

July 24, 2018

Inspector Dwayne B. Holt  
Flight Standards Service North Texas District Office

[REDACTED]

The following is the written report you asked me to send concerning my forced landing last Saturday. I hope this contains what you need. Please feel free to contact me if you have additional questions.

Mimi Andrews

#### ENGINE FAILURE AND FORCED LANDING N3611Y, JULY 21, 2018

Intended flight was to be from Granbury Regional Airport (KGDJ) to Hilltop Lakes Airport (0TE4).

I used a computer at my residence to access Intellicast radar images and to get Metar and TAF info for my route from aviationweather.gov. Stations checked, if I recall correctly, were KGDG, KACT, KLXY, KCLL, and KUTS. KCLL and KUTS were showing some low cloud typical of early morning conditions in that part of the state. All others were clear.

I also used the internet access at my residence to download current flight and weather information from Foreflight into my primary and backup iPads.

Preflight was conducted using my usual procedures.:

- Drained a fuel sample from each of 5 points in the fuel system (2 Wing tank drains, 2 Low point drains in belly, main fuel strainer drain). All 5 samples were clean and contained no water.

- Confirmed fuel quantity in tanks using a hollow plastic dipstick.

- Checked oil quantity and confirmed that oil filler cap was secure.

- Did a rough check of alternator belt tension by reaching through the dipstick access.

- Conducted a thorough walk-around inspection starting at left wing root and checking each item as I came to it—attach bolts, hinges, brakes, pitot and static ports, etc. Confirmed that protective covers had been removed from pitot tube and fuel tank drain ports.

My first attempts to start the engine were unsuccessful, so I went to the terminal building to wait for the starter to cool for about 30 minutes. While there I updated my weather information from aviationweather.gov using the airport's computer. This check confirmed that the low layer at KCLL and KUTS had burned off and that those stations were now clear.

The second engine start attempt was successful and the engine stabilized and ran normally. I accomplished the appropriate checklists and taxied for takeoff on Runway 14. Engine runup was normal—mag drops within limits, prop cycled normally, alternate air source operated normally.

I completed the Before Takeoff Checklist, made a 360 degree turn on the taxiway to check for traffic, announced my intentions on CTAF, and made a normal takeoff on Granbury's Runway 14. Crosswind was from the right.

I reduced to climb power (top of the green on manifold pressure, then RPM), retracted the gear, and trimmed the airplane.

At around 500' AGL I turned crosswind (right traffic for that runway) and then turned left to exit the pattern. I transmitted this on CTAF.

I proceeded on course, crosschecking between pilotage navigation and the GPS position on my iPad (The airplane had no installed GPS equipment). Retrimmed for a cruise-climb airspeed. All engine indications were normal.

At 3500' I established a cruise attitude, allowed the airspeed to build, set cruise power (22" MP and 2300 RPM), and set the mixture for approximately 13 gph on the fuel flow gauge. Engine indications were normal, and the airplane achieved the cruise speed I was accustomed to seeing.

Note: All times given in this document are estimates.

Approximately 20 minutes into the flight, in the area of Blum, TX, the engine began to run rough. Suspecting vapor lock because of the hot day, I switched the fuel selector from the right tank to the left, per Cessna's vapor lock checklist. The roughness got worse, so I switched back to the right tank. I selected the boost pump switch to low, and it had no effect. The engine began to lose power rapidly. I tried the high position of the boost pump switch, also with no effect. I tried retarding the throttle rapidly per Cessna's checklist, and that had no effect. While the engine did run briefly a time or two, it never caught hold and started to produce power. Time and workload did not permit me to find and read the actual checklist, although it was in the left-side map pocket.

During the above activity, I let the airplane slow to best glide speed and trimmed it to that speed.

Meanwhile, I checked the Foreflight map for a nearby airport and found none. The two possibilities were Hillsboro and a private strip listed as Barnstormer. Hillsboro was too far away, so I continued toward Barnstormer while attempting to get a restart. I scanned the ground for an indication of surface wind and found none. It soon became evident that Barnstormer was also out of reach.

At an altitude I estimate to be around 1000' AGL, I selected a field and directed my attention to the approach and landing. I was on a right base leg for that field, it looked long enough, and was into the wind (assuming the takeoff wind direction still existed). I elected to comply with Cessna's procedure and land with the gear up, because the engine-driven hydraulic pump had only windmilling power and consequences of a landing with the gear partially extended would be worse. Once I knew I had the field made, I held the flap handle in the down position. There was enough pressure to operate the flaps. I do not know the exact flap setting when I landed, but I suspect it was around 30 degrees. At some point during the final approach I think I advanced the throttle to silence the gear horn. I turned off the ignition switch on short final.

Flare and touchdown were as normal as I could expect (never having landed gear up, the sight picture was different). Touchdown was firm, but not what I would normally describe as a hard landing. The airplane slid to a stop very quickly. I turned the fuel selector to the off position and turned off the master switch. The ELT did not activate.

I estimate that the time between the initial onset of engine roughness until landing was around two minutes. No checklists were performed because of the intense workload and the need to place aircraft control above all else.

I exited the aircraft, taking my purse which contained my licenses and ID, then turned my attention to getting some help. The house on the property proved to be unoccupied as did nearby structures. What finally worked was a cellphone call to 911. The Hill County sheriff's deputies and their Emergency Coordinator were very helpful.