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[Pages 29997-29998]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0436; Directorate Identifier 2009-NM-230-AD; Amendment 39-16643; AD 2011-07-06]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; correction.

SUMMARY: The FAA is correcting an airworthiness directive (AD) that published in the Federal Register. That AD applies to the products listed above. The service information reference in paragraph (g)(7) in the Actions section of the AD is incorrect. This document corrects that error. In all other respects, the original document remains the same.

DATES: This final rule is effective May 24, 2011. The effective date for AD 2011-07-06 remains May 6, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Wing Chan, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7311; fax (516) 794-5531; e-mail: wing.chan@faa.gov.

SUPPLEMENTARY INFORMATION: Airworthiness Directive 2011-07-06, amendment 39-16643 (76 FR 18024, April 1, 2011), currently requires revising the Limitations and Normal Procedures sections of the airplane flight manual; revising the maintenance program for certain airplanes by incorporating certain inspections; replacing certain data concentrator units (DCUs) with

modified DCUs, and, if applicable, modifying the configuration strapping units, installing the outboard low-heat detection switches and wing A/ICE box assembly and its associated wires; and activating the outboard low-heat detection switches; for Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes.

In the AD as published, the reference to Bombardier Service Bulletin 601R-30-034, dated November 19, 2007, in paragraph (g)(7) of the AD is incorrect. The reference to the Bombardier Service Bulletin should read Bombardier Service Bulletin 601R-31-034, dated November 19, 2007.

No other part of the preamble or regulatory information has been changed; therefore, only the changed portion of the final rule is being published in the Federal Register.

The effective date of this AD remains May 6, 2011.

Correction of Regulatory Text

§ 39.13 [Corrected]

In the Federal Register of April 1, 2011, on page 18028, in the first column, paragraph (g)(7) of AD 2011-07-06 is corrected to read as follows:

* * * * *

(7) Replacing DCUs P/N 622-9820-007, 622-9820-008, or 622-9820-009 with modified DCUs having P/N 622-9820-010, and modifying CSUs, are also acceptable for compliance with the requirements of paragraph (g)(3) of this AD if done before the effective date of this AD, in accordance with Accomplishment Instructions of Bombardier Service Bulletin 601R-31-034, dated November 19, 2007.

* * * * *

Issued in Renton, Washington, on May 13, 2011.

Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.

[Federal Register Volume 76, Number 63 (Friday, April 1, 2011)]
[Rules and Regulations]
[Pages 18024-18029]
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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0436; Directorate Identifier 2009-NM-230-AD; Amendment 39-16643; AD 2011-07-06]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

* * * There have recently been several in-service occurrences that have highlighted the inability of the existing [wing anti-ice] system to detect a low-heat condition in the wing leading edge at all times, with the potential consequence of unannounced asymmetric ice build-up on the wing. * * *

Such a condition, in combination with maneuvers close to stick shaker activation, could possibly result in reduced controllability of the aircraft.

* * * * *

We are issuing this AD to require actions to correct the unsafe condition on these products.

DATES: This AD becomes effective May 6, 2011.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of May 6, 2011.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Wing Chan, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7311; fax (516) 794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on May 10, 2010 (75 FR 25788). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

At present, the Wing Anti-Ice System (WAIS) sufficient heat switches/sensors on CL-600-2B19 aircraft are located at the inboard end of each wing and require a simultaneous low-pressure signal to generate a L or R WING A/ICE amber caution. However, there have recently been several in-service occurrences that have highlighted the inability of the existing system to detect a low-heat condition in the wing leading edge at all times, with the potential consequence of unannounced asymmetric ice build-up on the wing. These have included partial failure of several piccolo ducts [ref: Airworthiness Directive (AD) CF-2008-30] and partial (not fully closed or open) failure of a modulating and shut-off valve, the latter resulting in unannounced asymmetric ice build-up on the wing leading edge. Such a condition, in combination with maneuvers close to stick shaker activation, could possibly result in reduced controllability of the aircraft.

This directive mandates:

- (a) Revision of the Airplane Flight Manual (AFM) to notify the flight crew that, following installation and activation of the low-heat detection switches, certain WAIS mode selection changes may result in a two-minute inhibition of the wing anti-ice message, if posted;
- (b) Revision of the approved maintenance schedule to include one revised and three new functional checks that are required following activation of the low-heat detection switches;
- (c) Replacement of the Data Concentrator Units (DCUs) with DCUs incorporating a software update that caters for the new outboard low-heat detection switches and generates the appropriate anti-ice message for the flight crew when a low-heat condition is detected;

Note: Although not related to this directive, the software update also corrects the sampling rate of two previously non-compliant Flight Data Recorder (FDR) parameters, normal acceleration and pitch attitude.

- (d) Installation of the low-heat detection switches in the wing outboard leading edges, the wing A/ICE box assembly and associated wires; and
- (e) Activation of the low-heat detection switches.

You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Support for the NPRM

Air Line Pilots Association, International (ALPA) stated that it agrees that all reasonable steps should be taken to avoid reduced controllability while operating in icing conditions. ALPA stated that it supports the NPRM, but also encouraged the FAA to implement it as soon as possible to enable full compliance before winter.

Requests To Revise Costs of Compliance

Limited Brands and Air Wisconsin requested that we revise the costs of compliance. Limited Brands disagreed with the estimate of 21 work-hours and the cost of \$1,785 per product to comply with the proposed AD. Limited Brands stated that the modification of the data concentrator unit (DCU), as required by paragraph (g)(3) of the NPRM, costs \$1,200, the installation required by paragraph (g)(4) of the NPRM costs \$3,300, and additional labor costs are \$25,000, which brings the actual cost to \$30,000 per airplane. Air Wisconsin stated it calculated that the costs are \$600 for each of the two upgrades, \$2,570 for other required parts, and 70 work-hours—for a total of \$9,720 per airplane.

We agree to revise the Costs of Compliance section of this AD. We have based our cost estimate on the service information and information from the manufacturer, and have calculated the costs for complying with the AD as follows: 2 work-hours for revising the Limitations section of the AFM and the ALI; 3 work-hours for replacing the DCU; 72 work-hours for installing the switches, assemblies, and wires; and 4 work-hours for activating the switches. We also calculated \$4,500 for parts. We revised the Costs of Compliance section of this AD accordingly.

Request To Clarify the Modification to the Wing Leading Edges

Air Wisconsin requested clarification regarding the modification of the wing leading edges. Air Wisconsin noted that the effectivity is against the airplane models but Bombardier Service Bulletin 601R-30-031, Revision D, dated February 3, 2010, specifies modifying the leading edges, which was not addressed in the NPRM. Air Wisconsin noted that, if a non-modified spare leading edge is installed, there could be cause for confusion.

We agree to provide clarification. The actions required by paragraph (g)(4) of this AD include modifying the leading edges.

Request To Revise the Compliance Time for Requirements of Paragraph (g)(2) of the NPRM for Task C30-10-141-01

Mesa Airlines requested that we clarify the requirements of paragraph (g)(2) of the NPRM for Task C30-10-141-01. Mesa Airlines stated that on page 2A-11 of Appendix A of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirement Manual (MRM), Task C30-10-141-10 provides the functional check of the wing anti-ice standby overheat switches and overheat/sufficient heat sensors and associated circuitry with an interval of 6,000 flight hours. Mesa Airlines stated that page 1-2-35 of Section 2 of Part 1 of the Bombardier CL-600-2B19 Maintenance Review Board (MRB) Report, Task 30-12-12-01, "Functional check of the wing anti-ice overheat sensors (duplicate Certification Maintenance Requirements (CMR) C30-10-141-01)," provides a compliance time of 4,000 flight hours. Mesa Airlines also stated that page 1-1-6 of Section 1 of Part 1 of the Bombardier CL-600-2B19 MRM states the following in Note 15: "This task has a duplicate CMR requirement.

Refer to Maintenance Requirements Manual, CSP-A-053, Part 2, Appendix A, for identification of specific requirements regarding handling of CMRs. Where the CMR interval for an MRB report task is more restrictive, the CMR interval takes precedence. When the interval for an MRB report task is more restrictive, the MRB report task interval will take precedence."

Mesa Airlines asked that we clarify the NPRM as to which interval needs to be tracked—6,000 flight hours or 4,000 flight hours.

We agree to clarify. The intent of the AD is to introduce the CMR tasks that are associated with the new switches. CMR Task C30-10-141-01 was inadvertently mandated in Canadian AD CF-2009-37 and was carried over into the NPRM. The MRB group is currently looking into harmonizing these task intervals. Therefore, we have removed CMR Task C30-10-141-01 from Table 1 of this final rule.

Request To Clarify Required Service Information

Air Wisconsin requested that we clarify the name of the service information in paragraph (g)(2) of the NPRM. Air Wisconsin stated that paragraph (g)(2) of the NPRM refers to "Airworthiness Limitations Instructions." Air Wisconsin asked if it should instead be "Bombardier CL-600-2B19 Maintenance Requirements Manual (MRM), Appendix A, Certification Maintenance Requirements (CMR)."

We agree with the commenter's suggested service information citation. We have changed paragraph (g)(2) of this final rule accordingly.

Request To Revise Compliance Time in Table 1 of the NPRM

Air Wisconsin requested that we revise the compliance time in Table 1 of the NPRM. Air Wisconsin stated that under the column heading "Initial Compliance Time (whichever occurs later)" for Tasks C30-10-141-03, C30-10-141-05, and C30-10-141-07 in Table 1, the compliance time under that column heading should read "Before the accumulation of 6,000 flight hours, or if previously accomplished, within 6,000 flight hours since last accomplishment, whichever comes first." The commenter did not provide a reason for these suggestions.

We agree with the commenter's suggested change. The intent of Table 1 is to establish the initial compliance times for accomplishment of the specified tasks because only repetitive intervals are specified in Bombardier TR 2A-46, dated July 24, 2009. However, we acknowledge that some operators might have previously accomplished the initial tasks and could be doing those tasks repetitively. The commenter's suggested language would provide credit for earlier accomplishment of the tasks for those operators. We have revised Table 1 to include the language suggested by the commenter.

Request To Remove Note 3 of the NPRM

Air Wisconsin requested to remove Note 3 from the NPRM. Air Wisconsin stated that the inspection requirements in Bombardier Temporary Revision (TR) 2A-46, dated July 24, 2009, are already contained in the general revision of the MRM, specifically, Revision 9, dated December 10, 2009. Air Wisconsin stated that this updated general revision makes Note 3 irrelevant and, therefore, the note should be removed.

We disagree. The note is necessary to keep operators in compliance when the TR is incorporated into general revisions. Operators that have a revision of the MRM that contains the information in Bombardier TR 2A-46 are in compliance. We have not changed the final rule in regard to this issue.

Request To Remove Note 4 of the NPRM

Air Wisconsin requested we remove Note 4 from the NPRM. Air Wisconsin stated this note is not pertinent to the content of the NPRM because Task 30-11-41-820-801 is not part of Bombardier Service Bulletin 601R-30-031, Revision D, dated February 3, 2010, and should be removed.

We disagree. Task 30-11-41-820-801 is pertinent to this AD because it is part of the Bombardier CRJ Series Regional Jet Aircraft Maintenance Manual, and it provides guidance to correct alignment of the piccolo ducts since a small number of cases have been reported in which they were found to have been installed in the opposing wing, resulting in the incorrect orientation of the bleed holes. One of the requirements of this AD is to install the low-heat direction switches in the wing outboard leading edges. This task requires particular attention to the correct alignment of the piccolo ducts after the installation of the low-heat detection switches. We have not changed the final rule in regard to this issue.

Request To Revise Compliance Time for Requirements of Paragraph (g)(5) of the NPRM

Air Wisconsin, Mesaba Airlines, and Mesa Airlines requested that we revise the compliance time for activating the outboard low-heat detection switches, as proposed by paragraph (g)(5) of the NPRM. Air Wisconsin requested that incorporating the procedures specified in Part F of the Accomplishment Instructions of Bombardier Service Bulletin 601R-30-031, Revision D, dated February 3, 2010, should be performed at the next heavy maintenance visit, provided that parts (kits) are available. Air Wisconsin stated that it has scheduled these tasks to be completed by the end of December 2011. Mesaba Airlines requested that the compliance time in paragraph (g) of the NPRM be revised from 11 months to 5,000 flight hours after the effective date of this AD. Mesaba Airlines stated that the 11-month compliance time for the modification will result in extended downtime and cause interruptions. Mesa Airlines stated that it agrees with Mesaba Airlines' request to change the compliance time from months to hours.

We disagree. In developing the compliance time for this AD action, we considered not only the safety implications of the identified unsafe condition, but the average utilization rate of the affected fleet, the practical aspects of an orderly modification of the fleet during regular maintenance periods, the availability of required parts, and the time necessary for the rulemaking process. The proposed compliance time, which is based on the effective date of the final rule, was determined to be appropriate. However, under the provisions of paragraph (h) of the final rule, we will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the change would provide an acceptable level of safety. We have not changed the final rule in regard to this issue.

Clarification of Changes to This AD

We have revised paragraph (e) of this AD by removing some text and retaining only the text that applies to the Reason section of this AD.

In addition, we have removed paragraph (h)(3) of the NPRM because this AD does not contain a reporting requirement.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Differences Between This AD and the MCAI or Service Information

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might also have required different actions in this AD from those in the MCAI in order to follow our FAA policies. Any such differences are highlighted in a NOTE within the AD.

Costs of Compliance

We estimate that this AD affects 599 products of U.S. registry. We also estimate that it takes about 81 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Parts cost \$4,500 per product. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$6,819,615, or \$11,385 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify this AD:

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. 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

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

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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. The FAA amends § 39.13 by adding the following new AD:



CORRECTION: [*Federal Register Volume 76, Number 100 (Tuesday, May 24, 2011); Pages 29997-29998; www.access.gpo.gov/su_docs/aces/aces140.html*]

2011-07-06 Bombardier, Inc.: Amendment 39-16643. Docket No. FAA-2010-0436; Directorate Identifier 2009-NM-230-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 6, 2011.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 through 8101 inclusive.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (h)(1) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

- (d) Air Transport Association (ATA) of America Code 30 and 31: Ice and rain protection, and instruments, respectively.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

* * * There have recently been several in-service occurrences that have highlighted the inability of the existing [wing anti-ice] system to detect a low-heat condition in the wing leading edge at all times, with the potential consequence of unannounced asymmetric ice build-up on the wing. * * *

Such a condition, in combination with maneuvers close to stick shaker activation, could possibly result in reduced controllability of the aircraft.

* * * * *

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Actions

(g) Do the following actions.

(1) Within 30 days after the effective date of this AD, revise the Limitations and Normal Procedures sections of the Canadair Regional Jet Airplane Flight Manual (AFM), CSP A-012, to include the information in Canadair (Bombardier) Temporary Revision (TR) RJ/164-2, dated May 14, 2009. This TR introduces procedures for operation in icing conditions. Operate the airplane according to the limitations and procedures in this TR.

Note 2: This may be done by inserting a copy of Canadair (Bombardier) TR RJ/164-2, dated May 14, 2009, into the AFM. When this TR has been included in general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in Canadair (Bombardier) TR RJ/164-2, dated May 14, 2009.

(2) Within 30 days after the effective date of this AD, revise the maintenance program by incorporating the inspection requirements for Tasks C30-10-141-03, C30-10-141-05, and C30-10-141-07, contained in Bombardier TR 2A-46, dated July 24, 2009, into Appendix A, "Certification Maintenance Requirements," of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual (MRM). The initial compliance times for the tasks identified in Bombardier TR 2A-46, dated July 24, 2009, are specified in Table 1 of this AD.

Note 3: The actions required by paragraph (g)(2) of this AD may be done by inserting a copy of Bombardier TR 2A-46, dated July 24, 2009, into the Bombardier CL-600-2B19 MRM. When this TR has been included in general revisions of the MRM, the general revisions may be inserted into the MRM, provided the relevant information in the general revision is identical to that in Bombardier TR 2A-46, dated July 24, 2009.

Table 1—Initial Compliance Times for Tasks in Bombardier TR 2A-46

Task	Applicability	Initial compliance time (whichever occurs later)	
C30-10-141-03	Airplanes on which Modification Summary TC601R17494 or actions specified in Bombardier Service Bulletin 601R-30-031 have been done.	Before the accumulation of 6,000 total flight hours; or if accomplished previously, within 6,000 flight hours since this task was last accomplished.	Within 5 flight hours or 30 days after the effective date of this AD, whichever occurs later.
C30-10-141-05	Airplanes with outboard sufficient heat switches installed in accordance with Modification Summary TC601R17494 or actions specified in Bombardier Service Bulletin 601R-30-031 have been done.	Before the accumulation of 6,000 total flight hours; or if accomplished previously, within 6,000 flight hours since this task was last accomplished.	Within 5 flight hours or 30 days after the effective date of this AD, whichever occurs later.

C30-10-141-07	Airplanes with outboard sufficient heat switches installed in accordance with Modification Summary TC601R17494 or actions specified in Bombardier Service Bulletin 601R-30-031 have been done.	Before the accumulation of 6,000 total flight hours; or if accomplished previously, within 6,000 flight hours since this task was last accomplished.	Within 5 flight hours or 30 days after the effective date of this AD, whichever occurs later.
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(3) For airplanes having S/Ns 7003 through 8095 inclusive: Before or concurrently with accomplishing the actions required by paragraph (g)(5) of this AD: Replace any data concentrator units (DCUs) having part number (P/N) 622-9820-007, 622-9820-008, or 622-9820-009 with modified DCUs having P/N 622-9820-010, and, if applicable, modify the configuration strapping units (CSUs), in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-31-034, Revision A, dated April 10, 2008.

(4) Before or concurrently with accomplishing the actions required by paragraph (g)(5) of this AD: Install the outboard low-heat detection switches, and wing A/ICE box assembly and its associated wires, in accordance with the Accomplishment Instructions of Parts A, C, D, and E of Bombardier Service Bulletin 601R-30-031, Revision D, dated February 3, 2010.

Note 4: A small number of cases have been reported in which piccolo ducts were found to have been installed in the opposite wing, resulting in the incorrect orientation of the bleed holes. During reinstallation of the piccolo ducts and leading edge assemblies after installing the low-heat detection switches, particular attention should be paid to the correct alignment of the piccolo ducts. Guidance can be found in Task 30-11-41-820-801 of the Canadair CRJ Series Regional Jet Aircraft Maintenance Manual.

(5) Within 11 months after the effective date of this AD: Activate the outboard low-heat detection switches in accordance with Part F of the Accomplishment Instructions of Bombardier Service Bulletin 601R-30-031, Revision D, dated February 3, 2010.

(6) Actions accomplished in accordance with the service information specified in Table 2 of this AD, before the effective date of this AD, are acceptable for compliance with the corresponding actions required by paragraphs (g)(4) and (g)(5) of this AD.

Table 2—Acceptable Service Information

Bombardier Service Bulletin—	Revision—	Dated—
601R-30-031	Original	May 15, 2009.
601R-30-031	A	September 8, 2009.
601R-30-031	B	October 28, 2009.
601R-30-031	C	December 23, 2009.

(7) Replacing DCUs P/N 622-9820-007, 622-9820-008, or 622-9820-009 with modified DCUs having P/N 622-9820-010, and modifying CSUs, are also acceptable for compliance with the requirements of paragraph (g)(3) of this AD if done before the effective date of this AD, in accordance with Accomplishment Instructions of Bombardier Service Bulletin 601R-31-034, dated November 19, 2007.

FAA AD Differences

Note 5: This AD differs from the MCAI and/or service information as follows: The MCAI specifies to include the revised Task C30-10-141-01. This AD does not include Task 30-10-141-01. This difference has been coordinated with TCCA.

Other FAA AD Provisions

(h) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

Related Information

(i) Refer to MCAI Transport Canada Civil Aviation (TCCA) Airworthiness Directive CF-2009-37, dated September 30, 2009; and the service information specified in Table 3 of this AD; for related information.

Table 3—Service Information

Service information	Revision	Date
Bombardier Service Bulletin 601R-30-031	D	February 3, 2010.
Bombardier Service Bulletin 601R-31-034	A	April 10, 2008.
Bombardier Temporary Revision 2A-46 to Appendix A— Certification Maintenance Requirements of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual.	Original	July 24, 2009.
Canadair (Bombardier) Temporary Revision RJ/164-2 to the Canadair Regional Jet Airplane Flight Manual CSP A-012.	Original	May 14, 2009.

Material Incorporated by Reference

(j) You must use the service information contained in Table 4 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail thd.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference 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.

Table 4—Material Incorporated by Reference

Service information	Revision	Date
Bombardier Service Bulletin 601R-30-031	D	February 3, 2010.
Bombardier Service Bulletin 601R-31-034	A	April 10, 2008.
Bombardier Temporary Revision 2A-46 to Appendix A— Certification Maintenance Requirements of Part 2 of the Bombardier CL-600-2B19 Maintenance Requirements Manual.	Original	July 24, 2009.
Canadair (Bombardier) Temporary Revision RJ/164-2 to the Canadair Regional Jet Airplane Flight Manual CSP A-012.	Original	May 14, 2009.

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