



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

April 13, 2021

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. ACCIDENT: ERA20LA179; Land O Lakes, FL

Date and time: May 12, 2020; 1125 EDT

Aircraft: Beech F33

Outcome: 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 reports were reviewed. Relevant regulation and medical literature were reviewed as appropriate.

FAA Medical Case Review

According to the FAA medical case review, the 61 year old male pilot reported 1035 total flight hours as of his last medical exam, dated 3/1/2019. At that time, he was 75 inches tall and weighed 225 pounds. He had reported medical disability benefits (military) related to back and knee problems and no use of medications to the FAA. No significant abnormalities were identified on the physical exam and he was issued a second class medical certificate limited by a requirement he wear corrective lenses.

Autopsy

According to the autopsy performed by the Medical Examiner' District Six, Pasco and Pinellas Counties, the cause of death was thermal injuries and the manner of death was accident. No significant natural disease was identified.

Toxicology

Toxicology testing performed by the Pinellas County Forensic Laboratory at the request of the medical examiner did not identify any tested-for substances.

Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified trazodone at 317 ng/ml in heart blood and in urine as well as gabapentin at 525 ng/ml in heart blood and in urine.

Medication Descriptions

Trazodone is a sedating antidepressant often marketed with the name Desyrel. It carries this warning, "Trazodone hydrochloride may cause somnolence or sedation and may impair the mental and/or physical ability required for the performance of potentially hazardous tasks. Patients should be cautioned about operating hazardous machinery, including automobiles, until they are reasonably certain that the drug treatment does not affect them adversely."¹ The range of blood levels believed to cause psychoactive effects is between 500 and 2500 ng/ml.²

Gabapentin is an anticonvulsant often used to treat chronic pain syndromes or nerve pain and is commonly marketed with the name Neurontin. Gabapentin carries this warning, "Patients taking Gabapentin should not drive until they have gained sufficient experience to assess whether Gabapentin impairs their ability to drive. Driving performance studies conducted with a prodrug of gabapentin (gabapentin enacarbil tablet, extended-release) indicate that gabapentin may cause significant driving impairment. Prescribers and patients should be aware that patients' ability to assess their own driving competence, as well as their ability to assess the degree of somnolence caused by Gabapentin, can be imperfect. The duration of driving impairment after starting therapy with Gabapentin is unknown. Whether the impairment is related to somnolence or other effects of Gabapentin is unknown.

Moreover, because Gabapentin causes somnolence and dizziness, patients should be advised not to operate complex machinery until they have

¹ National Institutes of Health. US National Library of Medicine. DailyMed. Trazodone. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=ed3039d8-3d27-4b71-a4b0-812943c9457f> Accessed 4/7/2021.

² Federal Aviation Administration CAMI toxicology Drug Information. Trazodone. <https://jag.cami.jccbi.gov/toxicology/DrugDetail.asp?did=200> Accessed 4/7/2021.

gained sufficient experience on Gabapentin to assess whether Gabapentin impairs their ability to perform such tasks.”³ When used to treat seizures, the effective range of blood levels for gabapentin is considered between 2000 and 10000 ng/ml.⁴

Finally, “Patients should be carefully observed for signs of central nervous system (CNS) depression, such as somnolence and sedation, when Gabapentin is used with other drugs with sedative properties because of potential synergy.”

Personal Medical Records

Records from the pilot’s primary care and multispecialty care provider within the Veteran’s Administration system and pain treatment provider for the three years preceding the accident were obtained and reviewed. These demonstrated that the pilot had a total of 90% service connected disability, 50% of which was due to dysthymic disorder (depression) and the rest due to orthopedic and peripheral nerve problems. The pilot had been treated for this entire period with trazodone for his depression without seeing psychiatry. No comments were made regarding his mental state by any of the physicians he visited. He had used a variety of other medications for treatment of chronic insomnia, chronic back and nerve pain, and orthopedic procedures. He had been using gabapentin daily since at least 2017 to treat chronic pain.

D. SUMMARY OF MEDICAL FINDINGS

The 61 year old male pilot had reported only orthopedic issues to the FAA and denied the regular use of any medication.

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Review of personal medical records reflected long standing depression and the use of trazodone and gabapentin for many years.

³ National Institutes of Health. US National Library of Medicine. DailyMed. Gabapentin. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=7538e255-95df-4991-aae0-a90d709f1e95> Accessed 4/7/2021.

⁴ Federal Aviation Administration CAMI toxicology Drug Information. Gabapentin. <https://jag.cami.jccbi.gov/toxicology/DrugDetail.asp?did=254> Accessed 4/7/2021.