

The following statement made by the FAA Inspector covers two accidents that occurred on 09/29/2015 at a private airstrip in Lake City, Colorado (CD32). Airplane number 1 in this statement (N4HW) was assigned NTSB accident number GAA15CA292. Airplane number 2 in this statement (N319PT) was assigned NTSB accident number GAA15CA293. Airplane number 3 (N5549N) in this statement does not meet the criteria for an accident as a parked airplane with no intent for flight. The parked airplane is not represented in the probable cause statement and the damage to that airplane is not being investigated.

Inspector's Statement

Date: 09/30/2015

Time: 1700

Location: Lake City, Colorado private Strip CD32

Name and Contact Number of the Inspector: Yancey Rushton [REDACTED]

Statement:

On 9/30/2015 I was dispatched to a small, high elevation strip, CD32 (Castle Lakes), to look at two Carbon Cubs that had crashed within two hours of each other.

I arrived around 3:00 pm to Lake City, Colorado (the nearest town) and met the Airport Manager, Mr. Clay Wormington, who took me up to CD32.

CD32 is a high elevation, hard packed gravel strip approximately 3000' in length/50' wide and in a deep canyon on the valley floor. The airstrip was in good condition, had a wind sock, and was lined with trees on both sides. Both the approach and departure end of the runway were obstacle free. The runway alignment is 04/22.

Upon arrival to the airport I saw three aircraft. The first aircraft, N4HW, was the first to crash. It was on the right side of the runway about 621' from the take-off position on runway 04. The second aircraft, N319PT, was the second to crash and it was also on the right side of the runway in a ditch. This aircraft was located about 368' from the take-off position on runway 04. The third aircraft, N5549N, was parked on the right side of the runway in what appeared to be a slight lateral extension for parking. This aircraft appeared to be intact and undamaged but upon further inspection we discovered tire marks and spar damage on the upper surface of the right wing, indicating that the second aircraft, N319PT had rolled over that plane on its way to the ditch.

Plane #1: N4HW, Cubcrafter Carbon Cub, CC-11-160

Plane #2: N319PT, Cubcrafter Carbon Cub, CC-11-160

Plane #3: N5549N, Cessna C-182

As began to look at the wreckage, I was informed by Mr. Wormington that he had witnessed both accidents and he was willing to provide a statement. In his opinion the first one, N4HW, was "hot dogging" and the second one, N319PT, lost directional control from the very start and never corrected. He further explained the following: "N4HW was trying to show off and took off in a very short distance and climbed out at an extremely high deck angle, Vx or better, and stalled, impacted a set of trees and crashed in a ditch. The second one, N319PT, lost directional control from the second power was added and the pilot never corrected with his rudders and was

aiming directly at me and my parked Cessna 182, forcing me to jump in the ditch to avoid being hit and that plane crashed 10 yards away, never getting more than 10' in the air."

With that knowledge I started my examination.

Aircraft #1: I started my investigation by examining the first aircraft and pacing off the distance from take-off to crash. That distance covered 270 paces with each pace being approximately 2.3' or 621 feet total. It impacted trees on the right side of the runway with its LEFT wing 250 paces down the runway about 25' feet in the air. The tops of the small Aspens had been chopped off and lay in the ditch where the aircraft ended up. I was confused at first because the location of the hit trees and the location of the downed aircraft and the obvious impact of the left wing did not make sense. Mr. Wormington explained that the aircraft had landed on private property, somebody who hates the airport and aviation, so he quickly removed the airplane and drug it with his tractor off the private property and placed it next to the runway. This explained the aircrafts location on the field. I examined the wreckage where it now lay. The fuel tanks had been punctured and were empty. The cables connecting ailerons and rudder appeared to be intact and not severed. The left wing had a classic U shape in the leading edge with bark and tree sap smeared on it and deep twisting and contortion from the impact. The U shape indentation was approximately 18 inches in depth and diameter and the wing around the indentation was crushed the entire chord length. The right wing was virtually untouched except for a small indentation that likely occurred as the plane was falling to the ground through the trees. The left horizontal stabilizer was intact and the right horizontal stabilizer was severed at the root. The nose cowling had severe twisting and lacerations indicating a very violent and sudden stoppage of the engine. Both wooden propellers were shattered at the hub.

Aircraft #2: The second aircraft lay in a ditch on the right side about 10 yards past the parked Cessna 182. N319PT's damage immediately looked like a plane that had hit the ground hard forcing the wings to structurally collapse from impact. Located next to the parked Cessna 182 was a small electrical service power pole that had been cut off at the top and was being replaced by the power company when I arrived. According to the line serviceman, the pole was not hit by the aircraft but the "guy wire" was and that pulled and snapped the pole. The eyewitness, Mr. Clay Wormington, did not witness the impact because he had jumped into the ditch to avoid being hit by N319PT as it rolled towards his parked Cessna 182. When the electrical service pole snapped, high voltage wires were severed and started a small grass fire next to the crashed N319PT. This was put out quickly by the eye witness Mr. Clay Wormington. An examination of N319PT revealed collapsed gear, structural failure at the wing root on both wings, and the right fuel tank had been punctured and was empty. The left tank contained at least half a tank of fuel. I traced all cables connecting the ailerons and rudders and they appeared to be intact. The propeller was intact and appeared to be mostly undamaged. It never made any contact with a tree or the ground. The aircraft lay exactly perpendicular to the runway in the ditch.

Aircraft #3: The third aircraft involved in this accident scenario was a parked Cessna 182, N5549N. This aircraft was located on the right side of the runway about 95 paces, 218 feet, from the take-off position. Damage to this aircraft was located on the top of the right wing. According to the eye witness, N319PT, was tracking down the runway from the very start off center and never corrected a drift to the right side of the runway. As the aircraft approached the

parked Cessna 182 and impact was imminent, the eye witness jumped into the ditch and N319PT jerked off the ground in an attempt to get airborne. As a result of not really being ready to fly, N319PT lifted off about 10 in the air and rolled across the top of N5549N, the parked Cessna 182, and then ended up in the ditch 10 yards away. N5549N had spar damage on the upper surface as well as main and tail wheel marks tracking in the direction of the crashed N319PT.

I took pictures of all three aircraft, interviewed the eye witness, and paced off the location of all aircraft. I searched both aircraft for any relevant documents. N4HW, the first to crash, contained nothing in the aircraft. The POH, the Registration, and all checklists had been removed. The second aircraft, N319PT, contained all required documents plus an additional mounted GO PRO camera, which I removed and took with me for examination. It was getting dark and ended my on scene investigation.

Inspector's Initial Observations:

Generally an accident investigation involves three areas: man, machine, or environment. In this accident I have been able to rule out machine. Both pilots are still alive and I have spoken with them at length and neither of them claim that there was anything wrong with the aircraft. I have also investigated the wreckage and do not see any obvious indicator that something failed on the aircraft.

The environment is still a bit of a question. Both pilots are reporting a wind gust on take-off and claiming that is the cause of the crash. However, the other 8 pilots in their Carbon Cub aircraft departed that same afternoon without incident and the eye witness claims that the winds were basically calm.

The man is the likely cause of this accident. Both aircraft departed a high elevation airport in a very short amount of distance. The first to crash, N4HW, crashed at approximately 621' feet down the runway. This was after climbing up to an altitude of at least 30' and taking off the tops of some small Aspen trees, which means that he rotated somewhere around the 400' range. The field elevation at the airport was 9300' MSL. The temperature was likely in the 75 to 80 degree Fahrenheit range which puts the Density Altitude at 12,600' according to a the Koch Chart. The POH for the CC11-160 stops at 8000 and any altitudes above that will require extrapolation. According to my quick calculations in a no wind environment, a minimum of 425' would be required to safely depart given the conditions and elevation. This would also assume that the mixture was leaned perfectly and that conditions were perfect. Any gusting wind, as reported by both pilots, would affect these numbers significantly. Additionally, there was at least an additional 2000' of runway remaining that would have allowed for a longer and safer take-off roll.

My observation and opinion is that the first pilot in N4HW rotated at a bare minimum distance for given conditions and then immediately climbed out of ground effect at a V_x that was too high and stalled the right wing, lost directional control and impacted the Aspen trees with the left wing, spiraling the plane down to the ground on the right side of runway. The second aircraft, N319PT initiated his take-off roll without using sufficient rudder to maintain a centerline track. As the aircraft drifted to the right the pilot realized that he would hit the parked Cessna 182 on

the right side and tried to force the aircraft into the air before it was ready to fly. As a result he only got airborne for a few second, rolled across the top of the parked Cessna 182, and then crashed into the ditch about 10 yards further down the runway.

In my estimation, both are pilot error and the “gusting wind” contributed to the accident but should not be the cause of the accident. Poor airmanship and a failure to properly understand the effects of density Altitude is the cause of this accident.

Signature: _____
Yancey G. Rushton, ASI

Date: _____