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No. CF-94-23

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-94-23 CANADAIR

Applies to the following Canadair CL-600 aircraft:

MODEL SERIAL NUMBERS

CL-600-1A11 (CL-600) 1004 to 1085

CL-600-2A12 (CL-601) 3001 to 3066

CL-600-2B16 (CL-601-3A and -3R) 5001 to 5147

CL-600-2B19 (Regional Jet) 7003 to 7038

Compliance is required as indicated, unless already accomplished.

There has been one instance of in-flight failure of a rudder control quadrant part number 600-92614-1. The failure was caused by stress corrosion and resulted in partial loss of rudder control. To prevent recurrence of the problem, emergency Airworthiness Directive (AD) CF-93-23 was issued to require an immediate one-time inspection of the rudder control quadrant for cracks at the inside root radius of the spigot as an interim action, pending a permanent fix by Canadair. Canadair has now developed a modification that provides better resistance of the rudder quadrant against the stress corrosion problem.

To prevent failure of the rudder quadrant, accomplish the following:

1. Before 31 January 1995 inspect the rudder quadrant, part number 600-92614-1 (original quadrant) or 600-92614-3 (quadrant modified with undercut), for cracks at the inside root radius of the spigot, using the ultrasonic method performed in accordance with the following service bulletins or their later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa:

(a) For CL-600-1A11, -2A12 and -2B16 aircraft:

Accomplishment Instructions Part A of the applicable Canadair Challenger Service Bulletins 600-0637 Revision 1 or 601-0426 Revision 1, both dated 15 November 1994.

(b) For CL-600-2B19 aircraft:

Accomplishment Instructions of Canadair Regional Jet Alert Service Bulletin A601R-27-011 Revision A, dated 21 September 1993.

Note: This inspection is required in addition to the original check specified in AD CF-93-23.

Alternatively, the above inspection may be performed with fluorescent penetrant method, also in accordance with the aforementioned service bulletins, if the quadrant assembly is first removed from the aircraft.

Personnel performing this inspection must be certified to Level II or III of CGSB Standard 48-GP-7M (for ultrasonic inspection) or 48-GP-9M (for fluorescent penetrant inspection) or MIL-STD-410 or equivalent.

If cracks are found, before further flight modify the rudder quadrant assembly in accordance with part 2 of this directive.

Note: Rudder quadrants, part number 600-92614-1 and 600-92614-3, are part of rudder quadrant assemblies, part number 600-92619-1 and 600-62619-5, respectively.

2. Before 31 May 1995 modify the rudder quadrant assembly, part number 600-92619-1 or 600-92619-5, in accordance with the following service bulletins or their later revisions approved by the Director, Airworthiness Branch, Transport Canada, Ottawa:

(a) For CL-600-1A11, -2A12 and -2B16 aircraft:

Accomplishment Instructions Part B of the applicable Canadair Challenger Service Bulletin 600-0637 Revision 1 or 601-0426 Revision 1, both dated 15 November 1994.

(b) For CL-600-2B19 aircraft:

Accomplishment Instructions of Canadair Regional Jet Service Bulletin 601R-27-015 Revision A, dated 31 October 1994.

The inspection required by part 1 of this directive is not required if the modification required by part 2 above is incorporated before 31 January 1995.

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 supersedes and cancels Airworthiness Directive CF-93-23 issued on 10 September 1993.

This directive becomes effective 23 December 1994.

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>.

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