

23 March 2021

To whom it may concern

This is my personal statement to the best of my recollection for the events leading up to the accident of N2164Z.

I had been watching the weather forecast for at least the last 10 to 15 days preparing for this trip to KYKM. Initially N38566 an 81 Beech Craft Sierra was reserved through flight service Pro at BEFA Paine field for this trip that was to occur today 23 March. However, that aircraft went into maintenance over the weekend so the reservation was switched to N735LH but based out of KRNT vs KPAE. It was my preference to depart KPAE on the morning of the 23 March so I looked for other options that were available at PAE. I choose N2164Z a Cessna 172S as it is very similar to another 172S model I am familiar with and even began my instrument training in, but being I had not flown N2164Z prior to today I decided to check it out the day prior.

On 22 March I took my mom to get her first COVID shot at the Boeing activity Center in Everett and stopped by Paine field prior to ensure I knew where N2164Z was and in what condition it was in. When I arrived on the 22nd it was in maintenance and I was told by Regal staff it would be out and ready that evening parked on the ramp well before my flight in the morning. I was not able to walk around or get inside on Monday the 22nd but begin it was similar to 435SP a familiar aircraft to me I was not concerned and I knew it was being cleared of any squaws it may have so I left Paine and took mom for her shot.

The evening of 22 March I again checked the weather and obtained a weather briefing using Foreflight for my flight from KPAE to KYKM. The weather looked like it was to improve and be VFR. So I continued with my planning my trip. My mom and I had a good dinner and we went to bed around 2000/2030. We discussed that we would get up as normal and we would head to her place in the morning.

We woke up as planned the morning of 23 March 2021 about 0430 and left my home at [REDACTED] Kent Wa 98030 at approximately 0500. I checked the weather and the flight looked still favorable but cloud cover was low locally so I advised my mom as we drove to Lynwood that I may or may not fly to YKM I would check the weather again a bit later. Along our drive the clouds to west were clearing and we could see clear pockets of sky. We talked about this and I told her that would be the deciding factor of fly vs driving.

We arrived her place at the Reserve Lynwood Scriber Lake road by about 0600. At about 0730 I checked the weather again using Foreflight and two pilot reports had been issued stating the tops were at 5000. The weather at Whidbey (KNUW) was reporting scattered (at 25,000 I believe) and Port Angeles was reporting clear below 12,000. Therefore, I informed my mom that I would go ahead and go to the airport as the weather was improving but would double check everything before departing for KYKM.

My flight plan was KPAE-4W0-S93-KYKM at 9500 feet. I would be well above the clouds and KYKM was reporting skys clear below 12,000. So with favorable weather and the fact that upon arrival of Paine field at about 0740 I could see blue skys to the west; I completed my flight plan in the BEFA room near Regal Air adding in W10 for a way point to the west and Lake Stevens for another to stay north of Paine's airspace; with the plan to get clearance to depart West and North so I could easily climb above and stay out of Paine's air space as well as SEA Bravo.

I signed out N2164Z writing my name on the write board and removing the binder/keys for the airplane and headed out to where it was parked.

As I walked to the plane I looked for any glaring issues and walked around to the storage compartment door and placed my winter survival gear (since I was flying over the mts) and my laptop computer into the baggage compartment. I then proceeded to place my flight bag into the back seat and placed my head set and knee boards on the passenger seat. I removed the control lock and then stepped back out away from the door and removed the pitot cover. Reached back in and turned on the master switches, all lights and Pitot heat and conducted a walk around of the airplane confirming it had all lights so I could return at night. As I came back around the pilot's side, I

confirmed the pitot heat was working and then reached back into the cockpit to switch off the lights and pitot heat. While doing so I took an opportunity to review the fuel quantity and check the other instruments as well. I noted the fuel quantity was about $\frac{3}{4}$ full in each according to the gauges, thus I decided not to climb up the wing spar to physically check fuel quantity rather I would simply go over to the self-serve fuel pumps and use the ladder and top off if needed.

I then picked up the checklist and shut off the master switches and started my walk around the airplane continuing my preflight inspection. Starting back at the oil checking to ensure I had between 6 and 8 quarts and the dipstick read about 7. Then proceeded to the cowling, prop, checking the tension of the belt and the gears and for anything out of place, nose wheel pressure and suspension, then proceeded to continue to walk around the left wing checking the ailerons and flaps, wheel and brakes then the fuselage, then the back tail as well as under belly as I walked around, then the right wing ailerons and flaps, wheel and brakes all the while looking for anything that could be out of the ordinary or an issue. Not seeing any I then reviewed the checklist and climbed into the cockpit. As I got in the cockpit I noted I had not physically checked the fuel as I would do so at the self-serve island. Once seated in the airplane I adjusted my seat and checked the control services moving the rudders and the yoke ensuring proper movement. I checked all circuit breakers were in and proceeded to the before start checklist.

I confirmed fuel selector to both checking for the decant, all switches off except beacon, held the brakes, check the circuit breakers were still in, opened the throttle about $\frac{1}{4}$ by pushing it in, opened the pilot's window to yell clear, checked to ensure prop was clear, with the engine being cold I moved the mixture to full rich and turned on the fuel pump for about 3 seconds until I saw the fuel move, then shut the fuel pump off, pulled mixture to cut off and reconfirmed visually prop was clear and turned the ignition key starting the engine, advancing the mixture full. I then did a quick look at the oil pressure, turned on the avionics master, taxi and the nav lights. I looked out around the aircraft and began relocate the airplane to the self-fuel island at Regal from its parking spot on the central ramp.

Upon reaching the self-fuel, I shut off the avionics switch and pulled the mixture shutting down the engine, as well as shut off the lights and masters. I connected the ground cable to the exhaust pipe, ran the credit card at the pump, took the ladder to the right wing and pulled the fuel nozzle over to the aircraft climbed up the ladder and opened and physically checked the fuel level in the wing and noted it was about a half inch down so added no fuel to the tank but noticed the self-fueling station pump shut off. So I went ahead and went back to the station and re-ran the credit card starting the self-serve again and proceeded to check the left side fuel level and saw it was a bit lower than the right $\frac{3}{4}$ to 1 inch from the top then heard the self-fuel pump shut off again so I decided with full tank (almost topped off) or about 5 hrs of fuel I was fine for my 1 hour flight and put the self-serve fuel nozzle back without dispensing any fuel.

After the self-serve nozzle and ground cable were put away; I conducted another short walk around this time including the fuel checks. Using the narrow provided sump device from inside the cockpit, filling the device completely full and then comparing the smell and color for 100LL, it was slightly blue and smelled correct each time. I double-checked the wings for level, fuel caps were on and no leaks, flags or glaring issues were seen. I returned the ladder to self-fuel station and then returned to the airplane.

After getting in I turned on the master switch and the avionics and obtained the ATIS information using the secondary radio without starting the engine. Noting the primary radio was set to Paine ground and ATIS while the secondary was off. I obtained ATIS information Sierra and set my altimeter to 30.46. I then shut off the avionics and master and reviewed my plan and kneeboard information.

One of my personal habits is to write out the airport information and have the aircraft speeds on my kneeboards vs relying solely on technology/Foreflight for the info. So I reviewed this information and talked through my anticipated call and gave my passenger briefing to myself. While reviewing my knee board note Rotate at 55 climb at 75.. plan was to request clearance for a north west departure to where I could visually see clear skys then climb

out toward W10 and turn west climbing and staying out of Paine's airspace to Lake Stevens then continue to climb to 9500 all while ensure stay clear of Bravo as well, request flight following and then proceed over the mountains above the clouds to KYKM.

I confirmed my Stratus was on, flight plan was on my iphone and ipad, then proceeded to conduct the prestart checklist once again, checked the doors, windows and my seat belt, looked down visual confirmed both tank, opened the pilots window yelled clear, visually checked to ensure no one was near, and this time since the engine had already been ran started without the fuel boost pump, mixture retarded and ¼ throttle...

Once engine was started I turned on the avionics master, confirmed I had set my altimeter, and re-checked the DG with Mag Compass, checked artificial horizon, set the fuel level in the Garmin 650 and put in my flight plan into the Garmin 650 as well. Once I had my radio set and flight plan entered, I picked up the checklist and did a quick double check for after start procedures. Noting I had missed the transponder check so I checked and made sure it said VFR 1200.

I then proceeded to call Ground requesting taxi instructions for departure to the North West. I could hear myself loud and clear but ground was really weak coming back to me so I told them they were weak and they repeated and I stated I needed to correct my radio issue and would re-check with them. I adjusted the volume on my headset and on the panel and ask for a radio check and it was still weak. I then pushed the com 2 and shut off com 1 checked ATIS it was loud and clear. Turned back on Com 1 and shut off com 2 and turned the Garmin 650 down then back up noting it was clear down at 10% volume thus I turned it up past 60% and ask ground for radio check and it was loud and clear. It was simply turned way down no real issue just had to turn the volume up on the radio vs my headset.

I then requested clearance to taxi for a North West departure. I think I stated I would like to again request my taxi clearance. Ground gave me clearance to taxi and I heard clear to taxi Delta Juliet, Alpha for runway 16R, and that is all so I repeated it back to them. There was no confirmation or negative read-back not right so I proceeded to Alpha via Delta and Juliet. Upon arriving Alpha at Juliet I again called ground and ask for further clearance at this point. I feel ground was a bit upset at me but I wanted to ensure no incursion and that I had correct taxi instruction. They told me they had already given me clearance to proceed on Alpha to 16R. I then stated I only heard to Alpha and read back only what I heard and then ask which intersection they wanted me to go to. They gave me clearance to A6 and 16R. I read back cleared to intersection A6 and 16R. I proceed to the intersection and stopped on the enhanced taxiway center line markings.

I picked up my checklist and proceeded to conduct my run-up checks, my seat felt a little bit back so I decided to adjust it pulling the parking brake while at idle and holding the brakes with my feet too. I adjusted my seat a little bit more forward, rechecked my seat belt and the doors and widows. Wiggled my feet on the rudders to ensure proper movement and pulled the yoke back to ensure my knee boards did not obstruct. I looked down at the trim tab and noted it was way high so I adjusted it to take off range, and then reached down and confirmed I was on both tanks and felt the detent. I then ran the engine up to 1800 RPMs and checked the magnetos, (right back to both then left back to both), there was only about a 25rpm drop both about the same, check my engine instruments that they were all working, pulled the power back to idle then back to about 1000 RPMs. Then I looked at the panel it looked correct, (no warning lights, altimeter was set, DG was matching mag compass, and artificial horizon was level), rechecked the fuel gauges the left read a bit lower but both read about ¾ but I knew visually they were almost topped off. Then I set the radio to tower and gave myself a takeoff briefing looking at my flight plan on my ipad and reiterating to myself I would go out to the northwest climb above the clouds staying clear of Paine's airspace and turn toward Lake Stevens. Stating to myself tower N2146Z at A6 ready for North West departure. I then radioed Paine tower stating N2146Z at A6 requesting departure to the northwest. There was another vehicle on the runway, tower ask them to stay clear of A6, I said say again for N2146Z then tower gave instructions to the vehicle and I understood it was not for me at A6 rather it was vehicle stay clear A6 and then

tower gave me a departure clearance of cleared for takeoff with a downwind departure. I read back cleared for takeoff 16R downwind departure.

I proceed to start taxi (lights cam action acronym) checked my lights; I turned on navs, beacon was on, looked down the runway to the north saw the vehicle but no other traffic so I continued to roll out to the center of the large runway 16R. Confirmed my instruments were moving/coming alive again as I added the power, confirmed my DG was set with Mag. I pulled out to the middle of the runway and came to an almost full stop. Mixture was already full rich, visually checked both tanks as I pushed throttle full releasing the breaks completely keeping in a little right rudder and went through my "REACT" acronym on roll out, RPMs coming alive, engine Instruments, Airspeed coming alive, Center line maintained, take off point; all were doing good as anticipated reached 55/60kts and started my rotation; nose lifted fine mains were off and I was climbing watching my altimeter and at about 800 feet (Under 1000 on the altimeter, so about 100/200 AGL) I was out of pavement in front of me probably over the 34L numbers of runway 16R and the engine sputtered -- felt like it choked I reached for the throttle ensured it was pushed full forward and it sputtered again, visually looked down and confirmed tanks at both. So still climbing I pushed on the push to talk at the same time as I started to turn left (west) saying something to the fact tower I've lost my engine or am losing my engine, they replied make 180.. and in my head I had already started for the GA runway as I was still climbing at this point thinking I could catch the parking lot or hopefully the GA runway but backwards to the current flow(34R). Tower said 180 so I increased my turn and then no power and I started to descend. I do not know for sure if the engine quit or if I just completely lost power with engine running all I remember is thinking I won't make the GA runway or the parking lot and saw the building coming at me and trees more to my left (or north) of me and recall an instructor stating pick the softest point if you have a choice. I saw a big green tree and a bunch of little brown ones and the building. I chose to turn more left hoping I might clear the trees and make the ramp or taxiway but then I knew it wasn't going to happen and I recalled Curtis one my flight instructors from BEFA stating if you ever do have to take trees; stall the plane as you clip them so I pulled back on the yoke and that's what I remember until I came to a stop. I do not recall spinning 180 degrees for the plane was headed North when I clipped the trees and was facing South when it was on the ground. I tried the pilot door to exit but the left wing blocked it so I climbed out the passenger side with my headset still on. I then reached back in and told tower I was exiting the aircraft and left it. Retrieving my belongings later once Paine fire said I was cleared to do so.

These are the events as I recall to the best of my relocation. I do not know what caused the engine to loose power cough and sputter.

If you have any further questions for me please let me know.

My last BFR was on 3/11/2021, and my last flight was RNT-EAT-RNT; also on 3/11/2021 in Cessna 182RG N2365C. I reviewed my flight times and I have approximately 90 hours in Cessna 172S and about 380 hours total flying time.

Respectfully,

[REDACTED]

Kevin Yarnell

[REDACTED]