

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

[Docket No. 2002–NM–311–AD]

RIN 2120–AA64

Airworthiness Directives; Bombardier Model DHC–8–400, –401, and –402 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–8–400, –401, and –402 airplanes. This proposal would require replacing certain flight guidance modules with improved modules, and certain flight control electronic control units with improved units. This action is necessary to prevent loss of the autopilot or manual pitch trim, which may increase the workload of the flightcrew and, under certain conditions, could result in reduced controllability of the airplane. This action is intended to address the identified unsafe condition.

DATES: Comments must be received by December 18, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM–114, Attention: Rules Docket No. 2002–NM–311–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. Comments may be submitted via fax to (425) 227–1232. Comments may also be sent via the Internet using the following address: *9-anm-nprmcomment@faa.gov*. Comments sent via fax or the Internet must contain “Docket No. 2002–NM–311–AD” in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 or 2000 or ASCII text.

The service information referenced in the proposed rule 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 FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, New York Aircraft Certification Office,

10 Fifth Street, Third Floor, Valley Stream, New York.

FOR FURTHER INFORMATION CONTACT: Ezra Sassoon, Aerospace Engineer, Systems and Flight Test Branch, ANE–172, FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York 11581; telephone (516) 256–7520; 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 action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.*, reasons or data) for each request.

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 action must submit a self-addressed, stamped postcard on which the following statement is made: “Comments to Docket Number 2002–NM–311–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. 2002–NM–311–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 two unsafe conditions may exist on certain Bombardier Model DHC–8–400, –401, and –402 airplanes. TCCA advises that, on certain airplanes, a malfunction in the pitch trim system may occur due to asynchrony between the autopilot pitch trim commands of flight guidance modules (FGMs) 1 and 2. This asynchrony is due to noise at frequencies close to the sampling rate in the signal on the FGM’s acquisition channel. This could result in loss of the autopilot pitch trim, which would require the flightcrew to disengage the autopilot and fly the airplane manually.

TCCA also advises that, on certain airplanes, a malfunction in the manual pitch trim system may occur in which the monitoring/modeling circuitry in the flight control electronic control units (FCECU) disables the pitch trim system. This may occur due to unidirectional cycling and rapid reversals of pitch trim commands by the flightcrew. This results in a nuisance warning of pitch trim runaway or loss of the pitch trim system.

These two conditions, if not corrected, could significantly increase the workload of the flightcrew, and in adverse conditions, could result in reduced controllability of the airplane.

Explanation of Relevant Service Information

Bombardier has issued Service Bulletin 84–22–04, Revision “B,” dated April 17, 2002, which describes procedures for replacing FGM1 and FGM2 with improved FGMs, and performing a Return-to-Service procedure. That service bulletin refers to Thales Service Bulletin C12429A–22–003, dated November 29, 2001, as an additional source of service information for modifying the FGMs to the improved configuration. The Thales service bulletin is included in the Bombardier service bulletin.

Bombardier has also issued Service Bulletin 84–27–14, Revision “A,” dated April 2, 2002, which describes procedures for replacing FCECUs with improved FCECUs. That service bulletin refers to Parker Service Bulletin 398500–27–235, dated January 9, 2002, as an additional source of service information for modifying the FCECUs to the improved configuration. The Parker service bulletin is included in the Bombardier service bulletin.

Accomplishment of the actions specified in the applicable Bombardier service bulletin is intended to

adequately address the identified unsafe condition. TCCA classified the Bombardier service bulletins as mandatory and issued Canadian airworthiness directive CF-2002-25, dated April 25, 2002, to ensure the continued airworthiness of these airplanes in Canada.

FAA's Conclusions

These airplane models are manufactured in Canada and are 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 applicable Bombardier service bulletins described previously.

Difference Between Proposed AD and Parallel TCCA Airworthiness Directive

Operators should note that, although the parallel Canadian airworthiness directive includes maintenance procedures that may be used as interim procedures until the affected FGMs and FCECUs can be replaced with improved parts, this proposed AD does not reference such interim procedures.

Cost Impact

We estimate that 12 airplanes of U.S. registry would be affected by the proposed replacement of FGMs, that it would take approximately 1 work hour per airplane to accomplish this proposed replacement, and that the average labor rate is \$65 per work hour. Required parts would be provided at no charge. Based on these figures, the cost impact of this proposed requirement on U.S. operators is estimated to be \$780, or \$65 per airplane.

We estimate that 15 airplanes of U.S. registry would be affected by the proposed replacement of the FCECUs, that it would take approximately 4 work hours per airplane to accomplish this proposed replacement, and that the

average labor rate is \$65 per work hour. Required parts would be provided at no charge. Based on these figures, the cost impact of this proposed requirement on U.S. operators is estimated to be \$3,900, or \$260 per airplane.

The cost impact figures discussed above are 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. 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. The manufacturer may cover the cost of replacement parts associated with this proposed AD, subject to warranty conditions. As a result, the costs attributable to the proposed AD may be less than stated above.

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 2002-NM-311-AD.

Applicability: Model DHC-8-400, -401, and -402 airplanes; certificated in any category; having serial numbers (S/Ns) 4001 through 4065 inclusive.

Compliance: Required as indicated, unless accomplished previously.

To prevent loss of the autopilot or manual pitch trim, which may increase the workload of the flightcrew and, under certain conditions, could result in reduced controllability of the airplane, accomplish the following:

Replacement of Flight Guidance Modules

(a) For airplanes with S/Ns 4001 through 4003 inclusive and 4005 through 4058 inclusive: Within 60 days after the effective date of this AD, replace flight guidance modules (FGMs) FGM1 and FGM2, part number (P/N) C12429AA06, with improved FGMs, P/N C12429AA07, and perform a Return-to-Service procedure, per Bombardier Service Bulletin 84-22-04, Revision "B," dated April 17, 2002.

Note 1: Bombardier Service Bulletin 84-22-04, Revision "B," refers to Thales Service Bulletin C12429A-22-003, dated November 29, 2001, as an additional source of service information for modifying FGMs from P/N C12429AA06 to P/N C12429AA07. The Thales service bulletin is included in the Bombardier service bulletin.

Replacement of Flight Control Electronic Control Units

(b) For all airplanes: Within 8 months after the effective date of this AD, replace flight control electronic control units (FCECUs), P/N 398500-1001 or -1003, with improved FCECUs, P/N 398500-1005, and perform a Return-to-Service procedure, per Bombardier Service Bulletin 84-27-14, Revision "A," dated April 2, 2002.

Note 2: Bombardier Service Bulletin 84-27-14, Revision "A," refers to Parker Service Bulletin 398500-27-235, dated January 9, 2002, as an additional source of service information for modifying FCECUs from P/N 398500-1001 or -1003 to P/N 398500-1005. The Parker service bulletin is included in the Bombardier service bulletin.

Alternative Methods of Compliance

(c) In accordance with 14 CFR 39.19, the Manager, New York Aircraft Certification Office (ACO), FAA, is authorized to approve alternative methods of compliance for this AD.

Note 3: The subject of this AD is addressed in Canadian airworthiness directive CF-2002-25, dated April 25, 2002.

Issued in Renton, Washington, on November 12, 2003.

Kalene C. Yanamura,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 03-28732 Filed 11-17-03; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003-NM-30-AD]

RIN 2120-AA64

Airworthiness Directives; Dassault Model Mystere-Falcon 50 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 Dassault Model Mystere-Falcon 50 series airplanes. This proposal would require applying PR (fuel tank sealant) and installing PR patches over the internal side panel recesses of the left-hand and right-hand feeder tanks at certain frames and stringers. This action is necessary to prevent fuel ignition in the event of a lightning strike and consequent uncontained rupture of the fuel tank(s). This action is intended to address the identified unsafe condition.

DATES: Comments must be received by December 18, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-30-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. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-nprmcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2003-NM-30-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Dassault Falcon Jet, P.O. Box 2000, South Hackensack, New Jersey 07606. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer; International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2125; fax (425) 227-1149.

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 action may be changed in light of the comments received.

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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. 2003-NM-30-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, notified the FAA that an unsafe condition may exist on certain Dassault Model Mystere-Falcon 50 series airplanes. The DGAC advises that an operator reported a lightning strike during final approach that impacted many points of the fuselage. At one impact point between frame 30 and frame 30A, the lightning pierced the fuselage skin, which is also the fuel tank skin in this area. Investigation revealed that the internal side walls of the left-hand and right-hand fuselage fuel (LH and RH feeder) tanks are not thick enough to properly withstand the effects of a lightning strike. This condition, if not corrected, could result in fuel ignition in the event of a lightning strike, and consequent uncontained rupture of the fuel tank(s).

Explanation of Relevant Service Information

Dassault has issued Service Bulletin F50-415, dated November 27, 2002, which describes procedures for application of PR (fuel tank sealant) and installation of PR patches over the internal side-panel recesses of the LH and RH feeder tanks. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition. The DGAC classified this service bulletin as mandatory and issued French airworthiness directive 2002-595(B), dated November 27, 2002, in order to assure the continued airworthiness of these airplanes in France.

FAA's Conclusions

This airplane model is manufactured in France 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, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, 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.