

OCCUPATIONAL AVIATION FATALITIES IN ALASKA: 1995-2000

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ABSTRACT

Alaska represents 16.2% of America's land area yet less than one percent of its population. As a consequence of this enormous size, as well as its forbidding geography, Alaska has less than 14,000 miles of roads---only 4,500 of which are paved. As such, Alaska relies on aviation rather than roads to transport supplies, equipment and people.

Using the Alaska Occupational Injury Surveillance System (AOISS) and the National Transportation Safety Board (NTSB) aviation database, all fatal aviation events in Alaska were analyzed for the years 1995 through 2000.

From 1995 to 2000, Alaska had 58 fatal aviation events involving 61 aircraft and resulting in 189 deaths (21% of all aviation deaths in the United States during this time). Of these deaths, 56% (106) were occupationally related. Occupational crashes were 2.0 times (95% CI: 1.3-3.0) more likely to result in fatalities when compared with non-occupational crashes. Of the 58 events, 52 (90%) occurred during the day, 35 (60%) from June through September and 53 (91%) off airport property. The most common phases of flight at the time of the events were cruising 21 (36%), maneuvering 14 (24%) and take-off/landing 10 (17%). 23 (40%) of the impact sites were mountain passes and 34 (59%) were either water or flat land/valleys. The majority of the pilots resided in Alaska, 54 (86%), were commercial or airline transport pilots, 55 (87%), and had attended college, 47 (75%). The majority of the events, 34 (58%), occurred during visual meteorological conditions and occurred without known precipitation at the event site, 41 (71%). Based on hours flown, flights in instrument meteorological conditions had a crash rate that was 11.8 times higher than those in visual meteorological conditions. According to final National Transportation Safety Board investigations, 46 (84%) of the events whose cause could be determined (N=55) were the result of pilot error.

