No. CF-2001-26R1 1/2
Issue Date 20 September 2002

## AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to CAR 605.84 and the further details of CAR Standard 625, Appendix H, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with CAR 605.84 and the above-referenced Standard.

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone (613) 952-4357.

Number: CF-2001-26R1

Subject: Bombardier CL-600-2B19 "RJ" - Engine Support Beam

**Effective:** 10 August 2001 (the effective date of Airworthiness Directive CF-2001-26)

Revision: Supersedes Airworthiness Directive (AD) CF-2001-26 dated 17 July 2001.

Applicability: Bombardier Inc. Model CL-600-2B19 "Regional Jet" aircraft, serial numbers 7003 through

7067, 7069 through 7208, 7210 through 7759, and 7761 through 7782.

**Compliance:** When indicated, unless already accomplished.

Background: Cracks on the upper and lower web of the engine support beam at fuselage station 640

have been discovered on several high time CRJ aircraft in service. Consequential failure of the engine support beam, which is a principal structural element, could possibly affect

the structural integrity of the aircraft.

Since the original issue of this Directive, Bombardier Aerospace has developed a modification to strengthen the engine support beam structure. The structural modification includes the increase of the upper and lower web thickness, the new upper and lower aft angles and the new intercostals. This Directive has been revised to provide terminating action to the repetitive inspection requirements of this Directive if the aircraft is modified in accordance with Bombardier Aerospace's Alert Service Bulletin A601R-53-059,

Revision B.

Corrective Actions:

1. Initially, in accordance with the following schedule:

Accumulated Aircraft Flight Cycles at Effective Date of this Directive	Compliance Schedule for Initial Inspection
7,500 or less	Prior to exceeding 8,000 flight cycles
More than 7,500 but not more than 11,750	Within 500 flight cycles after the effective date of this directive but not later than 12,000 flight cycles, whichever comes first
More than 11,750	Within 250 flight cycles after the effective date of this directive

Perform a detailed visual inspection in accordance with paragraph 2 of the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-53-059, dated 14 June 2001, or later revisions approved by the Director, Aircraft Certification, Transport Canada.

2. Subsequently, at intervals not to exceed 740 flight cycles, repeat the inspection detailed in paragraph 1 above.



- 3. Within 30 days after each inspection, report the results to Bombardier Aerospace via the CRJ Technical Help Desk.
- 4. If cracks are found, repair prior to further flight. Contact Bombardier Aerospace at the location detailed in the above-mentioned service bulletin for approved repair instructions.
- 5. Incorporation of modification in accordance with paragraph 2 "Accomplishment Instructions", Part B of Bombardier Alert Service Bulletin, A601R-53-059, Revision B, dated 6 August 2002, or later revisions approved by Chief, Continuing Airworthiness, Transport Canada, provides terminating action to the inspection requirements of paragraph 1 and 2 of this Directive.

Note: The new inspection requirements for the modified aircraft are detailed in Part 2 of Maintenance Requirements Manual, Appendix B, "Airworthiness Limitations" as introduced by Temporary Revision 2B-1099, dated 25 July 2002.

**Authorization:** For Minister of Transport

for B. Goyaniuk

Chief, Continuing Airworthiness

Contact: Mr. Anthony Wan, Transport Canada, Continuing Airworthiness, Ottawa, telephone (613) 952-4410, facsimile (613) 996-9178 or e-mail wana@tc.gc.ca or any Transport

Canada Centre.