



No.	CF-2000-18	1/2
Date	11 July 2000	

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 **CANADIAN AVIATION REGULATION (CAR) 593**. PURSUANT TO **CAR 605.84** AND THE FURTHER DETAILS OF **CAR STANDARD 625, APPENDIX H**, THE CONTINUING AIRWORTHINESS OF AN 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, AIRCRAFT CERTIFICATION BRANCH, TRANSPORT CANADA, OTTAWA.

CF-2000-18 BOMBARDIER

Applies to Bombardier Inc. (formerly Canadair) CL-600-2B16 (CL-604) aircraft, serial numbers 5301 through 5374.

Compliance is required as follows, unless already accomplished:

- (i) For aircraft serial numbers 5301 to 5334 No later than 15 September 2000;
- (ii) For aircraft serial numbers 5335 to 5354 No later than 15 November 2000; and
- (iii) For aircraft serial numbers 5355 to 5374 No later than 15 February 2001.

Corrosion has been detected inside the bore of the inboard flap vane, actuator beam assemblies, P/N 600-14250-25. As well, non-compliant gaps have been detected between the flap vane brackets, P/Ns 600-14306-1 and -2, and the adjacent skin on the inboard flaps. Both of these defects have been attributed to deficiencies in the manufacturing process. These conditions could compromise the structural integrity of the flap system and result in control difficulties with the aircraft in the event that a flap vane actuator or a flap vane bracket fails during flight.

To preclude in-flight failures of the flap vane system, accomplish the following:

A. Inspect the flap vanes at flap stations 60.0, 98.5 and 137.0 for a possible gap between each vane bracket, P/Ns 600-14306-1 and -2, and the adjacent skin. Approved instructions for the inspection and repair are detailed in Part 2, Accomplishment Instructions of Bombardier Alert Service Bulletin (ASB) A604-27-006 dated 18 April 2000, or later revisions approved by the Director, Aircraft Certification, Transport Canada.

If a gap is found between a vane bracket, P/Ns 600-14306-1 and -2, and the adjacent skin, accomplish the following before further flight:

1. Conduct a nondestructive inspection of the vane bracket in accordance with Part 6, Chapter 57-53-01 of the CL-604 Nondestructive Testing Manual. Replace all cracked vane brackets.
2. Eliminate any gaps between the vane of uncracked brackets and the adjacent skin that are 0.100 inch (2.54 mm) or less.
3. If a gap in excess of 0.100 inch (2.54 mm) is found between any vane bracket and the adjacent skin, contact Bombardier Aerospace, Customer Support for further instructions.

- B. Replace the six flap vane actuator beams, P/N 600-14250-25, with new beams, P/N 600-14250-27. Approved instructions for replacing the flap vane actuator beams are detailed in Part 2, Accomplishment Instructions of the aforementioned service bulletin or later Transport Canada approved revisions.
- C. Within 30 days of completing the repair, forward any cracked vane brackets, P/N 600-14306-1 and/or -2, and two flap vane actuator beam assemblies, P/N 600-14250-25, from each affected aircraft to Bombardier at the address detailed in the aforementioned service bulletin. Data indicating the station location of the flap actuator beam assembly and the aircraft flight hours and landings at removal are to be included with the flap vane actuator beam assemblies.

This directive becomes effective 15 August 2000.

For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

For further information contact a Transport Canada Centre, or Mr. Ian McLellan, Continuing Airworthiness, Ottawa, telephone (613) 952-4362, facsimile (613) 996-9178 or e-mail mclelli@tc.gc.ca.