

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



Medical Factual Memorandum for Record

October 15, 2024

A. CASE

NTSB ID: ERA23FA182
Location: Jesup, Georgia
Date: April 6, 2023

B. MEDICAL SPECIALIST

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

C. DETAILS

1.0 Description of Review

For purposes of evaluating the pilot for potentially impairing substances and potentially impairing medical conditions, the above Medical Specialist reviewed the following sources of medical information, along with selected relevant regulation, medical literature, and investigator reports.

- Final Federal Aviation Administration (FAA) medical case review
- Autopsy report
- FAA Forensic Sciences Laboratory toxicology report

2.0 Summary of Medical Facts

The 61-year-old male pilot's last aviation medical examination was December 12, 2021. At that time, he reported a medical history including high blood pressure, for which he was qualified under Conditions Aviation Medical Examiners Can Issue (CACI) criteria. He reported using the prescription blood pressure medication

lisinopril. He was issued a third-class medical certificate limited by a requirement to possess glasses for near/intermediate vision.

The Georgia Bureau of Investigation Division of Forensic Sciences performed the pilot's autopsy. According to the pilot's autopsy report, his cause of death was multiple blunt impact injuries, and his manner of death was accident. Due to the extent of the pilot's injuries, his heart was unavailable for examination. Within this limitation, the autopsy did not identify significant natural disease.

Postmortem toxicological testing by the FAA Forensic Sciences Laboratory detected ethanol at 0.046 g/dL in the pilot's cavity blood. Ethanol was not detected in liver or brain tissue.

Ethanol is the intoxicating alcohol in beer, wine, and liquor, and, if consumed, can impair judgment, psychomotor performance, cognition, and vigilance.¹ FAA regulation imposes strict limits on flying after consuming ethanol, including a prohibition on piloting a civil aircraft while having a blood ethanol level of 0.04 g/dL or greater.² Alcohol consumption is not the only possible source of ethanol in postmortem specimens. Ethanol may sometimes be produced by microbes in a person's body after death, potentially elevating ethanol levels in some postmortem specimens but not others.³

Submitted by:

Turan Kayagil, MD, FACEP
Medical Officer

¹ Cook CCH. Alcohol and aviation. *Addiction*. 1997;92(5):539-555.

² [14 Code of Federal Regulations § 91.17](#).

³ Kugelberg FC, Jones AW. Interpreting results of ethanol analysis in postmortem specimens: a review of the literature. *Forensic Sci Int*. 2007;165(1):10-29. doi:10.1016/j.forsciint.2006.05.004.