

Flight Instructor Written Statement Imani Sangster

[REDACTED]
Miramar, FL, 33027

June, 14th 2017

To whom it may concern:

Incident Report for N881AV on Saturday, June 10th, 2017

Airman name: Kimani Sangster

Certificate number: [REDACTED]

Total Time: 1488 Hrs

Time last 60 days: 50.2 Hrs

Time in last year: 549.2 Hrs

Time in make and model(CE-172): 1449 Hrs

Last flight review: 4/27/16 CFII Checkride

Last Checkride: 4/27/16 CFII Checkride

Preflight

The aircraft was refueled, I observed the student taking fuel samples to test for contaminants and they weren't any in the test. The student and I also checked the rest of the aircraft to complete the preflight.

Engine start

The aircraft was started using the checklist. It was a normal start with the gauges indicating in the green range showing that the engine was ok.

Taxi

We taxied out from the ramp, exited the ramp at spot 12, headed to runway 9L via taxiway Delta. During taxi, we did not notice any issues with the aircraft.

Run-up

During the runup we followed the items on the checklist, the flight controls were working correctly. The engine run up was done without any problems, the magnetos had two good drops in rpm: one on each magneto, the carburetor heat had a normal drop in rpm with power on the engine and with the throttle pulled back to idle.

Take off.

I asked the student to demonstrate a soft field takeoff, he then selected ten degrees of flaps, we received our takeoff clearance and we started our takeoff roll. During takeoff, we had normal engine indications and our airspeed started to climb. The student then kept the aircraft in ground effect to build speed as we were simulating that we were taking off from a grass strip or a rough field. At approximately 80 knots he started to climb out from ground effect where he then retracted the flaps at 200ft. Up to this point all indications were normal.

Climb

At approximately 350 ft I heard a slight decrease in power, I then looked at the student's hand and I asked him if he was guarding the throttle he said he was then the power came back.

Afterwards at approximately 400 ft we had another loss of power, this time it was significant it went down to 1900 rpms and it was fluctuating, I then took the controls of the aircraft and started to look for options. After taking the controls, the power then dropped to 1100 rpms and fluctuating, at this point I had no available runway remaining and I was losing altitude so I decided to put the aircraft down in a grass field that was on the airports property. On touchdown, I had very poor braking, even with the use of aerodynamic braking the aircraft felt like it was skidding. We then hit a tree on the property of the airport which damaged the leading edge of the left wing as well as the taxi and landing lights. The aircraft then hit the airport property fence adjacent to SW 137th avenue, the aircraft then stopped and we shut everything off including the fuel.

Kimani Sangster

Student Pilot Written Statement

June 10, 2017

Alejandro Cabrera

Student Pilot Certificate # [REDACTED]

[REDACTED]
Brandon, Florida 33611

To whom it may concern at the Federal Aviation Administration,

I am a Student Pilot at ADF Airways International Flight School with 97 Flying Hours on Single Engine Land.

On June 10, 2017 around 10:20am local time, I was starting my routine flight session at KTMB. On this particular day I was doing my #2 Stage Check Flight with CFI Kimani Sangster on a Cessna 172 with Tail# N881AV. Mr. Sangster was by my side looking closely at every step of my Pre-Flight Inspection. The fuel truck had already filled up the fuel tanks. During my walk-around I did drain the right tank, the strainer and the left tank; the fuel samples looked clear, uncontaminated. During the run-up everything appeared to be normal; during the left and right magnetos check the RPM dropped to about 100, Oil Pressure and Oil Temperature gauges were on the normal range and engine idle with carburetor heat applied was reading around 600 RPM. We took off from Runway 9L.

While waiting for clearance from the tower, I was instructed by Mr. Sangster to do a Soft Field Takeoff. I had climbed up to about 400 feet when the first drastic drop of RPM happened. Mr. Sangster asked me if I had pulled back the power to which I responded "No". I went ahead and did a quick check list; Fuel Valve was on "Both", Mixture was "Full Rich", Magnetos was on "Both", Master Switch was "On" and gauges were on "Green". Then another drop of RPM happened. That was when we realized something was not right, so I positively passed the control of the plane to Mr. Sangster. Once Mr. Sangster took control of the plane, we quickly looked for the best area to land since there was no remaining runway available for us to land. We touched down on the grass area about 300 feet off the runway and hit a tree before getting to a full stop right at the chain-link fence that surrounds the airport.

Sincerely,
Alejandro Cabrera

Examination of the aircraft and crash site:

Aircraft was departing Kendall Tamiami Airport (TMB) from runway 10L. The engine quit at 400' after takeoff. The aircraft landed 200' from the end of the runway. Due to the recent heavy rain, the aircraft rolled 1/4 of a mile, into a tree impacting the left wing at the landing light and stopped when the aircraft hit the perimeter fence. There were tire marks in the grass from the landing point, at various points where the instructor attempted to use brakes to slow the aircraft to impact area.

The damage to the aircraft included the impact from the tree at the landing light (broken light cover) on the left wing. The right wing tip cover is broken from the impact with the fence. There is wrinkling of the skin of the aircraft on top of the wings from the gas caps outwards to the wing tips. The spinner was damaged from the impact of the fence, and the propeller was bent from the collision with the fence.

Timothy Jensen
Aviation Safety Inspector

Engine Run on June 28, 2017

At 9 am, the engine was run twice. Prior to running of the engine, the fuel was sumped, and the oil was checked, neither showed any signs of contamination and were at appropriate levels. The cowling was off and the engine was completely exposed.

The first time the engine ran for 8 minutes, 2 minutes at idle simulating a taxi from the ramp to the runway. The aircraft was then run for 6 minutes simulating the run-up and take off power. The engine ran without hesitation and showed no signs of any type of problem. At shut down, there was a leak at the carburetor. However, looking at the bottom of the cowling, there were no fuel stains.

The aircraft was then run again, for 8 more minutes and all with the same result.

Timothy Jensen
Aviation Safety Inspector