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**Federal Aviation
Administration**

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Inspector Statement

On Tuesday, April 11, 2017 at approximately 1400 hours, this Inspector investigated/examined the accident scene and wreckage of N3846T, a Zenair STOL CH 701, built by John T. Lazear in 2000. N3846T was certificated by the Federal Aviation Administration with a Special Airworthiness Certificate in the Experimental category with the Purpose of Operating Amateur Built Aircraft August 8, 2000. N3846T is currently owned and registered to John P. Stone, [REDACTED]. The accident scene and wreckage was examined at the above mentioned address.

The wreckage/accident scene was in a hayfield owned by Mr. Stone and had been contained to an approximate 100 square foot area by first responders. The aircraft was in an upright position, at a 240 degree heading with the landing gear folded up under its belly. All major components are accounted for. Staining on the ground adjacent to the engine and left wing was indicative of a fuel spill.

Twenty feet directly in front of the nose, was a ground scar measuring approximately six feet long by three feet wide believed to be the main point of impact. This is evidenced by numerous yellow paint chips, numerous strands/chunks of composite material (pieces of the propeller) and miscellaneous debris in and around the scarred area. The sizes of the debris ranged from immeasurable to four inches in length. Fifteen feet and to the left (facing east) a ground scar was observed measuring approximately three feet long by one foot wide. Thirty five feet (facing west) in front of the main point of impact, a piece of composite material was found measuring seven inches long by four inches wide, and is believed to be a piece of the propeller.

All three propeller blades received substantial damage. One blade was sheared at the hub, one blade was sheared approximately 6 inches from the root, and the third was sheared approximately 9 inches from the root. What remained of the latter blade was caked with dirt.

The nose landing gear was folded up under the belly, slightly right of centerline. The engine lower fairing, forward lower portion, sustained substantial impact damage from both the nose landing gear and impact. The engine upper cowling was removed and propped up against the left wing. It is believed this was removed and placed there by the first responders. The engine firewall and surrounding outer skin upper portion was dented and crumpled toward the front of the aircraft. The skin area, forward of the crew doors, was crumpled in an accordion-like fashion, towards the rear of the aircraft.

The cockpit exterior sustained considerable damage. The windscreen had accordion like folds and was broken/split in several places. Numerous rivets used to mount the skin, windscreen, and overhead window, had pulled through or popped out. The left and right hand doors remained attached to the airframe. The interior of the crew compartment remained mostly intact except for the upper forward portion of the dashboard, the forward support tubes, and the pilot/passenger foot well which sustain substantial impact damage. The forward upper portion of the dashboard was crumpled. The forward support tubes were bent, cracked, and pulled free from their lower mounts. The pilot and passenger restraints remained attached. Positions of gauges, switches, levers, etc. appeared to be consistent with flight operations. The left and right wing fuel tank overhead fuel shutoff valves were observed in the "off" position. The header tank fuel valve was also observed in the off position.

The left wing remained attached to the airframe. The leading edge slats sustained substantial damage. The left wing tip leading edge and left wing root trailing edge sustained damage consistent with impact. The left flap and aileron was detached from the wing assembly. The left wing fuel tank filler cap was removed and fuel was observed in the fuel tank.

The main landing gear (to include the mount assembly) was folded under, to the rear, and right of centerline, of the aircraft's belly. The skin of the left side of the aircraft, forward of the empennage, aft of the crew doors, was crushed and folded in an upward direction.

The aft portion of the empennage, horizontal stabilizers, elevators, rudder, and vertical fin remained intact, however, the tail was left of centerline.

The skin on the right side of the aircraft, forward of the empennage, aft of the crew doors, was oil canned and showed evidence of stretching. The right wing fuel tank filler cap was removed and fuel was observed in the fuel tank.

Total time on the airframe was 464.0. Last condition inspection was completed 454.0 aircraft hours, October 30, 2016.

A review of the engine/accessory component times for compliance with the applicable manufacturer's recommended overhauls or replacement times for N3846T was found to be satisfactory. No discrepancies were noted.

A review of the Airworthiness Directives (AD) for the engine and associated accessories for N3846T against the current ADs were found to be satisfactory. No discrepancies were noted in required compliance.

A review of the Operating Limitations and Instructions for Continued Airworthiness for N3846T as depicted in the FAA Aircraft Registry Electronic Data Reporting System was found to be in compliance. No discrepancies were noted.

After interviewing the Pilot in Command of N3846T, it is believed the pilot took off, at a 130 degree heading, with a quartering tailwind. The pilot stated once the airplane became airborne, he felt could not gain the altitude needed to clear a tree line so he banked hard left. The aircraft now had a tailwind and was still unable to obtain lift. He realized he needed to clear power lines that were ahead of him, and pulled hard back on the stick. As the airplane cleared the power lines, the left wing stalled and the aircraft lost all lift.

It is believed, as indicated by ground scarring and examination of the wreckage, after the aircraft cleared the power lines, the left wing stalled and the airplane impacted the ground in a nose down attitude, at an estimated angle of between 40 to 50 degrees. The wreckage also indicates that the aircraft "pirouetted" counterclockwise, on its nose, before coming to its final position. Also, the gross weight of the airplane at the time of the accident is in question. Although the pilot claimed (see Record of Visit dated April 13, 2017) the wing tanks were empty, there is no way to determine how much fuel was on board because of spillage after impact and fuel was observed in both wing tanks as mentioned above.


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