Transport Canada Transports Canada

TP 7245E

No. CF-2006-11 1/2

Issue Date 31 May 2006

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.

Number: **CF-2006-11**

Subject: **Improper Installation of Chemical Oxygen Generator Release Pin**

Effective: 19 June 2006

Applicability: Bombardier Inc. Model CL-600-2B19, with aircraft serial numbers listed in Bombardier Service Bulletin 601R-35-016, dated 8 September 2005, and Alert Service Bulletin A601R-35-014, dated 25 September 2003.

Compliance: Compliance is required as indicated unless already accomplished.

Background: There have been several incidents on other aircraft makes and models where the release pins of chemical oxygen generators were installed incorrectly in the safety pin hole. This resulted in failure to activate the oxygen generators when required. The same hazard exists on the CL-600-2B19 aircraft since chemical oxygen generators B/E Aerospace part numbers, 117025-22 and 117025-23, used on the CL-600-2B19 aircraft have a similar actuation mechanism design as the oxygen generators used on the incident aircraft.

There has also been another incident on a CL-600-2C10 aircraft during deployment of the cabin oxygen system, during which the oxygen generator release pin failed to release at a flight attendant station. Investigation revealed that the release pin was misaligned with the lanyard tube in the mask container module, preventing actuation of the oxygen generator. Since the design of the flight attendant and passenger service unit oxygen generator on the CL-600-2B19 aircraft is similar to the CL-600-2C10 aircraft, a similar failure could occur.

Failure of the oxygen generator to activate when required will result in unavailability of supplemental oxygen that could lead to incapacitation of passengers and cabin crew during an in-flight decompression event.

Corrective Action: **Inspection of Chemical Oxygen Generator for Incorrect Installation of Release Pin in Safety Pin Hole. (Applicable to aircraft serial numbers listed in Bombardier Service Bulletin 601R-35-016, dated 8 September 2005)**

1. Within 1100 hours air time after the effective date of this directive, carry out a one-time detailed visual inspection of chemical oxygen generators, part number 117025- 22 and 117025-23, to detect incorrectly installed release pins, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin (SB) 601R-35-016, dated 8 September 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

2. If any chemical oxygen generator is found with incorrectly installed release pin, prior to further flight, correct the release pin installation in accordance with the Accomplishment Instructions of the above-noted SB 601R-35-016.

Inspection of Chemical Oxygen Generator for Misalignment and Engagement of Release Pin with Lanyard Tube. (Applicable to aircraft serial numbers listed in Bombardier Alert Service Bulletin A601R-35-014, dated 25 September 2003)

3. Within 550 hours air time after the effective date of this directive, carry out a one-time detailed visual inspection of chemical oxygen generators in the forward and aft flight attendant oxygen panels, the passenger service units and the lavatory oxygen panel, for correct alignment and engagement of the release pin with the lanyard tube, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin (ASB) A601R-35-014, dated 25 September 2003, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

4. If any chemical oxygen generator release pin is found to be misaligned with the lanyard tube or the release pin is not engaged in the lanyard tube, prior to further flight, correct the misalignment/lack of engagement in accordance with the Accomplishment Instructions of the above-noted ASB A601R-35-014.

Authorization: For Minister of Transport, Infrastructure and Communities

B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Philip Tang, Continuing Airworthiness, Ottawa, telephone 613 952-4379, facsimile 613 996-9178 or e-mail tangp@tc.gc.ca or any Transport Canada Centre.