

NTSB Recommendation A-83-080

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Rec #: A-83-080

NTSB Status: Closed - Acceptable Alternate Action

Issue date: 10/31/1983

Accident Date: 6/2/1983

Source Event: ACCIDENT

Location: CINCINNATI Ohio

Mode: AVIATION

Most Wanted List: No

Closed date: 9/12/1985

Report Number: AAR-84-09

Accident ID: DCA83AA028

Background Synopsis:

THE NATIONAL TRANSPORTATION SAFETY BOARD IS CONTINUING ITS INVESTIGATION OF THE ACCIDENT INVOLVING AIR CANADA FLIGHT 797 WHICH OCCURRED ON JUNE 2, 1983, WHEN THE FLIGHTCREW OF THE MCDONNELL DOUGLAS DC-9 AIRPLANE WAS FORCED TO MAKE AN EMERGENCY LANDING AT THE GREATER CINCINNATI AIRPORT BECAUSE OF AN IN-FLIGHT FIRE. THE INTERIOR MATERIALS OF THE AIRPLANE'S CABIN CONTINUED TO BURN AFTER THE LANDING. FIVE CREWMEMBERS AND 18 PASSENGERS WERE ABLE TO EVACUATE THE BURNING CABIN; THE REMAINING 23 PASSENGERS DIED IN THE FIRE. THE SAFETY BOARD'S INVESTIGATION HAS DETERMINED THAT THE FIRE BEGAN IN THE AIRPLANE'S LEFT REAR LAVATORY, BUT THE SOURCE OF IGNITION HAS NOT YET BEEN IDENTIFIED. TO PROMOTE A COMPREHENSIVE PROGRAM TO ADDRESS THE POTENTIALLY HAZARDOUS SITUATION POSED BY IN-FLIGHT FIRES, THE SAFETY BOARD IS ISSUING NEW SAFETY RECOMMENDATIONS RATHER THAN REITERATING RELEVANT SAFETY RECOMMENDATIONS PREVIOUSLY ISSUED TO THE FAA.

Recommendation:

THE NTSB RECOMMENDS THAT THE FEDERAL AVIATION ADMINISTRATION: REQUIRE THE INSTALLATION OF TACTILE AISLE MARKERS ON OVERHEAD STOWAGE BINS AND CABIN FLOORS OR SEATS OF ALL TRANSPORT CATEGORY AIRCRAFT WHICH WILL HELP PASSENGERS TO FIND THEIR WAY TO EMERGENCY EXITS IN EVACUATIONS WHEN VISIBILITY IN THE CABIN IS RESTRICTED OR WHEN THE CABIN ATMOSPHERE IS TOXIC, REQUIRING THE PASSENGERS TO REMAIN CLOSE TO THE FLOOR.

Correspondence:

Response Date: 1/27/1984 From: Addressee

Response:

FAA COMMENT: THE CODE OF FEDERAL REGULATIONS 14 CFR 25.811 REQUIRES THAT MEANS MUST BE PROVIDED TO ASSIST THE OCCUPANTS IN LOCATING THE EXITS IN CONDITIONS OF DENSE SMOKE. COMPLIANCE WITH THIS GENERALLY HAS BEEN BY USE OF TACTILE MARKERS LOCATED ON OVERHEAD STOWAGE RACKS. HOWEVER, SUCH TACTILE MARKERS ARE NOT AS READILY PERCEPTIBLE OR AS EFFECTIVE AS ILLUMINATED FLOOR PROXIMITY ESCAPE PATH MARKINGS FOR A TYPICAL MIX OF AIRLINE PASSENGERS WHO ARE NOT NECESSARILY FAMILIAR WITH THE EMERGENCY FEATURES OF AN AIRPLANE CABIN. WE BELIEVE NOTICE NO. 83-15 IS A MORE

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EFFECTIVE APPROACH TO THE PROBLEM OF VISIBILITY IN CONDITIONS OF SMOKE, AND THAT SAFETY RECOMMENDATION A-83-080 IS NOT NECESSARY.

Response Date: 7/9/1984 From: NTSB

Response:

The Safety Board will withhold further comment on these two Safety Recommendations pending the FAA's review of comments on NPRM No. 83-15. The Safety Board wishes to be kept informed of the progress of NPRM No. 83-15 and has classified Safety Recommendations A-83-80 and -81 as "Open--Acceptable Alternate Action." The Safety Board notes that the closing date for the public comments for NPRMs No. 83-14 and No. 83-15 was February 8, 1984. The Safety Board trusts that the FAA will complete its review of the public comments so that the final ruling can be promulgated as soon as possible.

Response Date: 6/11/1985 From: Addressee

Response:

FAA LTR: AS NOTED IN OUR LETTER DATED JANUARY 27, 1984, THE CODE OF FEDERAL REGULATIONS 14 CFR 25.811 REQUIRES THAT MEANS MUST BE PROVIDED TO ASSIST THE OCCUPANTS IN LOCATING THE EXITS IN CONDITIONS OF DENSE SMOKE. COMPLIANCE WITH THIS GENERALLY HAS BEEN BY USE OF TACTILE MARKERS LOCATED ON OVERHEAD STOWAGE RACKS. HOWEVER, SUCH TACTILE MARKERS ARE NOT AS READILY PERCEPTIBLE OR AS EFFECTIVE AS ILLUMINATED FLOOR PROXIMITY ESCAPE PATH MARKINGS FOR A TYPICAL MIX OF AIRLINE PASSENGERS WHO ARE NOT NECESSARILY FAMILIAR WITH THE EMERGENCY FEATURES OF AN AIRPLANE CABIN. ACCORDINGLY, THE FEDERAL AVIATION ADMINISTRATION (FAA) ISSUED A NOTICE OF PROPOSED RULEMAKING (NPRM), NO. 83-15. ENCLOSED FOR THE BOARD'S INFORMATION IS A COPY OF A FINAL RULE THAT WAS ISSUED ON OCTOBER 22, 1984, AND PUBLISHED IN THE FEDERAL REGISTER ON OCTOBER 26, 1984. THIS AMENDMENT, WHICH BECAME EFFECTIVE ON NOVEMBER 26, 1984, ESTABLISHES NEW PERFORMANCE STANDARDS FOR FLOOR PROXIMITY EMERGENCY ESCAPE PATH MARKING TO PROVIDE VISUAL GUIDANCE FOR EMERGENCY CABIN EVACUATION WHEN ALL SOURCES OF CABIN LIGHTING MORE THAN 4 FEET ABOVE THE AISLE FLOORS ARE TOTALLY OBSCURED BY SMOKE. THIS AMENDMENT MAKES THE STANDARDS APPLICABLE TO FUTURE TYPE CERTIFICATION OF TRANSPORT CATEGORY AIRPLANES AND, AFTER NOVEMBER 26, 1986, TO AIRPLANES TYPE CERTIFICATED AFTER JANUARY 1, 1985, AND OPERATING UNDER 14 CFR PART 121. THESE STANDARDS REPRESENT A SIGNIFICANT IMPROVEMENT IN AIRCRAFT CABIN SAFETY AND ARE IN ADDITION TO THE EMERGENCY LIGHTING STANDARDS CURRENTLY IN THE REGULATIONS.

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Response Date: 9/12/1985 From: NTSB

Response:

The Safety Board is pleased that a requirement for floor proximity emergency escape path markings has become a final rule. This requirement will help provide visual guidance for the evacuation of aircraft cabins when visibility is restricted by smoke or in the presence of toxic gases where passengers must remain close to the floor. Safety Recommendation A-83-80 has been classified as "Closed--Acceptable Alternate Action."