

U.S. Department of Transportation **Federal Aviation**

Administration

SAFO

Safety Alert for Operators

SAFO 08007 DATE 1/25/08

Flight Standards Service Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/safo

A SAFO contains important safety information and may include recommended action. SAFO content should be especially valuable to air carriers in meeting their statutory duty to provide service with the highest possible degree of safety in the public interest. Besides the specific action recommended in a SAFO, an alternative action may be as effective in addressing the safety issue named in the SAFO.

Subject: Hazard Present on Airplanes Pressurized by an A/C Cart During Ground Operations

Purpose: This SAFO informs air carriers about the hazard presented by an air conditioning (A/C) cart pressurizing an airplane cabin on the ground if all airplane doors are closed.

Background: On May 31, 2005, a flight attendant serving on a Bombardier CL600-2B19 (CRJ200) during ground operations was ejected from the airplane's galley service door and sustained serious injury. During the subsequent investigation, the National Transportation Safety Board (NTSB) determined the probable cause of the accident to be the opening of the galley service door when the airplane was pressurized. Contributing to the accident was the captain's failure to ensure one of the airplane doors was open while an A/C cart was connected to the airplane, which resulted in pressurization of the airplane on the ground.

Discussion: Many airplanes can be heated or cooled on the ground without use of an auxiliary power unit (APU) or engine by using an A/C cart to provide low-pressure cooled or heated air to the cabin. If all doors to the airplane cabin are closed when an A/C cart is in use, the cabin may pressurize, since the flight crew cannot control the cabin outflow valves without the APU or an engine. On certain aircraft (including, but not limited to the CRJ200), the cabin doors can be opened on the ground, even if significant differential pressure exists between the cabin and the outside. If a crewmember opens a cabin door when significant differential pressure is present, the internal air pressure may accelerate the door opening, possibly ejecting or otherwise injuring the crewmember. On these aircraft, at least one airplane door should remain open when an A/C cart is providing heated or cooled air to the cabin, to prevent cabin pressurization

Recommended Action: Directors of operations, directors of safety, managers of training and flight and cabin crewmembers should be aware of the hazard discussed in this SAFO. If this hazard is present in its operations, the air carrier should revise its crewmember training programs and operating manuals to educate crewmembers on the hazard and to provide procedures to mitigate the risk presented by it.

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