



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, DC

MEDICAL FACTUAL REPORT

July 14, 2016

Nicholas Webster, MD, MPH
Medical Officer

A. ACCIDENT: ANC15MA041 - Ketchikan, Alaska

On June 25, 2015, about 12:15 p.m. Alaska daylight time, a single-engine, turbine-powered, float-equipped de Havilland DHC-3 (Otter) airplane, N270PA, sustained substantial damage when it impacted mountainous tree-covered terrain, about 24 miles northeast of Ketchikan, Alaska. The airplane was being operated under the provisions of 14 *Code of Federal Regulations* (CFR) Part 135, as an on-demand visual flight rules (VFR) sightseeing flight when the accident occurred. The airplane was owned by Pantechnicon Aviation, of Minden, Nevada, and operated by Promech Air, Inc., of Ketchikan. The commercial pilot and eight passengers were fatally injured. Marginal visual meteorological conditions were reported in the area at the time of the accident. The flight departed a floating dock located in Rudyerd Bay about 44 miles northeast of Ketchikan about 1200 for a tour through Misty Fjords National Monument Wilderness.

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 toxicology report, autopsy report, and the investigator's report were reviewed.

FAA Medical Case Review

According to the FAA medical case review, the 64-year-old male commercial pilot was 74 inches tall, weighed 218 pounds, and reported he had accrued 3,900 total flight hours as of his most recent FAA medical certification exam dated March 23, 2015. He reported a history of seasonal allergies since 2000 but reported no medication use and

his examination did not identify any abnormal findings. The FAA Aviation Medical Examiner issued him a second class medical certificate with the following limitation: must wear corrective lenses.

Autopsy

According to the State of Alaska Medical Examiner's autopsy, the cause of death was multiple blunt force injuries and the manner of death was accident. The heart weighed 390 grams; the average for a man his weight is 387 grams (range 293-511 grams).^a The report identified mild focal narrowing (10 -20%) in the three main coronary arteries. Additionally, microscopic examination of the heart identified focal fibrosis of the intraventricular septum. No other significant natural disease was identified.

Toxicology

FAA Bioaeronautical Laboratory toxicology analysis did not identify carbon monoxide in blood, ethanol in vitreous, or any tested-for drugs in urine.^b

D. SUMMARY OF FINDINGS

FAA medical certification examinations did not identify any significant natural disease and FAA toxicology testing did not identify medications, drugs, or toxins.

The autopsy identified mild focal narrowing (10-20%) in the three main coronary arteries and focal intraventricular septal fibrosis of the heart.

^a 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.

^b According to the FAA Bioaeronautical laboratory toxicology report, specimens are analyzed using immunoassay, chromatography, GC/MS, HPLC/MS, or GC/FTIR. Concentrations (ug/mL) at or above those in () can be determined for, but not limited to, the following drugs: amphetamines (0.010), opiates (0.010), marihuana (0.001), cocaine (0.020), phencyclidine (0.002), benzodiazepines (0.030), barbiturates (0.060), antidepressants (0.100), and antihistamines (0.020). Drugs and/or their metabolites, that are not impairing or abused, may be reported from the initial tests. See the CAMI Drug Information Web Site for additional information (<http://jag.cami.jccbi.gov/toxicology/>).