



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

June 10, 2019

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Chief Medical Officer

A. ACCIDENT: CEN18LA274; Lakeview, AR

On July 11, 2018, about 2030 central daylight time, a Cessna 150H airplane, N50183, impacted terrain and sustained substantial damage after takeoff from Gaston's Airport (3M0), Lakeview, Arkansas. The student pilot, the sole occupant, sustained serious injuries. The airplane was registered to a private individual and was operated by the pilot under the provisions of Title 14 Code of Federal Regulations Part 91 as a visual flight rules personal flight. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed. The flight originated from 3M0 about 2028.

In a conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on July 18, a Federal Aviation Administration (FAA) aviation safety inspector (ASI) from the FAA Little Rock Flight Standards District Office reported to the NTSB IIC that he spoke with the pilot July 16 via telephone. The pilot reported to the FAA ASI that after takeoff from runway 24, the right wing impacted a tree branch. The pilot reported he overcorrected from impacting the tree branch and aerodynamically stalled the airplane. The airplane impacted a grass clearing and came to rest inverted near trees. The pilot was extracted from the wreckage and transported via an air ambulance helicopter to a hospital for medical treatment.

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 blue ribbon medical file, post accident medical treatment records, police files, and the investigator's reports were reviewed. Relevant regulation and medical literature were reviewed as appropriate.

FAA Blue Ribbon Medical File

According to the FAA blue ribbon medical file, the 38 year old male student pilot had applied once for a medical certificate, on 7/19/2017. At that time, he reported having 22 total flight hours. He was 67 inches tall and weighed 188 pounds. He reported no medical conditions but did report the use of finasteride which is used to treat hair loss and symptoms of an enlarged prostate.¹ No significant physical abnormalities were noted and the student pilot was issued a third class medical certificate without limitations.

Following the accident, the pilot was asked to provide information regarding his injuries and post accident medical treatment. He did not do so and on 9/19/2018 the case was referred for legal enforcement action.

Post Accident Medical Treatment Records

Records from the student pilot's post accident hospitalization were reviewed. The student pilot reported to his health care providers that prior to the accident he had been diagnosed with muscle spasms, major depression, hypertension, and was taking baclofen, bupropion, a combination tablet of lisinopril and hydrochlorothiazide, as well as finasteride to treat these conditions. The student pilot also told his healthcare providers that he had been drinking alcohol during the afternoon before the flight. Although local law enforcement requested a legal blood draw for alcohol during the pilot's initial stay in the emergency department, he refused.

No clinical blood alcohol or urine drug screen order or report are present in his medical records. No specimens were obtained for testing by the FAA Forensic Sciences Laboratory.

The pilot was admitted and treated for lacerations, multiple broken bones, and a small pneumothorax and later discharged.

Description of Medications

Baclofen is used to treat muscle spasms. The drug information for baclofen contains this statement, "Because of the possibility of sedation, patients should be cautioned regarding the operation of automobiles or other dangerous machinery, and activities made hazardous by decreased

¹National Institutes of Health. US National Library of Medicine. DailyMed. Finasteride.
<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=81b424d3-8418-4497-9395-59cae6755230>
Accessed 5/24/2019.

alertness. Patients should also be cautioned that the central nervous system effects of baclofen may be additive to those of alcohol and other CNS (central nervous system) depressants.”²

Bupropion is used to treat major depression. Often marketed as Wellbutrin, it causes increased risk of seizure, which is dose dependent. It may also cause hypertension, increase the risk of suicide in adolescents and young adults, and cause a number of psychiatric events such as hallucinations, mania, psychosis, concentration disturbance, paranoia, and confusion. The drug information for bupropion also contains this statement, “In postmarketing experience, there have been rare reports of adverse neuropsychiatric events or reduced alcohol tolerance in patients who were drinking alcohol during treatment with bupropion hydrochloride extended-release tablets (XL). The consumption of alcohol during treatment with bupropion hydrochloride extended-release tablets (XL) should be minimized or avoided.”³

Lisinopril/hydrochlorothiazide is used to treat hypertension.⁴ Finasteride is described above. These three drugs are not generally considered impairing.

Alcohol is the intoxicant commonly found in beer, wine, and liquor. It acts as a central nervous system depressant. After ingestion, at low doses, it impairs judgment, psychomotor functioning, and vigilance; at higher doses it can cause coma and death. The effects of ethanol on aviators are generally well understood; it significantly impairs pilots’ performance, even at very low levels. Federal Aviation Regulations, Section 91.17 (a) prohibits any person from acting or attempting to act as a crewmember of a civil aircraft while having 0.040 gm/dl or more ethanol in the blood.

D. SUMMARY OF MEDICAL FINDINGS

The 38 year old male student pilot had reported no chronic medical conditions and only the use of finasteride to the FAA. After the accident, he reported to his health care providers that he had muscle spasms, major depression, hypertension, and was taking baclofen, bupropion, a combination tablet of lisinopril and hydrochlorothiazide, as well as finasteride to treat these conditions. In addition, he admitted to drinking alcohol during the afternoon before the flight. No toxicology testing was performed.

² National Institutes of Health. US National Library of Medicine. DailyMed. Baclofen. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=346af8fe-3816-49de-bfd3-5a7425e728f9> Accessed 5/24/2019.

³ National Institutes of Health. US National Library of Medicine. DailyMed. bupropion. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=bff74476-f633-4048-bb11-3af93950c54c> Accessed 5/24/2019.

⁴ National Institutes of Health. US National Library of Medicine. DailyMed. Lisinopril/hydrochlorothiazide. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=96922ddc-e87f-4670-b22e-0ffd0d8f66e1> Accessed 5/24/2019.