



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

May 12, 2022

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. CRASH: CEN21FA376; Urbana, OH

Date and time: August 20, 2021

Injuries: 1 fatal

B. GROUP IDENTIFICATION

No group was formed for the medical evaluation in this accident.

C. DETAILS OF INVESTIGATION

1. Purpose

This investigation was performed to evaluate the pilot for medical conditions, the use of medications/illicit drugs, and the presence of toxins.

2. Methods

The FAA medical case review, autopsy report, toxicology findings, and the investigator's preliminary report were reviewed. Relevant regulation and medical literature were reviewed as appropriate.

FAA Medical Case Review

According to the FAA medical case review, the 68 year old male pilot had reported 2000 total flight hours as of his last aviation medical exam, dated 8/13/2020. At that time, he was 66 inches tall and weighed 134 pounds. He had reported no chronic medical conditions and no use of medications to the FAA. No significant abnormalities were identified and he was issued a third class medical certificate limited by a requirement he wear corrective lenses for near and distant vision.

Autopsy

According to the autopsy report issued by the Coroner of Montgomery

County Ohio, the cause of death was multiple blunt force injuries. The examination was significantly limited by the extent of injury; the brain and heart were not available for examination.

Toxicology

Toxicology tests performed on cavity blood by the Montgomery County Coroner's Office identified ethanol at 0.020 gm/dl but did not identify any other tested-for drugs.

Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified ethanol in cavity blood at 0.018 gm/dl in cavity blood; 0.010 mg/hg in liver; and 0.020 mg/hg in lung.¹ No other tested-for substances were detected.

Substance Description

Ethanol is primarily a social drug found in beer, wine, and liquor and is a central nervous system depressant. Federal Aviation Regulations, Section 91.17 (a) prohibits any person from acting or attempting to act as a crewmember of a civil aircraft while having 0.040 gm/dl or more ethanol in the blood.² After ingestion, ethanol is quickly distributed throughout the body's tissues and fluids fairly uniformly. The distribution pattern parallels the water content and blood supply of each organ. Ethanol may also be produced body tissues after death by microbial activity.³ In this situation, levels may vary widely.

D. SUMMARY OF MEDICAL FINDINGS

The 68 year old male pilot had reported no chronic medical conditions and no use of medications to the FAA.

According to the autopsy report issued by the Coroner of Montgomery County Ohio, the cause of death was multiple blunt force injuries. The examination was significantly limited by the extent of injury; the brain and heart were not available for examination.

Toxicology tests performed on cavity blood by the Montgomery County Coroner's Office identified ethanol at 0.020 gm/dl but did not identify any other tested-for drugs.

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¹ These units indicate testing occurred in solid organs and directly correlate to blood levels in gm/dl.

² US Government Printing Office .eCFR- Code of Federal Regulations. 91.17. Available from: <http://www.ecfr.gov/cgi-bin/text-idx?rgn=div8&node=14:2.0.1.3.10.1.4.9>. Accessed 4/14/2016

³ Federal Aviation Administration. Forensic Toxicology Drug Information. Ethanol. <http://jag.cami.jccbi.gov/toxicology/DrugDetail.asp?did=60> Accessed 03/02/2019.