499-2546A

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: March 6, 1995

In reply refer to: A-95-24

Mr. Gordon Bethune
President and Chief Executive Officer
Continental Airlines, Inc.
P. O. Box 4607
Houston, Texas 77210-4607

On March 2, 1994, about 1759:46 eastern standard time (est), Continental Airlines flight 795 (COA flight 795), a McDonnell Douglas MD-82, registration N18835, sustained substantial damage when the captain rejected the takeoff from runway 13 at LaGuardia Airport, Flushing, New York. The airplane continued beyond the takeoff end of runway 13 and came to rest on the main gear wheels with the nose pitched downward, so that the fuselage was balanced on top of a dike. The underside of the nose lay on a tidal mud flat of Flushing Bay. There were 110 passengers, 2 flightcrew members and 4 flight attendants aboard the airplane. There were no fatalities, and no serious injuries were reported. There were 29 minor injuries to passengers, all of which were sustained during the evacuation, and 1 minor injury to a flightcrew member. There was no postcrash fire.[1]

The National Transportation Safety Board has determined that the probable causes of this accident were the failure of the flightcrew to comply with checklist procedures to turn on an operable pitot/static heat system, resulting in ice and/or snow blockage of the pitot tubes that produced erroneous airspeed indications, and the flightcrew's untimely response to anomalous airspeed indications with the consequent rejection of takeoff at an actual speed of 5 knots above V1.

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[1]For more detailed information, read Aircraft Accident Report--"Runway Overrun Following Rejected Takeoff, Continental Airlines Flight 795, McDonnell Douglas MD-82, N18835, LaGuardia Airport, Flushing, New York, March 2, 1994" (NTSB/AAR-95/01)

The Safety Board's investigation of this accident revealed some disturbing information concerning the emergency evacuation of this airplane. For example, the flightcrew failed to shut down the engines before the captain issued instructions to evacuate. His instructions were perceived by flight attendants and passengers as ambiguous and confusing.

The flightcrew performed the shutdown procedures when they were told to do so by a firefighter who had entered the cabin at the L-1 exit. During the shutdown procedure, the crew turned off the emergency lighting system, preventing the cabin emergency lights and the floor proximity lights from illuminating when the engines were shut down.

The flight attendants did not demonstrate assertiveness prior to and during the evacuation. For example, the cockpit was never queried on the extent of the situation before the captain ordered the evacuation some 55 seconds after the airplane came to rest. Moreover, the flight attendants did not climb onto passenger seats and shout commands to direct passengers to useable exits to maximize the egress process known as "flow control." While these procedures are contained in the COA flight attendant emergency procedures manual, they are not practiced during recurrent training sessions. Therefore, it is not surprising that they were not followed during this evacuation.

The Safety Board's special investigation of flight attendant training programs at 12 air carriers examined the ability of flight attendants to perform appropriately during in-flight emergencies and during postaccident emergency evacuations.[2] Several flaws, inconsistencies, and shortcomings were found with both initial and recurrent training programs, which are approved by the Federal Aviation Administration (FAA), that affect flight attendant behavior during emergency situations. Some of these problems were found in this accident.

The Safety Board's special investigation resulted in 13 safety recommendations to the FAA that addressed such diverse topics as: the lack of guidance given to principal operations inspectors regarding flight attendant training programs; the ability of flight attendants to retain information about the emergency equipment and procedures for the several airplanes in which they must be qualified; the fidelity of training devices; the need for cockpit and cabincrews to train together

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[2]See "Special Investigation Report, Flight Attendant Training and Performance During Emergency Situations," NTSB/SIR-92/02, June 9, 1992.

to develop the skills to communicate and coordinate effectively during emergency situations; and the need for realistic and interactive scenarios to practice emergency procedures.

In that special investigation, the Safety Board found:

> Emergency situations typically require quick, assertive, and decisive action with little time for analysis of the situation. For most flight attendants, the only opportunity to practice skills needed in an emergency is during initial and recurrent training. These skills are perishable, and continuing and effective training is essential for maintaining them.

The Safety Board is aware that on December 8, 1994, the FAA issued a Notice of Proposed Rulemaking (NPRM) that proposes to revise the training and qualification requirements for certain air carriers and commercial operators. If this NPRM becomes a final rule, these operators will be required to provide approved crew resource management training not only to flight crewmembers but to their flight attendants, as well as to aircraft dispatchers.

Therefore, as a result of its investigation of this accident, the National Transportation Safety Board recommends that Continental Airlines, Inc.:

> Conduct a review of recurrent flight attendant training policies and procedures relating to all aspects of emergency evacuation training to determine if improvement or change is needed. (Class II, Priority Action) (A-95-24)

Also, the Safety Board issued Safety Recommendations A-95-18 through -23 to the FAA. In addition, the Safety Board reiterated Safety Recommendations A-92-74 and A-92-77, concerning flight attendant training, to the FAA.

The National Transportation Safety Board is an independent federal agency with the statutory responsibility "...to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the

recommendation in this letter. Please refer to Safety Recommendation A-95-24 in your reply.

Chairman HALL, Vice Chairman FRANCIS, and Member HAMMERSCHMIDT concurred in this recommendation.

By: Jim Hall
Chairman