## N9149V Accident flight 02/02/2017

On the morning of February 2<sup>nd</sup>, 2017 at approximately 6:30am CST I departed Winona, MN (KONA) en route to Thunder Bay, Ontario (CYQT) The flight was approximately 2:30 in duration at 10,000 and 11,000ft. The flight was uneventful and I did not notice any strange physiological symptoms other than a slight headache for last 10 or 15 min of the flight. After landing, calling Canada customs, and securing the aircraft I entered the FBO. Once in the FBO my headache remained and I had a brief feeling of "butterflies" in my stomach. Almost a feeling of anxiety.

I don't normally experience anxiety but I didn't think much of it under the circumstances. I had never flown to Canada before and had done a lot of research trying to make sure I did everything correct. US Eapis, Canada customs, ect. One mistake I made as telling Canada customs that I would be arriving at 9:00am local time. On an earlier phone call with Canada Customs they told me I had an arrival time window of plus or minus 0:30. After entering the FBO I found out that Thunder Bay operates on Eastern Time, not Central. Even though I had already contacted customs and alerted them of my arrival. I was worried that confusion over the time zone, with me arriving an hour after schedule, would cause me trouble.

The the preceding week before the accident flight my 4 year old daughter was not acting normal. She had no outward symptoms of any one thing but was very irritable. My wife and I assumed she was sick to some degree. I mention this because it was the first thing I thought of when questioning myself on why I might have a headache. I also usually start the day with coffee, but did not this day due to the early departure. Another "justification" I used for the headache.

During my stay in Thunder Bay my headache came and went thought the day. At lunch I had two cups of coffee in an attempt to remedy the headache and it seemed to help. After completing my business there my focus turned to the flight to Duluth to clear customs. I don't recall any more episodes of "butterflies" but the added stress/anxiety to properly re-enter the states may have added to the "smoke screen" of my symptoms. I called the the US customs office in Duluth to alert them on my intended arrival time. I was delayed an extra 1/2hr because my plane would not start and I needed to arrange a preheat. I called the US customs office back to inform them of the delay.

I departed Thunder Bay(CYQT) approximately 4:00pm central Time(5:00 eastern) for Duluth(KDLH). The flight was approximately 1:20 long. I flew this leg at 6000ft and recall it being uneventful without a headache. After landing and exiting the plane the headache returned. I quickly cleared customs, used the restrooms, and called my wife telling her I when I would be home(she recalls me mentioning having a headache). I was worried about restarting the airplane in the cold so I quickly ran out to the plane to get it started before it had a chance to cool down. After starting the airplane I used my Ipad to file my flight plan to Winona. I then took my time getting the cockpit organized for the flight. Once I got confirmation that my flight plan was accepted I contacted ground for my clearance. Taxing out to runway 27 I still had a headache and experienced another episode of "butterflies" but this time was a little more intense than the morning episode. It didn't last long though, by the time I reached the runway holding area (A5, RWY27) the headache and "butterflies" had subsided. At this point I seemed to feel good but became hyper focused. I performed my runup and ran though my pre-takeoff check 3 or 4 times continuously checking my avionics and

instruments. This was not normal behavior for me, it almost seems as if I was reluctant to take off. At this point I don't think I was fully in command of my actions, although at the time I was unaware of any problems. The tower asked if I was ready to go, this snapped me out of my pre-takeoff checklist cycle. I remember being cleared for take off with a left turn to 240. I set the heading bug to 240 and proceeded to take off. When I was climbing out on the runway heading I experienced another case of "butterflies" when I reached to retract the landing gear. I started the turn to 240 by hand but activated the autopilot during the turn. From this point on my memory gets fuzzy. My last memory is that of being cleared to 6000 on a heading of 240. I have a memory of reading that back with a slur and thinking I needed to ask to return to the airport.

In the hospital I listened to my departure audio on LiveATC.net. It was much different than I remember and I had several radio transitions, even a hand off to departure that I had no recollection of. But there is a point where departure cleared me direct Winona, maintain 9,000. When hearing this a memory popped into my head of going to the flight plan page of my Garmin 530, selecting Winona, and pushing the direct to button and then enter. When I get a "direct to" clearance that is what I do, followed by reaching over to the GPSS button to switch from heading bug mode to GPSS. The whole process is almost muscle memory. This time I didn't push the GPSS button. I believe this is the point I went unconscious. Right after my last radio transmission.

The next thing I remember I was slowly waking and thinking that I had just dozed off for a few min. I tried to key the mic and let ATC know I was all right. As I was trying to call ATC it struck me how clear my windscreen was, up to this point I thought I was still flying. I slowly reached my hand out the hole in the front windscreen, as I held it there I realized I was no longer flying. I was very confused with loud ringing in my ears. I noticed a car/truck with a spotlight about 1 mile from me off my right wing. I tried to turn any aircraft lights on that I could, with out any luck. I was wearing a headlamp at the start of the flight but could not locate it or my flashlight that was on the seat next to me at departure. The passenger seat also had my gloves and hat at the time of departure, but I could not locate any of these items in the dark. I tried to exit the airplane but couldn't move. Initially I thought I was paralyzed, it turned out that my feet were pinned under the rudder pedals. My right foot freed easily, it took several min to get my left foot free. While trying to free myself I heard a helicopter near by and assumed it was looking for me.

Once out of the plane I realized I was terribly weak with very little balance. The loud ringing in my ears continued. I attempted to put on my winter bib overalls to help with the cold, but quickly realized that I physically unable to do so. I was only wearing a sweatshirt up until this point so I retrieved my winter jacket and slipped it on. By now my fingers were too cold to zip it up. I started off across the field in the direction that I saw he truck. I couldn't take more than 1 or 2 steps without falling down so I crawled and fell my way out into the field. I got to a point (not far, 50-75 yards from the plane) where I was too tired to go any further. I fell down and rolled over on to my back. I was very comfortable and considered waiting there for help. At this time a helicopter flew nearly directly overhead, I yelled an waved my arms to no avail. I realized that help would have a difficult time finding me and being it was so cold time wasn't on my side.

I started to feel warm. Having read many survival stories I thought this was the precursor to hypothermia. I decided that I couldn't wait, and had to try to get to help. I looked back toward

the plane and saw a light and 2 buildings though the trees opposite of the airplane. It looked like this was the closest structures to me so I started to back track to the plane. By the time I made it back to the plane I was gaining strength and balance. I could now walk 6 or 7 steps before falling down. I made it to the tree line and initially got stuck on a barb wire fence that I did not see. After a few min I realized it was a fence I was able to crawl under it. They I slowly made my way from tree to tree, occasional falling. Once I made it around one of one of the buildings, I could see the house with a blue flicker of TV light in the windows.

Once inside the Woman called 911, a sheriff deputy showed up within min.

## Some Facts about the airplane:

I ran the Heater/Defrost full-on for the entirety of all three flights.

I departed KDLH with 22gal in the right tank, 16 gal n the left.

Accident flight was running on the right tank.

S-Tec 30 auto pilot was on heading mode, alt hold was off.

I believe I had full throttle with full mixture. At take off (density alt >2500) this yields 18.5 gal/hr.

I did not have any form of CO detection.

Dan Bass