 20 FLIGHT ALTITUDE LIMITED TO 10,000 FEET MSL OR LESS."

Alternative Methods of Compliance

(d) 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

(e) Special flight permits may be issued in accordance with §§ 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.

Incorporation by Reference

(f) Unless otherwise specified in this AD, the actions shall be done in accordance with de Havilland Temporary Revision 5-101, dated August 17, 2001, for Supplementary Inspection Task 52-1 to the de Havilland Dash 7 Maintenance Manual PSM 1-7-2. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, 123 Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, suite 410, Westbury, New York; or 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.

Note 4: The subject of this AD is addressed in Canadian airworthiness directive CF-99-03R1, dated August 22, 2001.

Effective Date

(g) This amendment becomes effective on June 15, 2004.

Issued in Renton, Washington, on April 22, 2004.
Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. 04-10244 Filed 5-10-04; 8:45 am]
BILLING CODE 4910-13-P