

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 27, 2003.

Comments for inclusion in the Rules Docket must be received on or before July 14, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2003-NM-98-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](mailto:9-anm-iarcomment@faa.gov). Comments sent via the Internet must contain "Docket No. 2003-NM-98-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, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Dan Parrillo, 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) 256-7505; fax (516) 568-2716.

**SUPPLEMENTARY INFORMATION:** Transport Canada Civil Aviation (TCCA), which is the airworthiness authority for Canada, notified the FAA that an unsafe condition may exist on certain Bombardier Model CL-600-2C10 (Regional Jet Series 700 & 701) series airplanes. TCCA advises that it has received several reports of failure of the wing anti-ice (WAI) ducts. Failure analysis indicates that the WAI ducts, located in the under-floor pressurized area, can collapse due to insufficient strength for the applied differential pressure. This condition, if not corrected, could result in cracks or

rupture of the WAI ducts, and consequent leakage of hot air in the under-floor pressurized area of the fuselage when the anti-ice system is turned on. Such leakage of hot air results in insufficient heat for the anti-ice system and consequent aerodynamic degradation.

#### **TCCA Airworthiness Directive**

TCCA issued airworthiness directive CF-2003-07, effective on March 25, 2003, to ensure the continued airworthiness of these airplanes in Canada. The Canadian airworthiness directive requires an amendment to the Master Minimum Equipment List (MMEL)/Minimum Equipment List (MEL) to prohibit operations into known or forecast icing conditions under certain conditions, and accomplishment of the actions specified in CRJ 700/900 Series Regional Jet (Bombardier) Alert Service Bulletin A670BA-30-007 (described below).

#### **Explanation of Relevant Service Information**

The manufacturer has issued CRJ 700/900 Series Regional Jet (Bombardier) Alert Service Bulletin A670BA-30-007, Revision A, dated April 15, 2003. The alert service bulletin describes procedures for a detailed inspection to detect damage of the four WAI ducts and to determine if the external shrouds of the ducts are open or cracked, and replacement of any damaged duct with a new duct or a duct with the same part number (P/N) that is free of any dent or other handling damage. The alert service bulletin also describes procedures for eventual replacement of all four WAI ducts with new ducts.

TCCA classified this service bulletin as mandatory and issued Canadian airworthiness directive CF-2003-07 to ensure 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 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 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 prevent the WAI ducts from collapsing, cracking, or rupturing, and consequent leakage of hot air in the under-floor pressurized area of the fuselage when the anti-ice system is turned on. Such leakage of hot air results in insufficient heat for the anti-ice system and consequent aerodynamic degradation. This AD requires a revision to the Limitations Section of the Airplane Flight Manual (AFM) to prohibit operations into known or forecast icing conditions under certain conditions. This AD also requires accomplishment of the actions specified in the service bulletin described previously, except as described below.

#### **Differences Between This AD and Service Bulletin/Canadian Airworthiness Directive**

Operators should note that, although the service bulletin specifies that the manufacturer may be contacted for disposition of certain conditions of the surrounding equipment and structure of the external shroud of the WAI ducts, this AD requires the inspection of those areas to be accomplished per a method approved by either the FAA or TCCA (or its delegated agent). In light of the type of inspection that will be required to address the identified unsafe condition, and in consonance with existing bilateral airworthiness agreements, the FAA has determined that, for this AD, an inspection approved by either the FAA or TCAA (or its delegated agent) will be acceptable for compliance with this AD.

The Canadian airworthiness directive requires an amendment to the MMEL/MEL to prohibit operations into known or forecast icing conditions under certain conditions. In the United States, the MMEL and the MEL are not developed or approved as part of the certification requirements of the airplane. Therefore, in order to prohibit operations into known or forecast icing conditions under certain conditions, the FAA has determined that it is necessary to address the identified unsafe condition by requiring a revision to the Limitations Section of the AFM. In accordance with 14 CFR 121.628(b)(2), this AD has the effect of overriding the MMEL/MEL, so it has the same effect as the Canadian airworthiness directive.