

Airworthiness Directive

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Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2004-NM-41-AD; Amendment 39-13545; AD 2004-07-01]

RIN 2120-AA64

Airworthiness Directives; Bombardier Model CL-600-2C10 (Regional Jet Series 700 & 701), and CL-600-2D24 (Regional Jet Series 900) Series Airplanes

PDF Copy (If Available):



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Preamble Information

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Bombardier Model CL-600-2C10 (Regional Jet Series 700 & 701) and CL-600-2D24 (Regional Jet Series 900) series airplanes. This action requires revising the airplane flight manual to advise the flightcrew to monitor the fuel quantity in the center fuel tank throughout the flight. This action also requires repetitive tests to detect a fuel leak between the wing fuel tanks and the center fuel tank; and further related investigative and corrective actions, if necessary. For certain airplanes, this AD also requires installation of flexible hoses and brackets in the fuel feed system. This action is necessary to detect and correct cracking in the primary fuel ejector. Cracking in the primary fuel ejector could cause fuel leakage into the center fuel tank, which could result in engine shutdown during flight. This action is intended to address the identified unsafe condition.

DATES: Effective April 15, 2004.

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

Comments for inclusion in the Rules Docket must be received on or before April 30, 2004.

X-ref

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2004-NM-41-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-iarcomment@faa.gov. Comments sent via the Internet must contain "Docket No. 2004-NM-41-AD" in the subject line and need not be submitted in triplicate. Comments sent via fax or the Internet as attached electronic files must be formatted in Microsoft Word 97 or 2000 or ASCII text.

The service information referenced in this AD may be obtained from Bombardier, Inc., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, 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, 1600 Stewart Avenue, Suite 410, Westbury, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: James Delisio, 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) 228-7321; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION: Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, recently notified the FAA that an unsafe condition may exist on certain Bombardier Model CL-600-2C10 (Regional Jet Series 700 & 701) and CL-600-2D24 (Regional Jet Series 900) series airplanes. TCCA advises that there have been two instances of longitudinal cracks found in the primary fuel ejector on affected airplanes. This condition, if not corrected, could result in fuel leakage from the wing tanks into the center tank, which could cause engine shutdown during flight.

Explanation of Relevant Service Information

Bombardier has issued the following Temporary Revisions (TRs) to the Airplane Flight Manuals (AFM), Document CSP B-012 (for Model CL-600-2C10 (Regional Jet Series 700 & 701) series airplanes) and CSP C-012 (for Model CL-600-2D24 (Regional Jet Series 900) series airplanes):

- CRJ Regional Jet (Bombardier) TR RJ 700/52-2, dated December 19, 2003, to the Bombardier Model CL-600-2C10 AFM, Document CSP B-012.
- CRJ Regional Jet (Bombardier) TR RJ 900/10-1, dated December 19, 2003, to the Bombardier Model CL-600-2D24 AFM, Document CSP C-012.

These TRs describe revisions to the Abnormal Procedures section of the AFM to advise the flightcrew to monitor the fuel quantity in the center fuel tank throughout the flight.

Bombardier has also issued CRJ 700/900 Regional Jet Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003. This service bulletin describes procedures for performing repetitive tests to detect fuel leaking between the wing tanks and the center tank. The leak test involves filling the wing fuel tanks with a specified quantity of fuel, and monitoring the amount of fuel increase in the center tank over time. The service bulletin describes procedures for sending the results of the leak test to the Bombardier Technical Help Desk.

If the amount of fuel increase in the center fuel tank is more than 150 pounds (68 Kgs), the service bulletin describes procedures for further related investigative and corrective actions. The related investigative action is performing a visual inspection of the center tank (including the ejectors and fuel system components) to determine the source of the leak. When the source of the leak is found, the corrective action is replacing any cracked or damaged part with a new part. The service bulletin also

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includes directions for faxing the results of inspections to Bombardier, and for sending all replaced parts to Bombardier.

TCCA classified these TRs, and this service bulletin as mandatory and issued Canadian airworthiness directive CF-2004-04, dated February 12, 2004, to ensure the continued airworthiness of these airplanes in Canada.

For airplanes having serial number 10005 through 10065 inclusive, the service bulletin states that, prior to the leak test, flexible hoses and brackets must be installed in the fuel feed system in accordance with Bombardier CRJ 700 Regional Jet Service Bulletin 670BA-28-008, Revision C, dated January 23, 2003. These installations are intended to address conditions that can result in fuel line and coupling damage, and leakage due to the combined effects of installation misalignment and vibration.

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 us informed of the situation described above. We have 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 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, this AD is being issued to revise the AFM to advise the flightcrew to monitor the fuel quantity in the center fuel tank throughout the flight. This AD also requires repetitive leak tests of the center fuel tank; a detailed inspection if a leak is detected; and repair, if necessary. For certain airplanes, this AD also requires installation of flexible hoses and brackets in the fuel feed system. The actions are required to be accomplished in accordance with the service information described previously, except as discussed below.

Differences Among the Canadian Airworthiness Directive, Service Bulletin, and This AD

Although Service Bulletin 670BA-28-025, Revision A, and the Canadian airworthiness directive specify a "visual inspection" to determine the source of any leakage found during the leak test, this AD requires a "detailed inspection." A definition of "detailed inspection" is included in Note 2 of this AD.

Where the Canadian airworthiness directive refers to airplanes that have accumulated a certain number of flight hours "since new," this AD uses the words "since the date of issuance of the original Airworthiness Certificate or the date of issuance of the Export Certificate of Airworthiness, whichever occurs first." This decision is based on our determination that the words "since new" may be interpreted differently by different operators. We find that the terminology included in this AD is generally understood within the industry and records will always exist that establish these dates with certainty.

The Canadian airworthiness directive allows for leak tests to be performed in accordance with CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, original issue, dated December 12, 2003; or CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003. However, this AD would require actions to be accomplished in accordance with Revision A. Revision A contains significant changes to procedures and compliance times.

Although Service Bulletin 670BA-28-025, Revision A, and the Canadian airworthiness directive include sending reports of certain findings to the manufacturer, this AD does not include those requirements.

Although Service Bulletin 670BA-28-025, Revision A includes instructions for sending all damaged parts to the manufacturer, this AD does not include that requirement.

Interim Action

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

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

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 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 rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2004-NM-41-AD." The postcard will be date stamped and returned to the commenter.

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.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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 adding the following new airworthiness directive:

Regulatory Information

2004-07-01 Bombardier, Inc. (Formerly Canadair): Amendment 39-13545. Docket 2004-NM-41-AD.

Applicability: Model CL-600-2C10 (Regional Jet Series 700 & 701) and CL-600-2D24 (Regional Jet Series 900) series airplanes, as listed in CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003; certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct cracking in the primary fuel ejector, which could cause fuel leakage into the center fuel tank, and result in engine shutdown during flight, accomplish the following:

Airplane Flight Manual (AFM) Revisions

(a) Within 14 days after the effective date of this AD: Revise the Abnormal Procedures sections of the Bombardier Model CL-600-2C10 and Model CL-600-2D24 Airplane Flight Manuals (AFM), Documents CSP B-012 and CSP C-012, to include the applicable Temporary Revisions (TR) specified in paragraphs (a)(1) and (a)(2) of this AD. Thereafter, operate the airplane per the limitations specified in these AFM revisions.

(1) CRJ Regional Jet (Bombardier) TR RJ 700/52-2, dated December 19, 2003, to the Bombardier Model CL-600-2C10 AFM, Document CSP B-012.

(2) CRJ (Bombardier) TR RJ 900/10-1, dated December 19, 2003, to the Bombardier Model CL-600-2D24 AFM, Document CSP C-012.

Note 1: When information identical to that in the applicable TR specified in paragraphs (a)(1) and (a)(2) of this AD has been included in the general revisions of the applicable AFM, the general revisions may be inserted into the AFM, and the TR may be removed from the AFM.

Prior Requirement

(b) For airplanes having serial numbers (S/N) 10005 through 10065, inclusive; prior to accomplishing the leak test required by paragraph (c) of this AD, install flexible hoses and brackets in the fuel feed system in accordance with the Accomplishment Instructions of Bombardier CRJ 700 Regional Jet Service Bulletin, 670BA-28-008, Revision C, dated January 23, 2003.

Leak Tests

(c) At the applicable compliance time, for the applicable S/N in Table 1 of this AD, do a leak test

between the wing tanks and the center fuel tank in accordance with the Accomplishment Instructions of CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003. Thereafter, repeat the leak test at intervals not to exceed 450 flight hours.

Table 1.-Leak Test Thresholds

Airplane S/N	Accumulated flight hours	Inspection threshold
10005 through 10065, inclusive	More than 2,500 flight hours since accomplishment of the service bulletin in paragraph (b) of this AD.	Within 100 flight hours after the effective date of this AD.
10005 through 10065, inclusive	2,500 flight hours or less since accomplishment of the service bulletin in paragraph (b) of this AD.	Within 250 flight hours after the effective date of this AD.
10003 and 10004; 10066 through 10999, inclusive; and 15001 through 15990, inclusive.	2,500 flight hours or more since the date of issuance of the original Airworthiness Certificate or the date of issuance of the Export Certificate of Airworthiness, whichever occurs first.	Within 100 flight hours after the effective date of this AD.
10003 and 10004; 10066 through 10999, inclusive; and 15001 through 15990, inclusive.	2,499 flight hours or less since the date of issuance of the original Airworthiness Certificate or the date of issuance of the Export Certificate of Airworthiness, whichever occurs first.	Within 450 flight hours after the effective date of this AD.

Detailed Inspection and Repair

(d) If, during the leak test required by paragraph (c) of this AD, the amount of fuel increase in the center fuel tank is 150 pounds (68 Kgs) or more: Before further flight, do the further investigative and corrective actions, in accordance with the Accomplishment Instructions of CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003.

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."

Actions Accomplished per Previous Releases of Service Bulletin 670BA-28-008

(e) Actions accomplished before the effective date of this AD in accordance with Bombardier CRJ 700 Regional Jet Service Bulletin 670BA-28-008, Revision A, dated September 16, 2002; or Revision B, dated October 2, 2002; are considered acceptable for compliance with the corresponding action in this AD.

Reporting and Part Return Requirements

(f) Although the Accomplishment Instructions of CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, dated December 15, 2003, specify to submit certain information to the manufacturer, and to return damaged parts to the manufacturer; this AD does not

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include such requirements.

Alternative Methods of Compliance

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

Incorporation by Reference

(h) Unless otherwise specified in this AD, the actions shall be done in accordance with CRJ Regional Jet (Bombardier) Temporary Revision RJ 700/52-2 dated, December 19, 2003, to the Bombardier CL-600-2C10 Airplane Flight Manual, Document CSP B-012; CRJ Regional Jet (Bombardier) Temporary Revision RJ 900/10-1, dated December 19, 2003, to the Bombardier CL-600-2D24 Airplane Flight Manual, Document CSP C-012; CRJ 700/900 Regional Jet (Bombardier) Alert Service Bulletin 670BA-28-025, Revision A, excluding Appendix A, dated December 15, 2003; and Bombardier CRJ 700 Regional Jet Service Bulletin 670BA-28-008, Revision C, dated January 23, 2003; as applicable. 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., Canadair, Aerospace Group, P.O. Box 6087, Station Centre-ville, Montreal, Quebec H3C 3G9, 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, Westbury, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Note 3: The subject of this AD is addressed in Canadian airworthiness directive CF-2004-04, dated February 12, 2004.

Effective Date

(i) This amendment becomes effective on April 15, 2004.

Footer Information

Issued in Renton, Washington, on March 19, 2004.
Kevin M. Mullin,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.
[FR Doc. 04-6774 Filed 3-30-04; 8:45 am]
BILLING CODE 4910-13-P

Service Bulletin Information

Service Bulletin for the Lotus Notes Client:

Comments
