

CEN12FA088

New Orleans, LA

MEDICAL FACTUAL

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

According to his FAA blue ribbon medical file, the pilot was first medically certificated in 1960. He initially failed the color vision testing and underwent a practical signal light test. His third class medical certificate was limited by the restriction, "Not valid for night flight or by color signal control". In 1969 he was able to pass the Ishihara color plate test and was issued an unrestricted third class medical certificate. At no time did he report taking any medication or having any chronic medical problems to the FAA. However, he variously reported convictions including reporting "speeding tickets 20 years ago" in 1991, a conviction related to a "fight in public 30 years ago" mentioned only in 1995, and a conviction for "shooting guns at phone lines 40 years ago" mentioned once in 2001. His last third class medical certificate was issued 10/17/2011.

According to the investigator's reports, the passenger observed the pilot become incapacitated during flight. Although medical resuscitation was attempted after the passenger crash landed the plane, the pilot was initially found in cardiac arrest and could not be resuscitated. The autopsy found minimal evidence of blunt force trauma not related to the resuscitation attempt. However, significant natural disease was identified including cardiomegaly (heart weight of 420grams; normal for a man of his height would be 349+40grams [1]) and severe coronary artery disease with 90% eccentric narrowing by firm and calcified atherosclerotic plaque in the proximal half of the circumflex coronary artery and approximately 80% eccentric narrowing by firm atherosclerotic plaque in the proximal half of the right coronary artery. No stents or evidence of medical intervention for the coronary disease were identified by the pathologist. The coroner determined the cause of death was natural.

The following medications were found on board the aircraft: lisinopril (blood pressure medicine marketed under the trade name Prinivil), amlodipine (blood pressure medicine marketed under the trade name Norvasc), salicylic acid (aspirin), and Kroger Brand Extra Strength Pain Relief PM containing acetaminophen (a pain reliever also marketed under the trade name Tylenol) and diphenhydramine (a sedating antihistamine and sleep aid also marketed under the trade names Benadryl and Unisom). In addition, law enforcement identified a baggie of white powder found in the aircraft as crystal meth.

According to records of the investigator's conversations with colleagues and family members, the pilot was known to have high blood pressure, had undergone a procedure two years before to remove plaque from the coronary arteries, and may have had a history of stroke. This investigation did not obtain personal medical records.

Toxicology testing performed by the St. Louis University Toxicology Laboratory as part of the autopsy identified diphenhydramine at 0.29ug/ml and methamphetamine at 0.65ug/ml in the pilot's blood as well as methamphetamine (>5 ug/ml) and its primary metabolite amphetamine (0.61ug/ml) in urine.

Toxicology testing by the FAA's Civil Aeromedical Institute (CAMI) did not identify any carbon monoxide, cyanide, or ethanol. However, CAMI did identify methamphetamine in blood (0.345ug/ml) and urine (10.005ug/ml), its primary metabolite amphetamine in blood (0.046ug/ml) and urine (1.085ug/ml), and diphenhydramine in blood (0.072ug/ml) and urine.

Reference

1. Zeek, P., *Heart Weight*. Arch Pathol, 1942. **43**: p. 820-832