

Flight Narrative

Aircraft N6849B

Based at KBUU

Date of Flight 8/9/2020

Approximately 2-2:30 PM

On August 5, 2020 the aircraft was at Racine (KRAC) where it was fueled. Both wing tanks were topped off with 100LL gas for a total fuel load of 36 gallons. The aircraft was then flown directly to KBUU and hangered. Conservatively figuring 12 gallons an hour burn there should have been at least 30 gallons on board at the time of landing .

On Sunday August 9 Vaughan Weeks (here after "the Pilot") and Ruth Webb ("the passenger") went to Burlington intending to take a short local flight. Weather was checked before going to BUU by phoning the automated service at KBUU.

Upon arriving the aircraft was pre-flighted. During the fuel check about ¼" of water was visible in the draw from the left tank. Two more full sampler tube draws were made on that tank and neither showed any additional water.

The pilot and passenger boarded and the engine was started. Preliminary checks of oil pressure and temperature showed good. Fuel gages indicated both tanks were full.

The pilot had just noticed another aircraft land on runway 11 as he began taxiing to the west end of the ramp. Winds were checked via radio and they were given as 190°. Because of the proximity of runway 19 the pilot decided to use that runway.

The aircraft was taxied to a position near the north end of the runway and the engine run up was performed at 2000 rpm. Appropriate rpm drops were noted on left, right and carb heat. The radio announcement "Burlington traffic, Tri-Pacer 6849 Bravo Departing runway 19 Burlington, the turf". The plane was then taxied to position at the runway end.

Although the runway was sufficient for a normal takeoff the pilot opted to use the short field takeoff procedure described in the Tri-Pacer owner's handbook. This involved bringing the engine to full throttle, releasing the brake and accelerating while holding back pressure to reduce weight on the nose gear. At near take off speed full flaps are applied which causes the aircraft to leave the ground in ground effect and accelerate just above the surface (per the handbook this reduces the takeoff roll by 20%. This happened.

When takeoff speed was reached the aircraft was rotated for climb.

At this point the pilot noticed the plane felt a bit mushy but initially thought this was due to the high temperature.

It then became evident that the plane was not climbing well at all and might have trouble clearing some small trees near the runway's end. A quick glance at the tachometer showed that the engine had only reached 2100 rpm at full throttle.

Judging there was not enough runway ahead to land the pilot maneuvered slightly to the left through a low spot in the trees.

The plane was still gaining altitude very slowly. Trying to gain airspeed the pilot slightly lowered the nose (but still nose high) the plane began to sink so the nose was raised again to an attitude that gave at least some climb. The tachometer was still showing 2100 rpm.

The pilot briefly considered carb heat but realized this would guarantee a loss of power and climb with another line of trees just ahead.

The second row of trees was barely cleared, again by turning slightly to go through a low spot.

The third row of trees was too close to climb over. Visually the treetop directly ahead was at about the height of the cabin floor when the impact occurred.

A series of violent disorientating pitch and yaw changes (no roll change felt) delivered the plane to the ground.

The pilot and passenger were conscious throughout the crash and found themselves upside down and entangled in bent airframe tube, seats and a badly displaced panel.

People were on the scene in seconds and told us 911 had been called and help was already on the way.

Rescue personnel using "jaws of life" and other implements extracted the pilot and passenger from the plane. Once extracted the pilot and passenger were removed from the scene in separate "Flight for Life" helicopters.

Vaughan Weeks

8/15/2020