

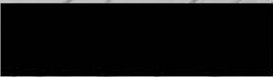
Pilot Statement:

On April 1, 2012 at 7:00 AM I unloaded my powered parachute from the trailer at the Blackwater Ultralight flight Park. I performed a through preflight following my regular checklist prior to flight. The aircraft was just at the Sun and Fun air show on display and many people had sat in the aircraft so I took extra care when following my routine preflight inspection.

It was found that the throttle was to the full position and needed to be back to idle, the key was removed, so I had to get the extra set, and the battery was disconnected so I needed to reconnect the power. All the adjustments were made to achieve what was supposed to be a safe takeoff.

Weather conditions were checked and VFR conditions were favorable for the flight. Mr Harris arrived on time for his scheduled appointment at 7:30 am for his introductory flight lesson. I asked that him and his wife step aside a safe distance as I would put the front wheel against the trailer to start the engine, check the mags, and warm the engine up to 114 Degrees. I then move the powered parachute away from the trailer and explained the basics of the powered parachute of how we would lay out the chute for takeoff. The winds were calm and I explained to Mr. Harris that we would "Kite" the chute in a large grassy area and then turn onto the Runway and take off to avoid any traffic that may be inbound to land.

Mr. Harris signed the standard liability waiver and he climbed into the back seat of the aircraft. I made sure his seat belt and shoulder harness were secure and asked if he had anything that might fall from his pockets to insure that nothing would fall out and go thru the prop. I asked him if he wanted me to take a video of the flight and if he would mind if we used it on the website and he said no he would not mind. I made one last double check of the A B C D lines and chute layout before turning on the camera getting myself strapped in and headsets on. As the video indicates I again explained what would happen in the process and what we were supposed to do for his safety and own understanding. I then started the engine and Kited the chute. The chute moved a bit to the left but this was not uncommon and because I had a wide open area could easily be adjusted. Before entering the runway I checked for traffic and increased the throttle for takeoff pushing on the footbars to begin to turn the aircraft away from oncoming trees. Once the wheels left the runway I pushed the footbars to steer the chute In the air away from the trees that ran along the runway. Due to the fact the steering lines were fully extended the travel in the line induced by my legs could not give the chute enough of a turn to avoid the oncoming trees as evidenced in the video. My second attempt when I could not turn was to "pump" the steering lines to get some immediate altitude by filling the chute with more air and by pulling the lines with my hands but by that time it was too late and we had reached the maximum climb and the maximum performance of the chute. Causing us to clip some trees and eventually fall to the ground. Immediately on the ground I attended to Mr. Harris and others called 911 to get emergency personnel to his aid. Unfortunately Mr Harris was injured more than I was and I wished I would have sustained the injuries instead of him.


Craig Ewing

Narrative History of Flight

On April 1, 2012 at 7:00 a.m. Powered Parachute N415BA was unloaded from a trailer at the Blackwater Ultralight flight Park. The pilot performed a through preflight as per the aircraft manual provided by the manufacture.

The aircraft was at the Sun and Fun air show in Lakeland FL on display the prior day and many people had sat in the aircraft so extra care was taken when following the checklist for preflight inspection.

Some of the items found in the pre flight were: The throttle was to the full position and needed to be pushed back to idle, the key was removed, so the extra set was used, and the battery was disconnected so the pilot reconnected the battery. All the adjustments were made to achieve what was supposed to be a safe flight.

Weather conditions were checked and VFR conditions were favorable for the flight. The passenger arrived on time for his scheduled appointment at 7:30 am for his introductory powered parachute flight. The pilot was completing his preflight inspection when the passenger arrived and explained to them that he had just come from the air show and was giving the aircraft a through preflight.

The pilot asked the passenger and his wife step aside to a safe distance as the pilot would put the front wheel against the trailer to start the engine, check the mags, and warm the engine up to 114 Degrees. The pilot then moved the powered parachute away from the trailer and explained the basics of the powered parachute and how he would lay out the chute for takeoff. The pilot explained to the passenger that he would "Kite" the chute in a large grassy area and then gradually turn onto the Runway and take off. This would avoid any traffic that may be inbound to land on the runway.

The pilot asked the passenger if he would mind if he recorded the flight and offered to give him a video of the flight if he was interested. He also asked if he could use it for promotion on the company's website. The passenger stated that he would not mind so the video camera mounted from behind the passenger was started. The following is a recollection of the sequence of events leading up the accident and includes reference points in the video to support each statement.

00:08 The pilot asked the passenger if he had anything that might fall out of his pockets because anything that would fall could potentially go thru the prop of the aircraft.

00:20 As a precaution, the pilot removed a set of car keys from his pocket.

01:17 The pilot checked to see the passenger had his seat belt on and strapped his own seat belt on.

01:41 The pilot again explained to the passenger what was going to happen. That he would start the engine, the chute would "Kite" above the cart once they started to move forward and he would check to see that the chute was inflated correctly before they left the ground. Once it was safe to take off he would throttle up to take off.

01:48 The pilot shows a hand gesture indicating that they would depart the taxiway after the chute was kited and enter the runway for takeoff.

01:59 The engine started

02:12 The parachute was kited and the pilot checked to make sure that it was inflated correctly.

02:14 The pilot checked for inbound traffic on the runway.

02:18 The aircraft was pointed down the runway with ample space to takeoff

02:19 Throttle was applied and the aircraft began to take off raising the nose wheel as expected for a planned departure down the runway.

02:20 The pilot applied input to the footbars to adjust the aircraft direction.

02:23 The pilot discovered that the footbars were not operating correctly and did not have directional control once airborne.

2:24 With the foot bars fully extended the pilot made a last second attempt to Grab with his hands the steering lines to clear the oncoming trees and fill the parachute with more air and create more lift.

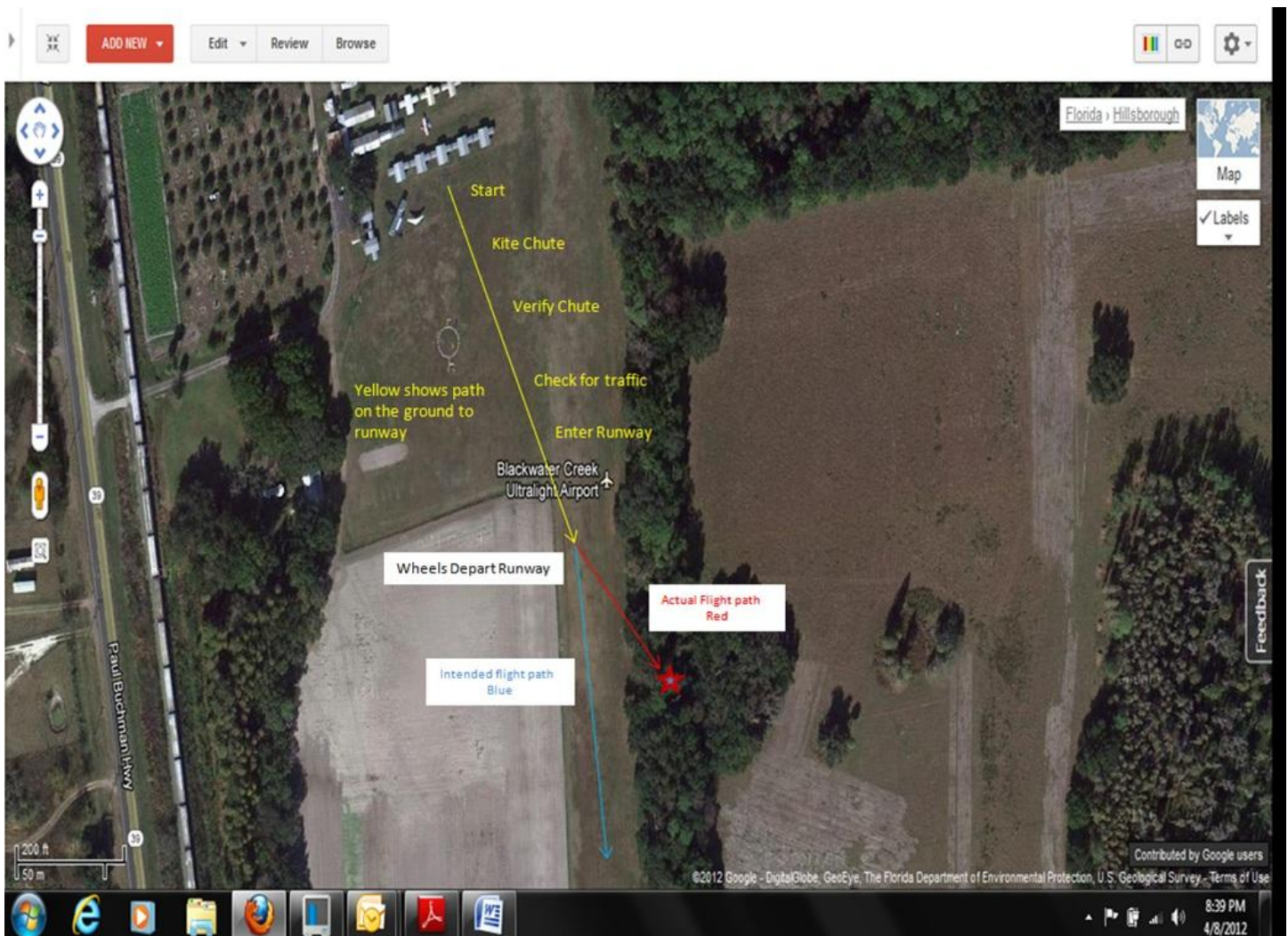
2:26 Indicates that the pilot was doing everything he could to control the aircraft. The foot bars that control the direction of the aircraft were fully extended, he tried to remove the slack in the lines by reaching up to the control lines and manually pulling them down to create more lift to clear the trees.

2:27 The aircraft impacted the top of the trees. Disabling the engine.

2:38 The aircraft struck the ground.

The picture below in Figure 1.1 shows the taxi area where the wing would be kited, (Yellow Line) The planned route for takeoff (Blue line) and the actual path once airborne. (Red Line)

Figure 1.1



The aircraft did not perform as needed for safe flight. The pilot had no way of knowing that someone had either intentionally or unintentionally adjusted the trim locks on his aircraft. The video clearly indicates the slack that was in the steering lines causing the inability to steer the aircraft once airborne. The way the aircraft is designed, the pilot had no way of checking the tension on these lines until the parachute is fully "Kited" and the wheels have left the ground.

The FAA investigator found a difference of 5 inches in slack between the right and the left steering lines. This caused the aircraft to pull to the left toward the trees once airborne and did not give the pilot the ability to compensate and avoid the trees by taking off down the runway. The pilot thinks that someone changed the settings of the trim locks while the aircraft was on display at the air show the day prior because he had flown the aircraft two days prior from the same airport with a similar takeoff pattern and the aircraft performed as expected.

Recommendations:

A possible recommendation by the pilot / owner operator of the aircraft is that the color of the steering lines could be different colors toward the ends. This would give the pilot the ability to see that one side is pulled in more on one side than the other side; it would tell the pilot how much line they have pulled in and offer warning areas showing that the pilot is at risk of a stall. Or in this case, the lines are too far out not allowing the ability to steer the aircraft on takeoff. It would allow the operator to know if someone has changed the trim on one side or the other and could have eliminated this accident.