

CEN13LA063

Oak Grove, LA; 11/19/2012

MEDICAL FACTUAL

The following were reviewed by Mary Pat McKay, MD, MPH, the Chief Medical Officer of the National Transportation Safety Board: the FAA medical review, the FAA investigator's report, the NTSB investigator's report, the toxicology findings, and the autopsy results.

According to the FAA medical review, this 68 year old pilot had a history of treatment for hypertension, high cholesterol, diabetes, and coronary artery disease requiring stents. Although he had been previously medically certified, his application for medical certification was denied in 2005 as a result of the extent of his coronary artery disease and the requirement for multiple medications to treat his diabetes and hypertension.

According to Title 14 Code of Federal Regulations Part 61 Section 23, light sport pilots must have either a valid medical certificate or a US driver's license; they must not have had an application for medical certification denied or a certificate revoked, suspended or withdrawn:

((c) Operations requiring either a medical certificate or U.S. driver's license. (1) A person must hold and possess either a medical certificate issued under part 67 of this chapter or a U.S. driver's license when— (...)

(ii) Exercising the privileges of a sport pilot certificate in a light-sport aircraft other than a glider or balloon; (...)

(2) A person using a U.S. driver's license to meet the requirements of this paragraph must— (...)

(ii) Have been found eligible for the issuance of at least a third-class airman medical certificate at the time of his or her most recent application (if the person has applied for a medical certificate); (...) and

(iv) Not know or have reason to know of any medical condition that would make that person unable to operate a light-sport aircraft in a safe manner.

(See Electronic Code of Federal Regulations, accessed 8/23/2013: <http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=7a80e8d04f2af4e76e8992e97c3a0489&ty=HTML&h=L&n=14y2.0.1.1.2&r=PART#14:2.0.1.1.2.1.1.17>)

On autopsy, the cause of death was determined to be multiple injuries. In addition, the pathologist noted a mildly enlarged heart (450 grams; average normal would be considered 371 grams with a range from 281 to 489 grams for this 199 pound man [1]). The pathologist noted mild to moderate atherosclerosis without significant coronary artery stenosis but failed to identify

the previously placed stents. He identified an area of scar in the cardiac septum from a previous heart attack.

Toxicology testing did not identify any carboxyhemoglobin, cyanide, or ethanol but revealed diphenhydramine in muscle and blood (0.19 ug/ml) and sotalol in muscle and blood.

Diphenhydramine is a sedating antihistamine and sleep aid available over the counter in medications marketed under the trade names Benadryl and Unisom.[2] According to the FDA, sotalol is a prescription antiarrhythmic beta blocker with both Class II and Class III antiarrhythmic properties. It is used to treat atrial fibrillation and ventricular arrhythmias but carries a warning that it may also cause life threatening ventricular arrhythmias. [3]

References

1. Kitzman DW, S.D., 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.
2. *Diphenhydramine Official FDA prescribing Information, Side Effects, and Uses.* Accessed 8/23/2013. Available from: <http://www.drugs.com/pro/diphenhydramine.html>.
3. *Sotalol Official FDA Information Side Effects and Uses.* Accessed 8/23/2013. Available from: <http://www.drugs.com/pro/sotalol.html>.