

Pilot's accident report involving AIR CREATION BUGGY ULTRALIGHT WEIGHT SHIFT CONTROL TRIKE (N2764N) which occurred on 11/13/2020 in Benson, AZ (E95)

Conditions at flight time approximately 1:45 pm: Wind from 270 at 7 knots. Overcast sky with ceiling above 5000ft, visibility greater than 10 miles, about 65 degrees F. E95 Runway 28

Thomas intended to complete ten touch and go's to improve landing and takeoff skills. Thomas took off from RWY 28 gaining altitude to 350 AGL and turned crosswind while continuing to climb to 500 feet during downwind leg. He initiated base turn at about 100 yds past the east end of runway 28, cutting the power to idle while turning final at 250 ft AGL about 150 yds east of RWY 28.

Thomas was maintaining airspeed at 55 to 60 mph and glide ratio to land on the Numbers or slightly beyond. As Thomas drew closer to the runway he realized he was sinking far faster than he had at the beginning of final approach, which he now attributes to a severe downdraft near the east end of runway 28. Knowing that he was short of the runway, Thomas added power at about 40 feet AGL to climb but the downdraft continued to push him onto the ground, landing on 3 wheels about 10 -12 feet short of the runway, still going 60 mph. The front tire hit the east edge of RWY 28, the force causing the front wheel carriage to shear from the main structure of the trike. The force broke the front tire rim and the full weight of the front wheel assembly was on the throttle cable which is operated by the right pedal of the front wheel assembly.

At this point the front wheel is hanging and spinning below the aircraft by the throttle cable which has pulled out to full throttle. Thomas maintained control of the aircraft as it continued to climb at full throttle. Thomas issued a MAYDAY alert on the airport frequency, explained that his front tire was hanging below the aircraft and he was at full throttle without throttle control. He quickly climbed through 400 feet traveling west over the runway. At the end of the runway he began to turn crosswind and discovered the dangling wheel made the aircraft turn at a high rate of bank so he regained control and made slight inputs to the left to maintain control. He eventually entered the downwind leg slightly to the south of the railroad tracks.

Thomas decided his best course of action in the circumstances was to kill the engine while on the base leg and perform a power off landing in the dirt on the north side of the runway which would be more forgiving than the runway surface. During the downwind leg he was still climbing through 700 ft. Thomas turned base leg about 300 feet east of the end of RWY 28 and killed the engine about halfway through the base leg.

Thomas maintained his airspeed at 55-60 mph and decent rate as he had been trained to do. At about 15 ft AGL he rotated from gliding down into forward flight and brought the trike down as intended to the dirt on the back wheels first, then the front body of the trike hit, causing the trike to do one complete somersault before stopping.

Thomas exited the vehicle safely, took off helmet and headset and observed the damaged trike. One propeller blade sheared off during the somersault, the kingpost and the outer 7 feet of each

wing were bent down at a 90 degree angle. There was no gas leakage, but the fiberglass shell of the body was broken in several places and pieces were missing. Within a minute after getting out of the wreckage, a guy named Larry drove up with his pickup asking if Thomas was okay. Thomas told him he was fine except for a pain coming from his right heel, but he was walking around so he figured it was bruised but not sprained or broken. Soon afterwards Officers from the Benson Police department and Cochise County Sheriff arrived and Officer P Macaladan began taking a report.