

# NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering Washington, DC

# **Medical Factual Report**

**December 13, 2017** 

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# A. ACCIDENT: ANC17MA001; Togiak, AK

On October 2, 2016, about 1154 Alaska daylight time, a turbine-powered Cessna 208B Grand Caravan airplane, N208SD, sustained substantial damage after impacting steep, mountainous, rocky terrain about 12 miles northwest of Togiak, Alaska. The airplane was being operated as flight 3153 by Hageland Aviation Services, Inc., dba Ravn Connect, Anchorage, Alaska, as a scheduled commuter flight under the provisions of 14 Code of Federal Regulations (CFR) Part 135 and visual flight rules (VFR). All three people on board (two commercial pilots and one passenger) sustained fatal injuries. Visual meteorological conditions prevailed at the Togiak Airport, Togiak, and company flight following procedures were in effect. Flight 3153 departed Quinhagak, Alaska, at 1133, destined for Togiak.

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

## 2. Methods

The FAA blue ribbon medical files, FAA medical case review, toxicology results, autopsy reports, and the investigator's reports were reviewed for each pilot. Personal medical records were obtained and reviewed for the Second in Command.

#### **Pilot in Command (PIC)**

## FAA Medical File and Medical Case Review

According to the FAA files, the 43 year old male PIC received his first aviation medical certificate in 1995 and reported at that time that he had been admitted to a hospital for a tonsillectomy as a child. Thereafter, he reported hay fever "not requiring treatment" and sinus surgery in 2006 and radiofrequency treatment of low spine with resolution of pain in 2015 (reported in July 2015 as "previously reported"). No other medical conditions and no medications were reported.

At the time of the PIC's last aviation medical exam, dated 07/22/2016, the pilot reported 6,000 hours of civil flight experience. According to the records, at that time he was 76 inches tall and weighed 194 pounds. No physical abnormalities were identified and he was issued a second class medical certificate without limitations.

## <u>Autopsy</u>

According to the autopsy performed by the Alaska State Medical Examiner's Office, the cause of death was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified.

# **Toxicology**

Toxicology testing performed by the FAA's Bioaeronautical Research Sciences Laboratory did not identify any tested-for substances in urine.<sup>1</sup>

## Second in Command (SIC)

## FAA Medical File and Medical Case Review

According to the FAA files, the 29 year old male SIC received his first aviation medical certificate in 2012 and reported at that time that he had a non-traffic conviction for improper lights on a bicycle and had paid a \$30 fine. The FAA medical file contains an undated letter from the copilot stating he had misunderstood question 18v (regarding DUI and other traffic arrests/convictions) on the application for a medical certificate and reported that in 2005 he had had his driver's license suspended as a result of a reckless driving/speeding conviction in Virginia. This was not reported on his 2014 application but was reported on his 2016 application. In addition, his last application, dated 7/12/2016, he reported and admission to a hospital with a diagnosis of dengue fever. At no time had he reported the use of any medications to the FAA.

At the time of the SIC's last aviation medical exam, dated 7/12/2016, the pilot reported 189 hours of civil flight experience. According to the

<sup>&</sup>lt;sup>1</sup> The toxicology lab tests for more than 1300 substances including prescription and over the counter medication as well as drugs of abuse. See: <a href="http://jag.cami.jccbi.gov/toxicology/default.asp?offset=0">http://jag.cami.jccbi.gov/toxicology/default.asp?offset=0</a> for a full listing.

records, he was 76 inches tall, weighed 202 pounds. The aviation medical examiner noted he was "fully recovered" from his dengue fever and found no physical abnormalities. The SIC was issued a second class medical certificate without limitations.

## <u>Autopsy</u>

According to the autopsy performed by the Alaska State Medical Examiner's Office, the cause of death was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified.

# **Toxicology**

Toxicology testing performed by the FAA's Bioaeronautical Research Sciences Laboratory did not identify any tested-for substances in liver tissue.<sup>1</sup>

# Interview with the SIC's Friend

The Investigator in Charge (IIC) interviewed the SIC's live in girlfriend soon after the accident. According to the Interview Summary, she stated the SIC had been diagnosed at one point with post traumatic stress disorder (PTSD) and intermittently treated with zolpidem (a short acting prescription sleep aid also called Ambien) for insomnia.<sup>2</sup>

#### Personal Medical Records

Personal medical records from the VA hospital utilized by the SIC from January 2015 through September 2016 were reviewed. In addition to the information in the FAA files, the SIC had visits for minor ocular and dermatologic concerns. During an early visit, dated 1/16/2015, a nurse performed a routine 4 question screening questionnaire (PTSD 4Q) with the SIC regarding symptoms of PTSD. The record documents he responded "no" to each question, for a final score of zero.

Records from the SIC's previous outpatient military medical and dental care were obtained and reviewed. The record included visits for minor illnesses and injuries as well as a history of radial keratotomy to correct his vision. No evidence of visits for psychiatric issues or complaints related to PTSD were present in the record. The SIC had a single visit in 2012 where he discussed occasional insomnia. He was provided with a prescription for thirty zolpidem tablets without refills and did not return with this complaint. Finally, the SIC had been screened before and after two deployments for symptoms of PTSD and depression; all of these screens were negative.

<sup>&</sup>lt;sup>2</sup> National Institutes of Health. US Library of Medicine. DailyMed. Zolpidem <a href="https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=313ccc9f-7b3e-4e42-b5d8-0e27c3c72d8e">https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=313ccc9f-7b3e-4e42-b5d8-0e27c3c72d8e</a> Accessed 11/24/2017.

## D. SUMMARY OF MEDICAL FINDINGS

The 43 year old male pilot in command had reported no chronic medical conditions and no medications to the FAA. According to the autopsy performed by the Alaska State Medical Examiner's Office, the cause of death was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified. Toxicology testing did not identify any tested-for substances.

The 29 year old male second in command had reported no chronic medical conditions and no medications to the FAA. According to the autopsy performed by the Alaska State Medical Examiner's Office, the cause of death was multiple blunt force injuries and the manner of death was accident. No significant natural disease was identified. Toxicology testing of liver tissue did not identify any tested-for substances. Review of recent personal medical records identified only minor illnesses and injuries.