

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



CEN22FA405

MEDICAL

Specialist's Factual Report

July 24, 2024

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A. ACCIDENT

Location: Tomball, Texas
Date: September 1, 2022

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 evaluate the left-seated pilot owner of the airplane (pilot) and right-seated flight instructor (flight instructor) for potentially impairing substances and medical conditions.

2.0 Methods

The final Federal Aviation Administration (FAA) medical case review for the crash was reviewed, as were post-accident emergency medical services (EMS) and hospital records for the pilot and flight instructor. The flight instructor's autopsy and toxicology reports, as well as the transcript of an NTSB interview of the pilot, were reviewed. Selected investigator reports and relevant regulation and medical literature were also reviewed.

D. FACTUAL INFORMATION

1.0 Pilot

1.1 Medical Certification Information

According to the FAA medical case review, the 67-year-old male pilot's last aviation medical examination before the crash was March 8, 2022. At that time, he reported 1,535 total civilian flight hours. He was 74 inches tall and weighed 204 pounds. He reported no significant medical concerns. No significant issues were identified, and he was issued a third-class medical certificate limited by a requirement to have available glasses for near vision.

1.2 Post-Crash Medical Records

The pilot was alert and walking upon EMS arrival at the crash scene. He was transported to a hospital emergency department (ED) for evaluation of his injuries. Imaging studies (including chest imaging) performed for that purpose were without findings of significant natural disease. No significant past medical history or home medication use was documented. A COVID-19 coronavirus nucleic acid amplification test was positive. Laboratory studies were otherwise generally unremarkable and did not include testing for alcohol or other drugs. The pilot's oxygen saturation was normal, and he was discharged from the ED.

2.0 Flight Instructor

2.1 Medical Certification Information

According to the FAA medical case review, the 31-year-old male flight instructor's last aviation medical examination was April 28, 2022. At that time, he reported 700 total civilian flight hours. He was 74 inches tall and weighed 185 pounds. He reported no medication use or active medical conditions. No significant issues were identified, and he was issued a first-class medical certificate without limitation.

2.2 Post-Crash Medical Records

The flight instructor experienced cardiac arrest with EMS. He was transported to a hospital but resuscitation efforts were unsuccessful and he was declared dead in the hospital ED.

2.3 Autopsy

The Montgomery County Forensic Services Department performed the flight instructor's autopsy. According to the flight instructor's autopsy report, his cause of death was multiple blunt force injuries, and his manner of death was accident. The autopsy did not identify significant natural disease. The flight instructor's injuries included pelvic fractures and his urinary bladder was lacerated and empty.

2.4 Toxicology

At the request of the Montgomery County Forensic Services Department, NMS Labs performed postmortem toxicological testing of femoral blood from the flight instructor. No tested-for substances were detected.¹

¹ The NMS Labs toxicology report listed tested-for substances as: amphetamines, barbiturates, benzodiazepines, buprenorphine / metabolite, cannabinoids, cocaine / metabolites, fentanyl / acetyl fentanyl, methadone / metabolite, methamphetamine / MDMA, opiates, oxycodone / oxymorphone, phencyclidine, acetone, ethanol, isopropanol, and methanol.

The FAA Forensic Sciences Laboratory also performed postmortem toxicological testing of specimens from the flight instructor. No tested-for substances were detected.²

E. SUMMARY OF MEDICAL FACTS

1.0 Pilot

The 67-year-old male pilot's last aviation medical examination before the crash was March 8, 2022. At that time, he reported no significant medical concerns. He was issued a third-class medical certificate limited by a requirement to have available glasses for near vision.

Following the crash, the pilot was transported to a hospital emergency department (ED) for evaluation of his injuries. Imaging studies performed for that purpose were without findings of significant natural disease. No significant past medical history or home medication use was documented. A COVID-19 coronavirus test was positive. Laboratory studies were otherwise generally unremarkable and did not include testing for alcohol or other drugs. No findings requiring hospitalization were identified, and the pilot was discharged from the ED.

2.0 Flight Instructor

The 31-year-old male flight instructor's last aviation medical examination was April 28, 2022. At that time, he reported no medication use or active medical conditions. He was issued a first-class medical certificate without limitation.

Following the crash, the flight instructor experienced cardiac arrest before arriving to the hospital. Resuscitation efforts were unsuccessful. According to the flight instructor's autopsy report, his cause of death was multiple blunt force injuries, and his manner of death was accident. The autopsy did not identify significant natural disease. The flight instructor's injuries included pelvic fractures and his urinary bladder was lacerated and empty. Postmortem toxicological testing of specimens from the flight instructor did not detect any tested-for substances.

Submitted by:

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Medical Officer

² The FAA Forensic Sciences laboratory has the capability to test for around a thousand substances including toxins, prescription and over-the-counter medications, and illicit drugs.