



Transport
Canada

Transports
Canada

Canada

No. CF-93-18

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 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.

CF-93-18 CANADAIR

Applies to Canadair "Challenger" Model CL-600-2A12 (CL-601 variant) and CL-600-2B16 (CL-601-3A variant) aircraft, serial numbers 3002 to 3066 and 5001 to 5131.

Compliance is required within 10 flight hours or 30 calendar days, whichever occurs first after the effective date of this directive, unless already accomplished in accordance with Canadair Alert Wire TA601-0415-036 dated 3 May 1993, or Alert Service Bulletin A601-0415 dated 15 June 1993, or later revisions of the alert service bulletin if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa.

There has been a failure of a flap actuator caused by incorrect installation of the shoulder bolt which secures the flap actuator to the wing trailing edge. This resulted in overloading of the ball screw assembly and damage to the gearbox housing. If not corrected, failure of both actuators on the same flap could occur, possibly resulting in asymmetric flap deployment or retraction (blow back).

To detect incorrectly installed shoulder bolts (and tab washers on aircraft serial numbers 3002 to 3030 only) and to correct any damage resulting from such incorrect installation, accomplish the following:

1. Visually inspect for correct installation, the shoulder bolts (and tab washers on aircraft serial numbers 3002 to 3030 only) which secure the flap actuators to the left and right wing trailing edges at Wing Stations WS76.50, WS127.25, WS178.00, and WS264.00, and which have the following part numbers:

AIRCRAFT SERIAL NUMBER PART NUMBER

3002 to 3030 600-93009-9/11 or 600-93010-5

3031 to 3066 and 5001 to 5131 600-93009-17/19 or 600-93010-9

Also inspect the adjacent flap actuator gearbox housings for evidence of damage due to contact with the shoulder bolt head or tab washer.

2. If the shoulder bolts (and tab washers on aircraft serial numbers 3002 to 3030 only) are found incorrectly installed and no damage is found, correctly reinstall the shoulder bolts within the flight time limits specified in the aforementioned Canadair Alert Wire TA601-0415-036 or Alert Service Bulletin A601-0415.
3. If the gearbox housing is found damaged, accomplish eddy current or fluorescent penetrant inspection of the actuator hinge fitting lugs for evidence of cracks. Replace the shoulder bolt and damaged flap actuator and, if cracked, the actuator attachment bracket lugs, with serviceable parts before further flight.
4. Provide a description of the inspection results and any rework necessary to:

Challenger Information Services, Department 631

Bombardier Inc.

Canadair Business Aircraft Division

P.O. Box 6087, Station A

Montreal, Quebec, Canada

H3C 3G9

Facsimile: (514) 331-2643

Alternative means of compliance with the requirements of this directive may be used only if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa. Any application should be made to the appropriate regional office.

This directive becomes effective 13 August 1993.

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 (AARC) at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or <http://www.tc.gc.ca/civilaviation/communications/centre/address.asp>.

24-0022 (01-2001)



Documents
Document Sharing Hub