



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

April 12, 2022

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. CRASH: ERA22FA015; Titusville, FL

Date and time: October 14, 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, FAA medical file, 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 and the FAA medical file, the 54-year-old male pilot had reported 13,000 total flight hours as of his last aviation medical exam, dated 7/19/2021. At that time, he was 70 inches tall and weighed 218 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 first class medical certificate without limitations.

Autopsy

According to the autopsy report issued by the Office of the Medical

Examiner, State of Florida, 18th District, Brevard County, the cause of death for was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified.

Toxicology

Toxicology tests performed by the Steward Reference Laboratory at the request of the medical examiner did not identify any tested-for substances in vitreous or brain tissue.

Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified doxylamine in cavity blood (80 ng/ml) and in liver.

Substance Description

Doxylamine is a sedating antihistamine available over the counter in a variety of products intended to treat allergy and cold symptoms and to induce sleep. It carries specific warnings about sleepiness.¹ The usual blood level in live people where effects would be expected is between 50 ng/ml and 200 ng/ml.²

D. SUMMARY OF MEDICAL FINDINGS

The 54-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 Office of the Medical Examiner, State of Florida, 18th District, Brevard County, the cause of death for was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified.

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¹ National Library of Medicine. Medline Plus. Doxylamine.
<https://medlineplus.gov/druginfo/meds/a682537.html> Accessed 4/12/2022.

² M. Schulz, A. Schmoldt, H. Andresen-Streichert, S. Iwersen-Bergmann. Revisited: Therapeutic and toxic blood concentrations of more than 1,100 drugs and other xenobiotics. Critical Care 2020
<https://ccforum.biomedcentral.com/articles/10.1186/s13054-020-02915-5> Accessed 4/12/2022.