

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



ANC21FA065

INJURY REPORT

Medical Specialist's Factual Report

December 22, 2022

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A. ACCIDENT

Location: Eagle River, Alaska
Date: July 26, 2021
Time: 13:20 Alaska Daylight Time (AKDT)

B. MEDICAL SPECIALIST

Specialist Turan Kayagil, MD, FACEP
National Transportation Safety Board
Washington, DC

C. DETAILS OF THE INVESTIGATION

1.0 Purpose

This investigation was performed to document the injuries sustained by both aircraft occupants and to analyze whether the outcome of those injuries may have been more favorable had the emergency locator transmitter functioned correctly.

2.0 Methods

Injury information was obtained from the autopsy reports of both occupants. The occupants' toxicology reports, the Federal Aviation Administration (FAA) medical case review, selected National Transportation Safety Board (NTSB) investigator reports, and relevant medical literature were also reviewed. According to the NTSB investigator-in-charge, the accident flight was an instructional "discovery" flight; one occupant (flight instructor) was an employee of the flight school and the other (private pilot) was an instrument-rated pilot who was interviewing the flight school.

D. FACTUAL INJURY INFORMATION

1.0 Flight Instructor

The 23-year-old male flight instructor was fatally injured. According to his autopsy report, his cause of death was multiple blunt-force injuries of his head, torso, and extremities. Table 1 lists significant autopsy injury findings. The autopsy examination did not include radiographic imaging.

Injury	Description
Subarachnoid hemorrhage	Left frontoparietal, temporal, and occipital brain, and right frontal, parietal, and temporal brain
Cortical brain contusions	Scattered
Basilar skull fracture	Extending from anterior cranial fossa to posterior right petrous ridge of middle cranial fossa
Calvarial skull fracture	Frontal bone
Maxillary fracture	Upper maxillae freely mobile
Nasal fracture	Palpable
Lung contusions	Bilateral
Femur fracture	Left, palpable
Ankle fracture	Left, dislocated
External lacerations, abrasions, and contusions	Multiple sites detailed, including abrasions from the right shoulder to the left hip described as being consistent with seatbelt markings

Table 1: Flight Instructor's Injuries

2.0 Private Pilot

The 27-year-old female private pilot was fatally injured. According to her autopsy report, her cause of death was multiple blunt-force injuries of her head, torso, and extremities. Table 2 lists significant autopsy injury findings. The autopsy examination did not include radiographic imaging.

Injury	Description
Subdural hemorrhage	Overlying right and left hemispheres of brain
Subarachnoid hemorrhage	Global: right and left frontal, parietal, and occipital
Cortical brain contusions	Scattered
Cerebral peduncle laceration	Left, slight/partial, just superior to pons
Basilar skull fracture	Extending from anterior cranial fossa along right middle cranial fossa to right posterior cranial fossa
Calvarial skull fracture	Anterior frontal bone
Nasal fracture	Palpable
Lung contusions	Mild bilateral
Ankle fracture	Left, palpable
External lacerations, abrasions, and contusions	Multiple sites detailed, including abrasions from the left shoulder to the right hip described as being consistent with seatbelt markings

Table 2: Private Pilot's Injuries

E. SUMMARY OF INJURY INFORMATION

1.0 Flight Instructor

The 23-year-old male flight instructor's autopsy identified traumatic head, face, and brain injuries, including basilar and calvarial skull fractures, nasal and maxillary fractures, subarachnoid hemorrhage involving multiple brain regions bilaterally, and scattered cortical brain contusions. His autopsy also identified bilateral lung contusions and left-sided femur and ankle fractures.

2.0 Private Pilot

The 27-year-old female private pilot's autopsy identified traumatic head, face, and brain injuries, including basilar and calvarial skull fractures, nasal fracture, bilateral subdural hemorrhage, subarachnoid hemorrhage with global involvement of both brain hemispheres, scattered cortical brain contusions, and slight/partial laceration of the left cerebral peduncle in the midbrain. Her autopsy also identified mild bilateral lung contusions and a left ankle fracture.

Submitted by:

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