



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

March 23, 2016

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Chief Medical Officer

A. ACCIDENT: ERA15FA297, Saranac Lake, NY

On August 7, 2015, about 1750 eastern daylight time, a Piper PA-46-500TP, N819TB, registered to Majestic Air LLC and operated by a private individual, was destroyed during collision with terrain, shortly after takeoff from Adirondack Regional Airport (SLK), Saranac Lake, New York. The private pilot and three passengers were fatally injured. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and an instrument flight rules flight plan was filed for the planned flight to Greater Rochester International Airport (ROC), Rochester, New York.

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 any medical conditions, the use of any medications/illicit drugs, and the presence of any toxins.

2. Methods

The FAA blue ribbon medical file, FAA medical case review, toxicology results, autopsy report, and the investigator's reports were reviewed.

FAA Medical File and Medical Case Review

According to the FAA files, the 67 year old male pilot received his first aviation medical certificate in 1975, limited by a requirement for corrective lenses. He reported no medical conditions and no medications and routinely received a third class medical certificate over the ensuing years. From 2003 forward, the pilot applied for and received second class

medical certificates with the same limitation. In 2007, the pilot reported having had Lasik vision correction, and the limitation was changed to a requirement to have available glasses for near vision. In 2013, the pilot reported taking simvastatin, a cholesterol lowering agent also marketed with the name Zocor.¹

As of his last aviation medical exam, dated 03/16/2015, the pilot reported 4,620 hours of flight experience. At that time, he was 72 inches tall, weighed 172 pounds, and reported no medical conditions or no medications. He was issued a second class medical certificate limited by a requirement to wear corrective lenses and to possess glasses for near and intermediate vision.

Autopsy

According to the autopsy performed by the Adirondack Health Department of Pathology at the request of the Franklin County Coroner, the cause of death was multiple blunt force injuries due to aircraft accident.

In addition to his injuries, significant heart disease was identified, although the examination of the body was limited by the degree of thermal injury. The heart weighed 340 grams; average for a 172 pound man is 345 grams with a range of 261- 455 grams.² The left ventricular wall measured 1.5 cm thick, the interventricular septum was 1.5 to 2 cm thick, and the right ventricular wall was 0.5 cm. Average is less than 1.3 for the left ventricle and septum, and less than 0.3 cm for the right ventricle.² In addition, there was severe coronary artery disease with an 80% stenosis of the left anterior descending artery and a slit shaped 70-80% stenosis of the right coronary artery. However, there was no evidence of recent or old infarction. The valves were described as anatomically normal except for a 1x1 cm area of calcification of the mitral valve ring below the septal leaflet.

Toxicology

Toxicology testing performed by the FAA's Bioaeronautical Research Laboratory did not identify any ethanol, or any other tested-for substance in the pilot's specimens.

D. SUMMARY OF MEDICAL FINDINGS

This 67 year old male pilot had reported no medical conditions to the FAA. He had reported use of a cholesterol lowering agent in 2013, but on an exam five months before his fatal accident he reported no medications. His toxicology tests were negative for any tested-for substance. However, the autopsy identified calcification of the mitral annular ring as well as coronary artery disease with about 80% stenosis in both the right and left anterior descending coronary arteries but without evidence of damage from a previous heart attack.

References

¹ Drugs.com. FDA prescribing information, side effects, and uses. Simvastatin.
<http://www.drugs.com/pro/simvastatin.html> Accessed 3/23/2016.

² Kitzman DW, Scholz DG, Hagen PT, Ilstrup DM, Edwards WD. Age-related changes in normal human hearts during the first 10 decades of life. Part II (Maturity): A quantitative anatomic study of 765 specimens from subjects 20 to 99 years old. Mayo Clinic Proc., 1988. 63(2): p. 137-46.