



National Transportation Safety Board
Washington, D.C. 20594

Safety Recommendation

Date: NOV 23 1999

In reply refer to: A-99-57 through -58

Honorable Jane F. Garvey
Administrator
Federal Aviation Administration
Washington, D.C. 20591

On July 3, 1997, at 1730 Alaska daylight time, a wheel-equipped Piper PA-32, N15199, ditched¹ in the ocean approximately 1½ miles southwest of Skagway, Alaska.² The visual flight rules (VFR) flight was being conducted as a nonscheduled sightseeing flight under 14 Code of Federal Regulations (CFR) Part 135. The pilot reported that she was between ¼ and ½ mile from the shore of Taiya Inlet descending for landing at the Skagway Airport when the engine stopped about 1,200 feet above the water. The pilot ditched the airplane about 100 feet from shore because she was unable to glide the airplane to the airport or other beach areas. The six occupants, who were not wearing life jackets, exited the airplane and entered 39°F water. The pilot was not injured, one passenger sustained minor injuries, and two passengers drowned. Two passengers were missing and presumed to have died.

On June 22, 1994, about 2015 Alaska daylight time, a float-equipped deHavilland DHC-3, N13GA, crashed into the Taku Inlet, about 12 miles east of Juneau, Alaska.³ The VFR flight was being conducted as a nonscheduled air taxi flight under 14 CFR Part 135. The floats were torn off the airplane during impact, and the airplane sank. The pilot and three passengers received serious injuries from hypothermia, six passengers drowned, and one passenger was missing and presumed to have died. None of the occupants were wearing life jackets.

The circumstances of these accidents raise concerns about the adequacy of the requirements that address passenger safety in air taxi and air tour operations conducted over water in single-engine airplanes or single-engine helicopters. Inclusive of the two previously cited accidents, a review of the National Transportation Safety Board's accident data revealed that there were 29 accidents and 21 fatalities in 14 CFR Part 135 ditching accidents between 1983 and 1996. Fourteen accidents involved helicopters, and 15 involved fixed-wing airplanes.

¹ Emergency landing of aircraft on water.

² For more detailed information, read Brief of Accident ANC97FA097 (enclosed).

³ For more detailed information, read Brief of Accident ANC94FA070 (enclosed).

On June 1, 1995, the Safety Board issued a report on its special investigation of the U.S. air tour industry.⁴ That investigation resulted from the Safety Board's long-standing concern about air tour accidents and incidents, 139 of which were investigated by the Board between October 1, 1988, and April 1, 1995. On June 19, 1995, the Safety Board issued Safety Recommendation A-95-62, which asked the Federal Aviation Administration (FAA) to:

Require all occupants of helicopter air tour flights to wear life preservers when the helicopter is operating over water, whether float-equipped or not, unless it is operated at an altitude that allows it to reach a suitable landing area in the case of an engine failure.

On December 6, 1995, Safety Recommendation A-95-62 was classified "Open-Acceptable Response" after the FAA stated that it was considering the issuance of a notice of proposed rulemaking (NPRM). The NPRM would propose to require that occupants of helicopter air tour flights wear life preservers when the helicopter is operated over water.

On July 16, 1997, the FAA stated that it was developing the NPRM, had set a high priority on this rulemaking effort, and anticipated issuing the NPRM by December 1997. On August 26, 1997, the Safety Board again classified Safety Recommendation A-95-62 "Open—Acceptable Response." To date, the FAA has not published the NPRM. Although the Safety Board recognizes that it often takes considerable time to develop regulations, the Board is disappointed in the amount of time that has passed since the FAA reported that this safety recommendation had been designated as a high priority.

The Safety Board recognizes that the FAA has issued special Federal Aviation Regulation (SFAR) 71, which states in part, "[n]o person may conduct an air tour in Hawaii in a single-engine helicopter beyond the shore of any island, regardless of whether the helicopter is within gliding distance of the shore, unless: (a) the helicopter is amphibious or is equipped with floats adequate to accomplish a safe emergency ditching and approved flotation gear is easily accessible for each occupant; or (b) each person on board the helicopter is wearing approved flotation gear." Although the Safety Board supports SFAR 71, the accident data suggest that the need for such protection is not limited to operations in Hawaii.

The Safety Board is also concerned that passengers who are on board single-engine airplanes and do not wear flotation devices share the same potential for harm as those in helicopters when the airplane is operated beyond gliding distance to the shoreline. In the two accidents that were previously cited, 11 people drowned or are presumed to have drowned because they were not wearing life jackets when their single-engine airplane landed in the water. Therefore, the Safety Board believes that the FAA should require all occupants of single-engine airplanes and single-engine helicopters operated for hire (air taxi and air tour) to wear life preservers when the aircraft is operating over water, whether float-equipped or not, unless it is operated at an altitude that allows it to reach a suitable landing area in the case of an engine

⁴ National Transportation Safety Board. *Safety of the Air Tour Industry in the United States*, June 1, 1995. Special Investigation Report NTSB/SIR-95/01. Washington, DC.

failure. As a result, the Safety Board classifies Safety Recommendation A-95-62 “Closed—Acceptable Response/Superceded.”

Title 14 CFR Section 135.117, “Briefing Passengers Before Flight,” states that if the flight involves extended over-water operation, the pilot in command shall ensure that all passengers are orally briefed on ditching procedures and the use of required flotation equipment. “Extended over water operation” is defined in 14 CFR Section 1.1 as follows:

- (1) With respect to aircraft other than helicopters, an operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline; and
- (2) with respect to helicopters, an operation over water at a horizontal distance of more than 50 nautical miles from the nearest shoreline and more than 50 nautical miles from an offshore heliport structure.

The Safety Board is concerned that, on flights less than 50 miles from the shoreline, passengers are not required to receive a briefing on ditching procedures or on the use of flotation devices. In the July 3, 1997, accident, the pilot had to ditch the airplane but was not required to provide a brief on ditching procedures. Although it is not clear whether a required briefing would have affected the outcome of this accident, this regulatory deficiency should be corrected. Therefore, the Safety Board believes that the FAA should require passenger briefings on ditching procedures and the use of required flotation equipment for all air taxi and air tour passenger flights that operate over water at an altitude that would not allow them to reach a suitable landing area, including those that operate less than 50 miles from the shoreline.

Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Require all occupants of single-engine airplanes and single-engine helicopters operated for hire (air taxi and air tour) to wear life preservers when the aircraft is operating over water, whether float-equipped or not, unless it is operated at an altitude that allows it to reach a suitable landing area in the case of an engine failure. (A-99-57)

Require passenger briefings on ditching procedures and the use of required flotation equipment for all air taxi and air tour passenger flights that operate over water at an altitude that would not allow them to reach a suitable landing area, including those that operate less than 50 miles from the shoreline. (A-99-58)

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in these recommendations.

By: Jim Hall
Chairman

Enclosures

cc: Honorable Rodney E. Slater, Secretary
U.S. Department of Transportation