

10/19/75



# National Transportation Safety Board

Washington, D.C. 20594  
Safety Recommendation

**Date:** August 3, 1987

**In reply refer to:** A-87-91 through -93

Honorable T. Allan McArtor  
Administrator  
Federal Aviation Administration  
Washington, D.C. 20591

On June 18, 1986, at 0855 mountain standard time a Grand Canyon Airlines DHC-6, N76GC (Twin Otter), call sign Canyon 6, took off from runway 21 of the Grand Canyon Airport. The flight, a scheduled air tour over Grand Canyon National Park, was to be about 50 minutes in duration. Shortly thereafter, at 0913, a Helitech Bell 206B (Jet Ranger), N6TC, call sign Tech 2, began its approximate 30-minute, on-demand air tour of the Grand Canyon. It took off from its base at a heliport adjacent to State route 64 in Tusayan, Arizona, located about 5 miles south of the main entrance to the south rim of the park. Visual meteorological conditions prevailed. The two aircraft collided at an altitude of 6,500 feet msl in the area of the Tonto Plateau. There were 18 passengers and 2 flightcrew members on the DHC-6 and 4 passengers and 1 flightcrew member on the Bell 206B. All 25 passengers and crewmembers on both aircraft were killed as a result of the collision. 1/

The National Transportation Safety Board believes that certain aspects of the operation of both the DHC-6 and the Bell 206B were deficient. Specifically, the lack of limitations to the flight and duty times of the flightcrew members of the DHC-6, and the absence of an intercom or public address system on the Bell 206B detracted from the safety of both operations. Grand Canyon Airlines operated its scenic air tour flights under 14 CFR Part 91; therefore, it was not required to limit the flight and duty times of its pilots to that of pilots operating point-to-point flights under 14 CFR 135.265. As a result, the first officer of the DHC-6 had accrued 160 hours of flight time in the 30 days before the accident. This exceeded the maximum number of flight time hours allowed in 14 CFR Part 121 and 14 CFR 135.265 by 40 hours. Although he was reported to be rested before the accident, without more information the Safety Board cannot determine the extent to which he may have been fatigued at the time of the accident.

Further, the Safety Board believes that the hours flown in scenic air tour flights can be especially tiring since the aircraft generally have no autopilots and they are flown predominantly at low altitudes, where there is often turbulence and the pilot must exercise vigilance at all times to "see and avoid" other aircraft. Simultaneously, they

1/ For more detailed information, read Aircraft Accident Report—"Grand Canyon Airlines, Inc., and Helitech Inc., Midair Collision Over Grand Canyon National Park June 18, 1986" (NTSB/AAR-87/03).

narrate highlights of the air tour. Conversely, in most Part 121 operations and in many of the Part 135 operations in which flight time maximums apply, autopilots generally control much of the aircraft functions. At the same time, many of these flight regimes occur at high altitudes with little or no turbulence, little conflicting traffic and lower pilot workload. Despite the fact that those flights, in general, are less fatiguing to pilots than Grand Canyon scenic air tour flights are, flight and duty time maximums apply to those operations and not to the air tour flights. Therefore, the Safety Board concludes that to reduce the potential fatigue, the FAA should apply to revenue air tour operations the same flight and duty time limitations that apply to operations conducted under 14 CFR 135.265.

The Safety Board also believes that the practice of Helitech pilots turning their heads toward passengers to narrate tours compromised their ability to "see and avoid" other air traffic. Although the former president of Helitech testified that the collision occurred at a point where there would have been no narration, the Safety Board could not determine, due to the absence of cockpit voice recorders, whether the Bell 206B pilot had been turning his head to talk to passengers at the time of the collision. Regardless, the Safety Board believes that any unnecessary activity that detracts from the ability of pilots to "see and avoid" other aircraft should be prohibited. Therefore, the Safety Board urges the FAA to require pilots of revenue air tour flights to use a public address system, intercom, or similar system while narrating air tour flights.

In addition, the Safety Board believes that the deficiencies in the 1983-1985 regulations, which permitted regularly scheduled and on-demand scenic air tour flights to carry revenue passengers under the provisions of 14 CFR Part 91, exist beyond the Grand Canyon airspace. For example, from 1983 to 1985, the Safety Board investigated 24 accidents involving scenic air tour flights operating under 14 CFR Part 91 in a variety of aircraft including fixed-wing and rotary-wing as well as lighter-than-air aircraft. In these accidents, 17 persons were killed, 10 received serious injuries, and 33 received minor injuries. The Safety Board believes that operators of revenue air tour or sightseeing flights should be required to adhere to the same regulations as operators of on-demand and scheduled flights. These regulations specify minimum levels of experience and minimum training and proficiency standards for hiring, training, and certificating flightcrew members, as well as standards for aircraft maintenance. Since the standards of 14 CFR Part 135 are considerably more stringent and necessarily involve a higher level of FAA surveillance than exists under 14 CFR Part 91, the Safety Board believes that the elimination of 14 CFR 135.1(b)(2) will enhance the level of safety of scenic air tour or sightseeing flights. Consequently, the Safety Board believes that the FAA should require all scenic air tour or sightseeing flights, regardless of the distance flown, to be subject to the regulatory provisions of 14 CFR Part 135 and not 14 CFR Part 91.

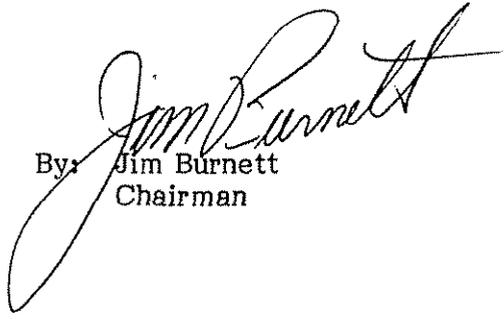
Therefore, the National Transportation Safety Board recommends that the Federal Aviation Administration:

Apply to revenue air tour flights the same flight and duty time limitations that apply to operations conducted under 14 CFR 135.265. (Class II, Priority Action) (A-87-91)

Require pilots of revenue air tour flights to use a public address system, intercom, or similar system while narrating air tour flights. (Class II, Priority Action) (A-87-92)

Require all revenue air tour flights, regardless of the distance flown, to be subject to the regulatory provisions of 14 CFR Part 135, and not 14 CFR Part 91. (Class II, Priority Action) (A-87-93)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and LAUBER and KOLSTAD, Members, concurred in these recommendations. NALL, Member, dissented in the adoption of Safety Recommendations A-87-91 and -93.

  
By: Jim Burnett  
Chairman