



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

March 25, 2022

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. ACCIDENT: ERA21LA068; Attalla, AL

Date and time: December 12, 2020

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, toxicology findings, and the investigator's preliminary report. Relevant regulation and medical literature were reviewed as appropriate.

FAA Medical Case Review

According to the FAA medical case review, the 74-year-old male pilot had reported 13,299 total hours of civil flight experience as of his last aviation medical exam, dated 12/4/2018. At that time, he was 69 inches tall and weighed 189 pounds. The pilot had a SODA for a remote below the knee amputation. He reported no chronic medical conditions and no use of medications. No significant abnormalities were identified and he was issued a second class medical certificate limited by a requirement he wear corrective lenses.

Autopsy

Because of the degree of fragmentation of the remains, no autopsy was performed.

Toxicology

Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified lamotrigine in muscle, the only specimen available.

Personal Medical Records

Records from the pilot's primary physician for the 3 years preceding the crash were requested; records from a single visit in December 2019 were provided and reviewed. According to the records, the pilot had a history of prostate cancer, macular degeneration, and phantom limb pain from his amputation. According to these records, the pilot's usual medications included tamsulosin and lamotrigine.

Records were also obtained from the pilot's oncologist for visits beginning in September 2019. The pilot had been diagnosed in September 2017 with high grade intraepithelial neoplasia but his prostate-specific antigen test continued to rise. Repeat evaluation revealed the presence of adenocarcinoma of the prostate in November 2018. Treatment with proton therapy did not improve his PSA numbers and in December 2019 further evaluation demonstrated metastatic disease. He was then treated with hormonal therapy and his PSA dropped to normal within a few months. The oncologist listed his medical conditions as benign prostatic hypertrophy, gastroesophageal reflux disease, and prostate cancer. The oncologist listed the lamotrigine and tamsulosin since his first visit without further comments on the medical condition for which he was using the lamotrigine.

Substance Descriptions

Tamsulosin, often marketed with the name Flomax, is used to treat symptoms of benign prostatic hypertrophy. It is not generally considered impairing.¹

Lamotrigine, often marketed with the name Lamictal, is approved for adjunctive treatment of epilepsy. Not uncommonly, it is used off-label for the treatment of neuropathy. Side effects include the potential for dizziness, tremors, somnolence, balance disorders, depression/suicidality, rash, and cardiac arrhythmias.²

¹ National Institutes of Health. US National Library of Medicine. Tamsulosin. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=339c3b57-a339-4578-bfd7-46b25d911ff6> Accessed 3/21/2022.

² National Institutes of Health. US National Library of Medicine. Lamotrigine. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=fb59c76a-9b6f-40ea-ac3a-58c3195c4377> Accessed 3/21/2022.

D. SUMMARY OF MEDICAL FINDINGS

The 74-year-old male pilot had a SODA for a remote below the knee amputation. He had reported no chronic medical conditions and no use of medications to the FAA. Because of the degree of fragmentation of the remains, no autopsy was performed. Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified lamotrigine in muscle, the only specimen available.