



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

Medical Factual Report

March 14, 2022

Mary Pat McKay, MD, MPH
Chief Medical Officer

A. ACCIDENT: ERA21FA225; Winterville, NC

Date and time: May 22, 2021

Injuries: 2 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 preliminary report. Relevant regulation and medical literature were reviewed as appropriate.

FAA Medical Case Review

According to the FAA medical case review, the light sport pilot had never applied for nor obtained an aviation medical exam.

Autopsy

According to the autopsy report issued by the Ecu Brody School of Medicine's Division of Forensic Pathology, the cause of death for the 62 year old male pilot was multiple injuries. The pilot was noted to have an enlarged heart (cardiomegaly) with a total heart weight of 620gm. Heart weight is most closely related to body weight; the pilot's preaccident body weight is unknown; he suffered significant thermal injury and his autopsy

weight was 233 pounds. In addition, his heart demonstrated somewhat thickened walls: the left ventricle measured 1.4 cm, the septum measured 1.5 cm, and the right ventricular wall measured 0.4 cm. Average for these numbers are 1.3, 1.3, and 0.3 cm.¹ These types of changes are often associated with obesity and hypertension. No other significant disease was identified.

Toxicology

Toxicology tests performed by the ECU Division of Forensic Pathology at the request of the pathologist did not identify any tested-for substances.

Toxicology testing performed by the FAA's Forensic Sciences Laboratory identified losartan in blood and urine. Losartan is a blood pressure medication that is not generally considered impairing.²

D. SUMMARY OF MEDICAL FINDINGS

The 62 year old male light sport pilot had never undergone an aviation medical exam and was not required to. The FAA therefore had no medical information regarding him.

According to the autopsy report issued by the Ecu Brody School of Medicine's Division of Forensic Pathology, the cause of death for the 62 year old male pilot was multiple injuries. The pilot was noted to have an enlarged heart (cardiomegaly) with a total heart weight of 620gm. Heart weight is most closely related to body weight; the pilot's preaccident body weight is unknown; he suffered significant thermal injury and his autopsy weight was 233 pounds. In addition, his heart demonstrated somewhat thickened walls: the left ventricle measured 1.4 cm, the septum measured 1.5 cm, and the right ventricular wall measured 0.4 cm. Average for these numbers are 1.3, 1.3, and 0.3 cm. These types of changes are often associated with obesity and hypertension. No other significant disease was identified.

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¹ 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 Study of 765 Specimens from 20 to 99 Years Old. Mayo Clin Proc. 1988; 63:137-146.

² National Institutes of Health. US National Library of Medicine. DailyMed. Losartan. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a8817f22-8478-49b9-8354-ab27ca222c6b> Accessed 3/14/2022.