



No.	CF-2000-07	1/2
Date	3 March 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-2000-07 BOMBARDIER

Applies to Bombardier Inc. (formerly de Havilland) DHC-8 aircraft, Models 102, 103, 106, 201, 202, 301, 311, 314 and 315.

Compliance is required as indicated, unless already accomplished.

Fatigue cracks have been found in the outer closing angles at both the front and rear spar locations. The closing angles, which consist of three segments (left, centre and right) at the front spar and three similar segments at the rear spar, are part of the structure connecting the fuselage to the wing front and rear spar webs in the wing/fuselage interface area. Cracking of those closing angles which are principal structural elements (PSEs) could adversely affect the structural integrity of the airplanes. Temporary revisions have been made to the DHC-8 Maintenance Program Manuals, Airworthiness Limitations List, to ensure that fatigue cracking of those angles which are PSEs is detected and corrected.

To detect and correct fatigue cracks in the wing/fuselage closing angles which are PSEs, accomplish the following:

1. Revise the Transport Canada approved maintenance program by incorporating the inspection and the inspection intervals of Airworthiness Limitations List (AWL), Structural Inspection Task 5310/31A as detailed in the Temporary Revisions (TRs) of the DHC-8 Maintenance Program Manuals specified below:

DHC-8 Models	Maintenance Program Manual	Temporary Revision No.
102, 103, 106	PSM 1-8-7	TR AWL-71
201, 202	PSM 1-82-7	TR AWL2-15
301, 311, 314, 315	PSM 1-83-7	TR AWL3-78

2. For those angles designated as PSEs, phase in the structural inspection tasks detailed in paragraph 1 above, as follows:

- (a) For aircraft that have accumulated less than 8,000 flight cycles as of the effective date of this directive, perform the inspection at 10,000 flight cycles.
- (b) For aircraft that have accumulated more than 8,000 flight cycles as of the effective date of this directive, perform the inspection within 2,000 flight cycles after the effective date of this directive.
- (c) For aircraft that have accomplished the 40,000-flight cycle inspection, and where no cracks were found and/or where the closing angles were replaced, the repeat interval of 10,000 flight cycles starts from the date of the 40,000-flight cycle inspection and/or the date of replacement of the closing angles.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address. To request a change of address, contact the **Civil Aviation Communications Centre (AARA)** at Place de Ville, Ottawa, Ontario **K1A 0N8**, or 1-800-305-2059, or <http://www.tc.gc.ca/aviation/pubs/index.htm>. 24-0022 (02-2000)

3. If any crack is found, contact Bombardier Aerospace Regional Aircraft, Technical Help Desk (telephone: (416) 375-4000), Downsview, Ontario for disposition prior to further flight.

This directive becomes effective 17 April 2000.

For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

For further information contact a Transport Canada Centre, or Mr. Anthony Wan, Continuing Airworthiness, Ottawa, telephone (613) 952-4379, facsimile (613) 996-9178 or e-mail wana@tc.gc.ca.

