



## NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering  
Washington, DC

### **Medical Factual Report**

**August 29, 2016**

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Medical Officer

#### **A. ACCIDENT: ERA15FA088 - Kuttawa, Kentucky**

On January 2, 2015, at about 1800 central standard time, a Piper PA-34-200T, N81291, was substantially damaged when it impacted trees and terrain during a forced landing near Kuttawa, Kentucky. The commercial pilot, and three passengers were fatally injured, and another passenger was seriously injured. Night instrument meteorological conditions prevailed and an instrument flight rules (IFR) flight plan was filed for the personal flight which was conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91. The flight departed Tallahassee Regional Airport (TLH), Tallahassee, Florida, around 4 p.m. eastern standard time, with the intended destination of Mount Vernon Airport (MVN), Mount Vernon, Illinois.

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

##### Methods

The FAA medical case review, FAA medical certification file, personal medical records, autopsy report, FAA toxicology report, and the investigator's report were reviewed.

##### FAA Medical Case Review and Medical Certification File

According to the FAA files, the 48-year-old male commercial pilot was first medically certified in 1983. As of his most recent medical certification examination, dated January 22, 2014, he measured 70 inches tall, weighed 232 pounds, and reported he had accrued 2,300 total flight hours. On his most recent exam and all exams over the prior 10 years, the pilot reported no medical concerns and did not use any prescription or nonprescription medication. Specifically, in section 18, Medical History, which asks "have you ever in your life been diagnosed with, had, or do you presently have... (m.)

Mental disorders of any sort: depression, anxiety...” he marked No. The aviation medical examiner did not identify any abnormal findings and issued a third class medical certificate without limitations.

### Personal Medical Records

According to the records from the pilot’s primary care provider from 6/2011 through 11/2014, the pilot was in good health, had a history of elevated lipids treated with rosuvastatin and anxiety / depression treated with citalopram for over four years. He had been on a stable dose of citalopram during this time and his symptoms were documented as well controlled with no adverse effects from the medication. The records did not identify any other significant natural disease.

Rosuvastatin is a lipid lowering medication marketed as Crestor.<sup>1</sup> Citalopram is a prescription medication marketed as Celexa that is used to treat a number of conditions including depression, anxiety and panic disorder.<sup>2,3</sup>

Citalopram is one of four specific selective serotonin reuptake inhibitors (SSRIs) that will be considered for special issuance of a medical certificate when used to treat a number of conditions including depression and any non-depression related condition for which an SSRI is used. The FAA will consider a special issuance of a medical certificate for the condition after 6 months of treatment if the applicant is clinically stable.<sup>4</sup>

### Autopsy

According to the Louisville Kentucky Medical Examiner’s autopsy report, the cause of death was multiple blunt force injuries and the manner was accident. The heart, described as enlarged, weighed 400 grams. Additionally, concentric left ventricular hypertrophy that measured 1.6 cm was described. The average heart for a man his weight is 403 grams (range 305-531 grams) and the average left ventricular free wall thickness 1.23 cm (standard deviation 0.16 cm).<sup>5</sup> Additionally, moderate coronary artery atherosclerosis was identified in the mid portion of the right coronary artery and the proximal portion of the left coronary artery measuring up to 50 percent stenosis. No other significant natural disease was identified.

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<sup>1</sup> National Library of Medicine (U.S.) 2016, *DailyMed*, Bethesda, MD: U.S. National Library of Medicine, National Institutes of Health, Health & Human Services. Rosuvastatin Calcium.  
<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=dde48e6f-1dd0-41f1-a1a5-01aa9a7459ba> Accessed 7/19/2016

<sup>2</sup> National Library of Medicine (U.S.) 2016, *DailyMed*, Bethesda, MD: U.S. National Library of Medicine, National Institutes of Health, Health & Human Services. Citalopram.  
<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=6daeb45c-451d-b135-bf8f-2d6dff4b6b01> Accessed 7/19/2016

<sup>3</sup> Stone KJ, Viera AJ, Parman CL. Off-Label Applications for SSRIs. *Am Fam Physician* 2003;68:498-504.  
<http://www.aafp.org/afp/2003/0801/p498.html> Accessed 08/18/2016

<sup>4</sup> Federal Aviation Administration, Guide for Aviation Medical Examiners, Item 47. Psychiatric Conditions - Use of Antidepressant Medications.  
[https://www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/aam/ame/guide/app\\_process/exam\\_tech/item\\_47/amd/antidepressants/](https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/app_process/exam_tech/item_47/amd/antidepressants/) Accessed 5/24/2016

<sup>5</sup> 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.

Toxicology

FAA Bioaeronautical Research Laboratory toxicology testing detected citalopram and its metabolite n-desmethylocitalopram in urine and blood (citalopram is described above). Additionally, rosuvastatin (described above) was detected in urine but not blood.

**D. SUMMARY OF FINDINGS**

The 48-year old pilot was in apparent good health but had not reported his history of depression / anxiety treated and controlled with citalopram for over 4 years on his medical certification examinations. Toxicological testing identified citalopram and rosuvastatin.

The autopsy documented the pilot had an enlarged heart with concentric left ventricular hypertrophy and moderate coronary artery disease with up to 50% narrowing of the mid right and proximal left coronary arteries.