



# **NATIONAL TRANSPORTATION SAFETY BOARD**

Office of Research and Engineering  
Washington, DC

## **Medical Factual Report**

**May 10, 2022**

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Medical Officer

### **A. ACCIDENT INFORMATION**

Identification: WPR22FA044

Location: Big Bear City, California

Date: November 20, 2021

### **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 and the presence of potentially impairing substances.

#### **2. Methods**

The Federal Aviation Administration (FAA) medical case review and the pilot's autopsy and toxicology reports were reviewed. Investigator reports and relevant regulation and medical literature were also reviewed.

#### **3. Findings**

##### **a. Medical Case Review**

According to the FAA medical case review, the 58-year-old male pilot's last aviation medical examination was on October 21, 2021. At that time, he reported 18,000 civilian flight hours. He was 73 inches tall and weighed 209 pounds. He reported no medication use and no active medical conditions. No significant issues were identified, and he was issued a first-class medical certificate without limitation.

b. Autopsy

The San Bernardino County Sheriff's Department Coroner Division performed the pilot's autopsy, which, due to the extent of injuries, was limited to an external examination only. According to the autopsy report, the cause of death was multiple blunt force injuries, and the manner of death was accident.

c. Toxicology

The FAA Forensic Sciences Laboratory performed toxicological testing on muscle from the pilot.<sup>1</sup> Doxylamine was detected. No blood was available for testing.

d. Description of Detected Substance

Doxylamine is a sedating antihistamine medication that is available over the counter as a sleep aid and as an ingredient in various cold and allergy products.<sup>2,3</sup> Sedating antihistamines can cause drowsiness and may have impairing effects on task performance.<sup>4</sup> The FAA states that pilots should not fly within 60 hours of using doxylamine, to allow time for it to be eliminated from circulation.<sup>5,6</sup>

## D. SUMMARY OF MEDICAL FINDINGS

The 58-year-old male pilot's last aviation medical examination was on October 21, 2021. At that time, he reported no medication use and no active medical conditions. He was issued a first-class medical certificate without limitation.

The San Bernardino County Sheriff's Department Coroner Division performed the pilot's autopsy, which, due to the extent of injuries, was limited to an external examination only. According to the autopsy report, the cause of death was multiple blunt force injuries, and the manner of death was accident. Toxicological testing of the pilot's muscle detected doxylamine.

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<sup>1</sup> The FAA Forensic Sciences Laboratory tested muscle for a wide variety of drugs, including medications and drugs of abuse, and for volatiles, including ethanol.

<sup>2</sup> National Institutes of Health National Library of Medicine. Unisom SleepTabs. DailyMed. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f591d52f-5610-4517-a96f-1ed63deb00bc>. Updated May 2, 2018. Accessed May 10, 2022.

<sup>3</sup> National Institutes of Health National Library of Medicine. Vicks NyQuil Cold and Flu Nighttime Relief. DailyMed. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=9090d896-7d6f-4080-97de-bd08f62f613b>. Updated December 3, 2021. Accessed May 10, 2022.

<sup>4</sup> Moskowitz H, Wilkinson CJ. *Antihistamines and Driving-Related Behavior: A Review of the Evidence for Impairment*. National Highway Traffic Safety Administration. DOT HS 809 714. May 2004. <https://www.nhtsa.gov/sites/nhtsa.gov/files/antihistamines20text.pdf>. Accessed May 10, 2022.

<sup>5</sup> Federal Aviation Administration. Guide for aviation medical examiners: pharmaceuticals (therapeutic medications) do not issue - do not fly. Federal Aviation Administration website. <https://www.faa.gov/go/dni>. Updated February 19, 2021. Accessed May 10, 2022.

<sup>6</sup> Federal Aviation Administration. Allergy – antihistamine & immunotherapy medication. Guide for Aviation Medical Examiners. [https://www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/aam/ame/guide/media/AllergyAntihistamineImmunotherapyMedication.pdf](https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/media/AllergyAntihistamineImmunotherapyMedication.pdf). Updated July 28, 2021. Accessed May 10, 2022.