Scott Arnold

From: Pete Thiel [redacted]
Sent: Tuesday, June 03, 2014 3:36 PM
To: Scott Arnold
Subject: Re: Your accident near Rockdale

Mr. Arnold:

Thank you. Matthew asked me to write down my thoughts from the planning stage of the flight from New Orleans, through the accident.

I had the main tanks of the plane filled at the FBO in New Orleans. I asked them to fill the mains, but not to put any fuel in the tip tanks. I have my receipt from Flightline First showing 50 .0 gallons of fuel. This was the amount used from Georgetown to New Orleans on our flight Friday afternoon. When I preflighted the plane the morning of the accident, I checked the main tanks, and they were full to overflowing. I remember this because I was a little perturbed that the FBO always tries to sell you that little bit extra fuel which then runs down the back of the wing and leaves blue streaks.

When I fly, I switch tanks each 30 minutes. I always begin a flight on the left tank since that lightens the weight on that side of the plane where I am seated as the pilot, and I am usually the heavier person in the cabin. On the scratchpad section of my foreflight app on my Ipad, I mark the current information letter at the top. The day we left New Orleans when I checked ATIS, it was information Sierra. By the time I contacted Lakefront ground ready to taxi, information had changed to Tango. As I fly, I make either an L or a R on the scratchpad indicating if I have flown on the Left or Right tank. At the time of the switch, I make this notation. When I begin a flight, I start with an L. If I miss a change, and go beyond 30 minutes, I write a number next to the L or R showing me how much over I went in order to consume an equal amount of time out of the tank on the other side. On the flight to Huntsville, I flew 30 minutes on the left tank, 30 minutes on the right, 48 minutes on the left, and then switched to the right tank. We landed in Huntsville on the right tank, having flown approximately 15 minutes on that tank. I have a screenshot of the scratchpad of my foreflight app from the day of the flight, and I wrote L, R, L 18, R. This indicates that in succession, I flew 30 minutes Left tank, 30 minutes Right tank, 48 minutes Left tank, and the remaining 12 minutes of the flight on Right tank.

When I switch the lever between fuel tanks, Pilots Choice teaches a 3 step process that is also used when moving the flap position selector, or the gear handle. If you are flying with an instructor, the pilot puts his hand on the switch or lever and says “identified”, the instructor verbally says “verified”, then you move the switch or selector. I follow this same procedure when I move gear, flaps, or fuel. I put my hand on the switch or lever, and sometimes audibly, sometimes to myself, say “Identified”, “verified”, then move the switch/lever, and confirm that it is in the correct intended position.

I don’t fly based off the fuel gauges, but calculate the amount of fuel I should have used estimating 18 gallons per hour in flight. I look at the gauges upon switching on the battery to make sure they verify what I believe to be the amount of fuel on board. The Bonanza actually burns around 16 gallons per hour, but if I figure 18, I have some safety built in. Our total fuel consumed to get to Huntsville should have been 36 gallons. That should leave 44 gallons in the plane, with more in the right tank than left.

After waiting out the weather in Huntsville, when I saw that we would be able to fly to Georgetown in VFR conditions, I went to the plane and sumped the tanks. I did not take on fuel because according to my calculations, I had 44 gallons left, more than was needed to get to Georgetown, plus adequate reserves. It was lightly raining out, so I did not visually confirm the amount of fuel in each tank. I didn’t want to introduce water into the tanks.

When I turned on the battery switch in Hunstville prior to starting the engine, both tanks registered at or just above half full. This matched the amount I expected to have on board using the math calculation for time flown and gph expected.

We took off from Huntsville at approximately 1800 - 1810 Central time. The estimated time in route was 42 minutes to Georgetown. We were still on the right tank when the engine stopped. It was time to switch sides on the fuel, and within several minutes I would have gone back to the left tank.

When the engine lost power, I immediately pushed the mixture knob to full rich, prop to full forward, and throttle to full power. This had no effect on the EGT or power in the engine. I then switched from the right tank to the left tank. This had no effect on the engine. I let the switch sit in that position about 2 seconds. I then changed the lever back to the right tank, since I have been told that if you do something, and the engine stops working, undo what you have just changed. The engine had been running on the right tank, so I returned the lever to that position. Upon returning the fuel selector to the right tank, I had about a 1 second surge in power, then back to nothing. I believed the engine was still producing some power, so I did not change the pitch of the propeller. I then cycled the magnetos, and that had no effect on the engine.

I asked to be vectored to the nearest runway, and located the airport on the VFR chart on my lap. It was Coffield, and my intent was to land on runway 17 if we made the field. We never had visual on the field, and I picked a field to attempt to land in that ran North-South, in line with the direction of the runways at Coffield. I knew that the airport runway would be lined up with prevailing winds in that area. I asked the controller if the field was paved to try to find differentiation in color between the runway and any possible grass landing strips in the area. Once we were approximately 1000-1500 feet AGL, I did not have the field in sight, so chose a grass area to attempt to land that did not have trees or livestock on it.

After the forced landing, I first asked if everyone was ok, then yelled to get out of the plane. I did not adjust any controls at that time. My mind was on getting out of the plane in case there was a fire. My family and I sat outside of the plane at a distance away looking at it. The strobes were still functioning. After about 5 minutes, when I didn't believe there was any fuel spilling, or fire, I entered the plane, and turned off the battery and alternator switch, and turned off the magnetos and put the key in my pocket. I did not turn off any other switch, or touch the fuel selector. After we walked to a road, and the sherrif found us, we returned to the plane. At that time, the DPS supervisor climbed around inside the cockpit asking me a couple questions about different switches. I don't know if he moved anything. It was not the trooper who filed the report, it was a supervisor who arrived later. He then closed the door, and I don't believe it was opened again.

My total flight time: 512.9 hours
My time in model and make: 134.7
(These include the flight to Huntsville, but do not include the accident flight departing Huntsville with an intended destination of Georgetown)

The following answers I received from information from Beth Jenkins at Pilots Choice Aviation:
The last inspection on 188DP was an annual inspection dated February 1, 2014. Tach. time from the inspection until we left for New Orleans was 63.59 hours. I don't have a register of the tachs time at the time of the accident, but according to the Hobbs meter, the total flight time from Georgetown to New Orleans, back to Huntsville, and the accident site should have been approximately 5.3 hours. That would put the estimate of time since last inspection at 68.89 hours.

I am waiting to hear back from Pilot's Choice on which type of ELT was installed. I will forward that to you as soon as I receive it. I do not believe the ELT activated.

If you need any further clarification, or have any questions, please do not hesitate to call or email me.

Pete Thiel