



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

May 17, 2021

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. ACCIDENT: WPR21LA032; Billings, MT

Date and time: October 30, 2020, 19:05 local

Injuries: 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, 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 74 year old male pilot had reported 851 total flight hours as of his last medical exam, dated 1/23/2018. At that time, he was 68 inches tall and weighed 206 pounds. He reported having had coronary artery bypass procedures in 2004 and 2010 to the FAA. He had also reported having hypertension, cataract surgery (bilateral), and vascular surgery. At his last exam, he reported using losartan, amlodipine, aspirin, meloxicam, atorvastatin, and metoprolol to control his diseases. No significant abnormalities were identified on the physical exam and he was issued a special issuance third class medical certificate limited by a requirement he wear corrective

lenses for distant vision and have available glasses for near vision. In addition, it was marked, “Not valid for any class after 1/31/2019.” The pilot had completed the BasicMed course most recently on 11/26/2018 and signed that he had completed the comprehensive medical examination checklist on 11/22/2018.

Autopsy

According to the autopsy performed by the Department of Justice, Forensic Science Division, the cause of death was multiple blunt force injuries and the manner of death was accident. In addition, severe atherosclerotic stenosis (>75%) of left anterior descending coronary artery and moderate (<75%) atherosclerotic stenosis of right coronary artery was identified. A single patient graft to the left marginal artery was identified. The pathologist reported the presence of hypertensive cardiovascular disease based on elevated heart weight (wall thicknesses not described) and on the appearance of the kidneys.

Toxicology

Toxicology testing performed by the FAA’s Forensic Sciences Laboratory identified losartan, amlodipine, metoprolol, and zolpidem in cavity blood and urine.

Medication Descriptions

Losartan is a prescription blood pressure medication.¹ Amlodipine is a prescription blood pressure medication, often marketed with the name Norvasc.² Metoprolol is used to treat high blood pressure and to reduce the risk of recurrent heart attack.³ None of these drugs are considered impairing.

Zolpidem is a short acting sleep agent, available by prescription as a Schedule IV controlled substance. This drug carries a number of warnings, including the potential for altered behaviors, agitation, hallucinations, and performing complex behaviors (such as eating and driving) while asleep.⁴ The absence of a quantified amount of zolpidem in the available sample indicates the level was well below that thought to cause effects.

¹ National Institutes of Health. US National Library of Medicine. DailyMed. Losartan. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=d5571a70-fe83-4277-ac42-ffaff2e051b2> Accessed 5/17/2021.

² National Institutes of Health. US National Library of Medicine. DailyMed. Amlodipine. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=b52e2905-f906-4c46-bb24-2c7754c5d75b> Accessed 11/16/2019.

³ National Institutes of Health. US National Library of Medicine. DailyMed. Metoprolol. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=90aa06a3-100f-4466-b950-506303707b01> Accessed 5/17/2021.

⁴ National Institutes of Health. US National Library of Medicine. DailyMed. Zolpidem. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=208db529-ae52-462d-8fd2-775b11ce6350> Accessed 5/17/2021.

D. SUMMARY OF MEDICAL FINDINGS

The 74 year old male pilot had reported having had coronary artery bypass procedures in 2004 and 2010 to the FAA. He had also reported having hypertension, cataract surgery (bilateral), and vascular surgery. At his last exam, he reported using losartan, amlodipine, aspirin, meloxicam, atorvastatin, and metoprolol to control his diseases. These are not considered impairing. At the time of the accident, the pilot was certified under BasicMed.

According to the autopsy performed by the Department of Justice, Forensic Science Division, the cause of death was multiple blunt force injuries and the manner of death was accident. In addition, severe atherosclerotic stenosis (>75%) of left anterior descending coronary artery and moderate (<75%) atherosclerotic stenosis of right coronary artery was identified. A single patient graft to the left marginal artery was identified. The pathologist reported the presence of hypertensive cardiovascular disease based on elevated heart weight (wall thicknesses not described) and on the appearance of the kidneys.

Toxicology testing identified losartan, amlodipine, metoprolol, and zolpidem in cavity blood and urine.