

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39****[Docket No. 99-NM-107-AD]****RIN 2120-AA64****Airworthiness Directives; Bombardier Model DHC-7-100 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 all Bombardier Model DHC-7-100 series airplanes. This proposal would 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 visual 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, this proposal also would provide a temporary option, for certain cases, for revising the Airplane Flight Manual (AFM), and installing a placard. 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 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.

DATES: Comments must be received by December 22, 1999.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-107-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 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, Garratt 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:

Franco Pieri, 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) 256-7526; 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-107-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-107-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 all Bombardier Model DHC-7-100 series airplanes. TCCA advises that fatigue cracks have been reported in the door stop fittings mounted on the

baggage door. Failure of a door stop fitting would appreciably degrade the structural integrity of the baggage door installation. This condition, if not corrected, could result in structural failure, and consequent rapid decompression of the airplane during flight.

Explanation of Relevant Service Information

Bombardier has issued de Havilland Temporary Revision (TR) 5-100, dated December 23, 1998, for Supplementary Inspection Task 52-1 to the de Havilland Dash 7 Maintenance Manual PSM 1-7-2. The service information describes procedures for 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; and repetitive detailed visual inspections to detect cracks of the inner door structure on all four door locking attachment fittings. TCCA classified this service information as mandatory and issued Canadian airworthiness directive CF-99-03, dated February 22, 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 § 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 information described previously, except as discussed below. The proposed AD also would require corrective actions to be accomplished in accordance with de Havilland Dash 7 Maintenance Manual PSM 1-7-2. The corrective actions, for certain cases, involve replacement of any cracked fitting or housing with a new fitting or housing, as applicable. For certain other

cases, the corrective actions involve replacement of any cracked structure with a new support structure, or repair as described below. In lieu of accomplishing the corrective actions, this proposal also would provide a temporary option, for certain cases, for revising the Airplane Flight Manual (AFM), and installing a placard.

Differences Between Proposed Rule and Service Information

Operators should note that, although the service information specifies that the manufacturer may be contacted for disposition of certain cracks, this proposal would require the repair of those conditions to be accomplished in accordance with a method approved by either the FAA, or the TCCA (or its delegated agent). In light of the type of repair that would be required to address the identified unsafe condition, and in consonance with existing bilateral airworthiness agreements, the FAA has determined that, for this proposed AD, a repair approved by either the FAA or the TCCA would be acceptable for compliance with this proposed AD.

Interim Action

This is considered to be interim action until final action is identified, at which time the FAA may consider further rulemaking.

Cost Impact

The FAA estimates that 32 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 3 work hours per airplane to accomplish the proposed inspections, 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 \$5,760, or \$180 per airplane, per inspection cycle.

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 substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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-107-AD.

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 visual inspection to detect fatigue cracks of the inner door structure on all four locking attachment fittings of the baggage door; in accordance with de Havilland Temporary Revision (TR) 5-100, dated December 23, 1998, 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 1,000 flight cycles.

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

(2) Inspect within 600 flight cycles or 3 months after the effective date of this AD, whichever occurs later.

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."

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 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 de Havilland Dash 7 Maintenance Manual PSM 1-7-2.

(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 in accordance with de Havilland Dash 7 Maintenance Manual PSM 1-7-2, 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.

(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 FAA-approved DHC-7 Airplane Flight Manual (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.

Note 4: The subject of this AD is addressed in Canadian airworthiness directive CF-99-03, dated February 22, 1999.

Issued in Renton, Washington, on November 16, 1999.

D.L. Riggins,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99-30369 Filed 11-19-99; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-NM-355-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737, 757, 767, and 777 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 Boeing Model 737, 757, 767, and 777 series airplanes. This proposal would require a one-time general visual inspection to determine the vendor and manufacturing date of all oxygen masks in the passenger cabin; and corrective action, if necessary. This proposal is prompted by a report that passengers were unable to activate supplemental oxygen generators during an in-flight decompression due to stress corrosion cracking of the crimped copper alloy ferrules used to secure loops on the lanyard ends. The actions specified by the proposed AD are intended to prevent failure of the supplemental oxygen system to deliver oxygen to the passengers and flight attendants in the event of decompression, which could result in injury to passengers and flight attendants.

DATES: Comments must be received by January 6, 2000.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-355-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9 a.m. and 3 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P. O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Susan J. Letcher, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2670; fax (425) 227-1181.

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 98-NM-355-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. 98-NM-355-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The FAA has received a report that passengers on a Boeing Model 767 series airplane were unable to activate supplemental oxygen generators during an in-flight decompression due to failure of the oxygen mask lanyards when the masks were pulled after deployment. Failure of the oxygen mask lanyards has been attributed to stress corrosion cracking of the crimped copper alloy ferrules used to secure loops on the lanyard ends. This condition, if not corrected, could result in failure of the supplemental oxygen system to deliver oxygen to the passengers and flight attendants in the event of decompression, which could result in injury to passengers and flight attendants.

The subject oxygen mask lanyards on Boeing 737, 757, and 777 series airplanes are similar to those on the affected Boeing 767 series airplanes. Therefore, all of these airplanes may be subject to the same unsafe condition.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Service Bulletins 737-35-1049, dated September 17, 1998, including Appendix A (for Model 737 series airplanes); 757-35-0014, dated