

National Transportation Safety Board

Office of Research and Engineering

Washington, DC 20594



WPR22FA210

MEDICAL

Specialist's Factual Report

May 25, 2023

A. ACCIDENT

Location: Camarillo, California
Date: 6/10/2022
Time: 08:03 Local
Airplane: Mooney M20K; N305L

B. MEDICAL SPECIALIST

Specialist Michelle Watters, MD, PhD, MPH
National Transportation Safety Board, RE-1
Washington, DC

C. DETAILS OF THE INVESTIGATION

Purpose

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

Methods

The Federal Aviation Administration (FAA) medical case review, the pilot's autopsy report, and FAA Forensic Sciences Laboratory toxicology report¹ were reviewed. Other relevant medical and regulatory issues were reviewed.

D. FACTUAL INFORMATION–PILOT

1.0 FAA Medical Case Review

According to the FAA medical case review, at the time of the accident, the 68-year-old male pilot did not have a valid FAA medical certificate. His most recent FAA medical certification exam was in 2014. At that exam, the pilot reported 2,100 total flying hours and was 68 inches tall and weighed 185 pounds. He reported no medications, and no significant medical issues were identified. He was issued a third class medical certificate that expired in 2016 that had the limitation that he must wear corrective lenses for near and distant vision. The pilot did not have a special issuance for any medical condition. There was a telephone complaint received from a relative in 2018, stating that the pilot had a heart attack in 2017 and received a "heart and

¹ The FAA Forensic Sciences Laboratory has the capability to test for more than 1,000 substances including toxins, common prescription and over-the-counter medications, and illicit drugs. <https://jag.cami.jccbi.gov/toxicology/>

valve transplant” and asking if the pilot was eligible for BasicMed.² The pilot applied for Basic Med on 5/6/19; his provision for flying under BasicMed expired in 2021.

2.0 Autopsy

According to the autopsy report from the Ventura County Medical Examiner’s Office, Ventura, California, the pilot’s cause of death was blunt trauma, and the manner of death was accident. The examination was limited by extensive injury; the pilot’s brain was not available for examination. His trachea and bronchi did not contain soot. The medical examiner reported that the pilot’s heart weighed 530 grams and he had 60% stenosis of the proximal section of his left anterior descending coronary artery. There was a focal subendocardial white-tan area of the posterior interventricular septum. The pilot was noted to have a pacemaker in place and a mitral valve replacement. Likely from thermal damage, the pacemaker representative was unable to retrieve information from the pacemaker.

3.0 Toxicology

Toxicology testing performed by the FAA Forensic Sciences Laboratory was inconclusive for metoprolol in the pilot’s cavity blood; metoprolol was detected in his liver tissue. Metoprolol is a medication used to lower blood pressure and reduce angina attacks. It is not a first line hypertensive medication unless the patient has a history of ischemic heart disease. The drug is generally considered non-impairing.^{3,4}

E. SUMMARY OF MEDICAL FACTS

The 68-year-old male pilot did not have a valid FAA medical certificate. His most recent FAA medical certification exam was in 2014. According to the autopsy report, the pilot’s cause of death was blunt trauma, and the manner of death was accident. The examination was limited by extensive injury; the pilot’s brain was not available for examination. The pilot’s heart weighed 530 grams and he had 60%

² General aviation pilots could begin flying under BasicMed on May 1, 2017. According to the FAA’s [BasicMed | Federal Aviation Administration \(faa.gov\)](https://www.faa.gov/basicmed) webpage (accessed 5/24/23), BasicMed “is an alternate way for pilots to fly without holding an FAA medical certificate as long as they meet certain requirements.” Those requirements are presented on the webpage and include the requirement to have an FAA special issuance authorized before operating under BasicMed if the pilot had a cardiovascular diagnosis of myocardial infarction, coronary heart disease requiring treatment, cardiac valve replacement, or heart replacement.

³ National Institutes of Health (NIH). U.S. National Library of Medicine (NLM). [DailyMed - METOPROLOL SUCCINATE- metoprolol succinate er tablets tablet, film coated, extended release \(nih.gov\)](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?id=68089). Updated 5/4/23.

⁴ Whelton, PK., et al. 2018. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Hypertension* 71:1269-1324.

stenosis of the proximal section of his left anterior descending coronary artery, a focal subendocardial white-tan area of the posterior interventricular septum, a pacemaker, and a mitral valve replacement. Toxicology testing was inconclusive for metoprolol in the pilot's cavity blood; metoprolol was detected in his liver tissue.

Submitted by:

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