

Pilot Statement: N9580S Forced Landing

I find that the easiest way for me to succinctly layout the events of this trip and eventual forced landing would be to bullet a timeline of events and my decisions pertaining below. I also feel it important to note that I have flown this aircraft on more than one occasion prior to taking it on this trip and was comfortable with the aircraft. Almost all my total time is in Citabria's akin and identical to the one involved in this incident, I am familiar with the aircraft.

The timeline and series of events are as follows:

8/23:

I came out to KDED to fly 9580S in preparation for the ferry to KEEN; this flight was to confirm the mechanical condition of the airplane/notice any squawks I wanted fixed before being comfortable on a long trip. I flew for an hour and noticed 2 things (the brakes were weak, and the elevator/aileron controls seemed to lightly bind at a certain position). I reached out to Pete Lankester to have these issues looked at and resolved for a Saturday (8/24) departure. All else was ok. I also used the remainder of the day to plan out my flight.

8/24:

The original departure time (early AM, 8-10) and date. This did not happen as the aircraft was not able to be looked at and worked on until later in the afternoon, and by then the weather had deteriorated past the abilities of myself and the aircraft (from the original departure airport KDED). A no go decision was made based on marginal and non VFR conditions enroute as well as daytime remaining, and the aircraft remained parked at KDED. Later that evening, I pulled a weather briefing from WX brief via the website for a 7:30AM departure the following morning, it was not overly promising for recommended VFR flight on my planned route.

8/25:

I called WX brief on my way to the original departure airport (KDED) to get an updated briefing to supplement the night before. This was around 8 AM. Conditions had improved for sections of my flight but were not VFR recommended around northern Florida/southern Georgia. I arrived at the airport (KDED) and began to preflight the aircraft while waiting to call WX brief again in several hours for an updated briefing. I called and obtained the updated briefing at around 12 PM; it was still not favorable for VFR flight along my route in the same areas. I contacted Pete Lankester to ask if it was alright to reposition the aircraft

to X04 for an attempted departure the following morning, as the weather further inland was trending better. He gave the ok, and I Departed KDED for X04. The aircraft was tied down mid afternoon at X04 and I left the airport to revise the flight plan I made for the following morning. With a revised route of flight, I checked the METARS/TAFs/Prog charts/etc. myself for the following morning via Foreflight. These provided a possible window of departure around 10AM local time the following morning from X04.

8/26:

I called WX brief around 7:30 am in preparation to head to the airport (X04) and obtained a briefing from the new departure airport (X04). The briefer noted that at the current time, VFR flight is not recommended and to call back in a few hours as the IFR and marginal conditions were set to improve by then. I called again at around 9:30 to obtain an updated briefing and was told at the time to attempt to wait until around 10:30-11AM local time and call back. Things had improved but were still not VFR recommended. I called back at 10:30 local time for an update and was told that overall things were much better, and a majority of my flight was now VFR conditions with the exception of a small pocket north of Gainesville. I asked the briefer if things were any better to the northwest of Gainesville and should I have an issue with the pocket, would I be ok to divert towards perry and around Tallahassee, Florida, heading back from that direction to my route of flight. The briefer had said yes, and I made the decision to depart with that possible diversion in flight in mind. I departed X04 at roughly 11AM local time enroute to my first planned fuel stop at KCWV. I did not have to divert from my planned route, the weather cooperated through the pocket discussed and I was able to land in KCWV well within VFR daytime minimums for a refuel and real time burn calculation.

I fueled the airplane in KCWV, which took on 24 gallons of fuel, and performed a burn calculation with my flight time (roughly 3 hours 10 minutes). I determined the airplane to have been burning roughly 7.6 gph (as expected). With this in mind, I referenced my flight plan and second fuel stop (KISO) to determine that I would have no issues making it there within VFR daytime minimums, with an alternate in between (KDPL). I called WX brief again right before departure (roughly 2:30pm local time) and was given the green light for VFR flight all the way through to my original stopping point for the evening (KONX), the only denotation being the earlier my departure the better (I departed immediately after the phone call). I departed KCWV for KISO following the phone call. Enroute to KISO, I made the decision to stop at KDPL for fuel as the headwinds made the trip a bit longer than expected and I also needed to contact KISO to see if I could park overnight (it had started to get close to dark and I was not comfortable continuing to KONX at night). At KDPL I took on 26.8 gallons of fuel and performed another burn calculation with my flight time (roughly 3 hours

36 minutes). I determined the airplane to have been burning roughly 7.5 gallons per hour (as expected again). I then called KISO to see about parking for the night as it was approaching sunset. I departed KDPL for KISO to park for the night (a roughly 20-minute flight).

*** It is important to note that I planned to fly through TFRs on the east coast near Delaware the following day, and on my route, had KGNV and KSAV approach check my transponder for function in flight. Both gave a negative return. This further reinforced my decision to overnight in KISO, as it had the resources to possibly troubleshoot/fix the transponder. It was also a much better middle point if I decided to fly to the north and west around D.C. (which ended up happening) ***

8/27:

I arrived at KISO at around 9am to speak with the maintenance folks about troubleshooting my transponder and possible fixes before I departed. They were kind enough to inspect what they could, but ultimately let me know that they would need schematics/diagrams as they do not work on this type of aircraft. I gave Pete a call and let him know, telling him I had no issues continuing without a working transponder around the west side of D.C., staying in the relevant airspaces. We both agreed that would make the most sense for the timeline of the flight to KEEN so I made a new flight plan. I then called WX brief around 11:30AM local time to obtain a briefing for my new route of flight and was given the ok for VFR flight all the way through my route. I did not top off the tanks from my roughly 20 minute flight between KDPL to KISO the night before because my next planned fuel stop, KCBE, was well within the fuel on board and VFR daytime minimums. I departed shortly after receiving the briefing and had an uneventful flight until just on the other side of the mountain ranges between KISO and 8W2. I had an intermittent issue with my radio's volume control and made the decision to land at 8W2 to troubleshoot the volume issue as well as top off my fuel there instead. I was able to cycle the radio on the ground which appeared to fix the problem, and then took on 24 gallons of fuel. I performed another burn calculation with a flight time from KDPL to KISO (.4 hours) and a flight time from KISO to 8W2 (2.8 hours), a total of 3.2 hours. Using these numbers, I determined I was burning roughly 7.5 gph (again, as expected, no change). Using this information, I determined that I would stop at KSWF for the evening and continue to KEEN the following morning. This was a 3 hour 29 minute planned flight and was well within VFR daytime minimums. I expected to have roughly 45-50 minutes of fuel on board when landing at KSWF using an 8 gph burn rate to plan my route.

I continued on the route I planned from 8W2 to KSWF (8W2, W35, N68, KTHV, S37, KUKT, N85, KFWN, KSWF) until just before KFWN, where I referenced the time in flight and fuel gauge to determine that I would be fine to continue to KSWF within minimums. I passed

KFWN just to the south and east (about 3 miles, as they were jumping at the time) and continued to KSWF. Roughly 8-10 miles to the northeast of KFWN, at 3,500 feet, I felt a momentary decrease in engine power. I immediately made a left hand 180 degree turn back towards KFWN and made the call to them that something was wrong, and I would be making straight in for runway 21. I made this turn and continued towards KFWN as the engine continued to run normally after the momentary issue for another minute and a half to two minutes and KFWN was the closest field/my best option. Roughly 5 miles northeast of KFWN, the engine began to surge up and down dramatically, I made another call to KFWN to let them know my intentions again and began to troubleshoot, keeping in constant contact with KFWN. I actuated the carb heat and that didn't seem to do anything but lower rpms further, so I returned it to its cold setting. I cycled the fuel shut off valve and when cycled off it nearly shut the engine off, so I quickly set it back to on and left that alone. I actuated the primer a singular time and that appeared to stop the surging momentarily. That immediately told me it was a fuel starvation issue of some sort. When the engine began to surge bad enough that I was losing altitude, I pitched and trimmed for best glide (70 IAS) and began to look below me for a suitable place to put the aircraft down.

I couldn't see anything at my current altitude and speed that would have resulted in anything but a stall and spin to the ground. I was too low and would have lost too much altitude and speed in a steep enough turn to make a field not covered in trees. I left the primer alone until I got closer, roughly 3.5 miles northeast of the field, and continued searching diligently for a safe place to put the aircraft down. I could not find one that made sense and was continuing to lose altitude and a little bit of speed. At this point all I had was what was almost directly in front of me, which was the apartment building and wooded area right before it in my direction of flight. I used what was left in the primer to help me aim just beyond the apartment building to the patch of trees I eventually came down in, the best possible option I had to avoid people and property on the ground at the altitude and speed I had left. I flew the aircraft all the way to the edge of the trees and sharply pulled back on the stick in an attempt to slow my speed and stall into the treetops. I then impacted the trees and came down with the aircraft to almost ground level and self-extricated from the aircraft. Fire and EMS personnel arrived almost immediately, and I had told one of them where the emergency fuel shut off valve was to turn it to the off position, as I had forgotten to do that after hitting my head hard in the crash and was worried about getting out and away from the aircraft. I waited for the police while making the relevant calls that hadn't already been made by others (bystanders and the folks at KFWN had already made the 911 call). When they arrived, I gave them my information and a brief report of what happened. I was then taken to the hospital for sutures and a CT scan of my head and neck. At the time of the first stutter, I should have had a little over an hour of useable fuel left on board the aircraft using the more aggressive 8 gph burn rate to plan my

route. The first stutter occurred roughly 3 hours 16 minutes into the planned 3 hour 29 minute flight. At that point in my route, there should have been between 8 and 10 useable gallons of fuel remaining on board the aircraft, depending on whether you use the 8 gph or 7.5 gph figure, either of which would have been within minimums for my ultimate destination KSWF, 13 minutes after the time of the incident.

***Another important item to note is that while calculating burn rates throughout my route from X04, I also referenced the fuel gauge in the wing and determined it to be more or less accurate. I flew this trip referencing both my own burn rates, time in flight, and the gauge simultaneously. All burn rates calculated using 35 gallons as my full and useable capacity. ***

I want to take this opportunity to thank all of the first responders, bystanders, and investigators involved in this incident. Everyone has been cordial and helpful in helping me navigate what has happened. I look forward to learning the outcome of the full investigation.