



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report **April 28, 2022**

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Medical Officer

A. ACCIDENT: WPR20LA123 – Auburn, CA

Date/Time: April 18, 2020; 10:41 a.m. (PDT)
Aircraft: Cessna TU206, N756TH
Injuries: 1 fatal, 1 serious
Flight conducted under Part 91 personal flight.

B. GROUP IDENTIFICATION

No group was formed for the medical evaluation in this accident.

C. DETAILS OF INVESTIGATION

Purpose

This investigation was performed to evaluate the pilot and pilot-rated passenger for medical conditions, the use of medications/illicit drugs, and the presence of toxins.

Methods

The initial Federal Aviation Administration (FAA) medical case review and the pilot's autopsy and Forensic Sciences Laboratory toxicology¹ reports were reviewed. Other pertinent scientific and regulatory issues were reviewed.

FAA Medical Case Review

According to the initial FAA medical case review, at the time of the accident, the 72-year-old male pilot had a deferred third class medical certificate. At the time of the most recent exam (2/28/20), the pilot was 69 inches tall and weighed 195 pounds. He reported having 838 civil flight hours. He reported taking hydroxychloroquine (commonly marketed as Plaquenil) for a new medical diagnosis of inflammatory arthritis, possible rheumatoid arthritis. His medical certification was deferred at the examination to await a decision by FAA. His previous medical certification expired on 3/31/20.

¹ The FAA Forensic Sciences Laboratory has the capability to test for more than 1,300 substances including toxins, common prescription and over-the-counter medications, and illicit drugs. <https://jag.cami.jccbi.gov/toxicology/>

According to the initial FAA medical case review, at the time of the accident, the 64-year-old male pilot-rated passenger held a first class medical certificate with the limitation that he must wear corrective lenses. At the time of the most recent exam (11/21/19), the pilot-rated passenger was 67 inches tall and weighed 210 pounds. He reported having 19,600 civil flight hours. He reported taking rosuvastatin to treat high cholesterol and losartan and hydrochlorothiazide to treat high blood pressure. No significant medical concerns were identified.

Autopsy—Pilot

According to the autopsy report by the Office of the Sheriff-Coroner—Placer County, Auburn California, the pilot died from multiple blunt force and thermal injuries and the manner of death was accident. The forensic pathologist reported that the pilot had marked abdominal aorta atherosclerosis and 75 to 90% calcific stenosis of portions of his left anterior descending coronary, left circumflex, and left main coronary arteries.

Toxicology—Pilot

FAA Forensic Sciences Laboratory toxicology testing detected the immunomodulating medication hydroxychloroquine in the pilot's heart blood and urine. Hydroxychloroquine is indicated for use in rheumatoid arthritis, lupus, and malaria treatment. Patients are advised that serious cardiac side effects could occur including a fast or irregular heartbeat, lightheadedness, dizziness, or syncope.² The non-impairing medication tamsulosin used to treat an enlarged prostate was also detected in the pilot's heart blood and urine.³ Toxicology testing performed for the coroner's office was negative for tested-for drugs; hemoglobin testing indicated some binding of combustion products.

No toxicology testing was performed for the surviving pilot-rated passenger.

D. SUMMARY OF MEDICAL FINDINGS

The 72-year-old male pilot had a deferred third class medical certificate; his previous medical certificate expired on 3/31/20. At the time of the most recent exam (2/28/20), the pilot reported taking hydroxychloroquine for a new medical diagnosis of inflammatory arthritis, possible rheumatoid arthritis. According to the autopsy, the pilot died from multiple blunt force and thermal injuries and the manner of death was accident. The pilot had marked abdominal aorta atherosclerosis and 75 to 90% calcific stenosis of portions of his left anterior descending coronary, left circumflex, and left main coronary arteries. Toxicological testing detected the immunomodulating medication hydroxychloroquine and the non-impairing tamsulosin in his heart blood and urine.

The 64-year-old male pilot-rated passenger held a first class medical certificate with the limitation that he must wear corrective lenses. At the time of the most recent exam (11/21/19), he reported treatment for high cholesterol and high blood pressure. No significant medical concerns were identified. No toxicology testing was performed for the pilot-rated passenger.

² National Institutes of Health (NIH).US National Library of Medicine (NLM). [DailyMed - PLAQUENIL-hydroxychloroquine sulfate tablet \(nih.gov\)](#) Updated 8/18/21.

³ NIH. NLM. [DailyMed - TAMSULOSIN HYDROCHLORIDE capsule \(nih.gov\)](#) Updated 3/20/21.