



MEMORANDUM FOR RECORD

Millicent Hill
Aviation Accident Investigator
Eastern Region Aviation

Date: May 30, 2019
Person Contacted: Scott Childs, FAA Inspector

This investigator interviewed Mr. Childs by telephone and email, he stated traveled to the accident site and inspected weight shift-control special light-sport aircraft.

- When he arrived on scene the pilot's father told him the pilot had recently bought the aircraft and had it trucked from Oregon to Georgia. The pilot was landing on his grass strip from north to south. The grass strip is lined by trees on the right (west) side. The aircraft impacted trees about 6 ft off the ground. The aircraft was on its side, resting against trees to the right of the runway. The fuselage was heavily damaged and was still attached to the wing. The wing was intact with damage to the wingtips. The engine separated from the steel tube and Dakron fuselage. The fuel tank was breached, and the ground was soaked with fuel.
- He spoke to the previous owner stated the pilot had 12 flight hours in trikes. He stated trikes are "difficult to learn, because all of the controls are reversed." He urged him to get more training and help reassembling the wing after transport. He also stated the aircraft was equipped with a high-performance wing, a Cheval wing, and was "less forgiving."
- The pilot does not have a weight shift control endorsement/rating, the aircraft did not have a current annual condition inspection. The pilot completed the wing instillation himself. The only engine logbook entry is the instillation in 2009.
- The day before the accident the pilot reported having control issues with the aircraft. Mr. Childs viewed three videos, about 15 minutes each, dated 3 days before the accident from a helmet-mounted go-pro camera the pilot wore. The pilot was flying from his home strip, at Rolling Meadows Airfield (29GA), Sharpsburg, Georgia, to Atlanta Regional Airport (FFC), Atlanta, Georgia. After landing there was recorded audio of the pilot on a phone call to his wife talking about how much difficulty he had controlling the aircraft.
- Mr. Childs viewed a 15:57 minute video of the accident flight. The accident video was recorded in fast-forward with no audio. During the landing the pilot makes "full left and forward" control bar movements, which would result in "full right and nose up" at the control surfaces.
- The pilot later reported to the FAA he had missrigged the wing during instillation, then "switched some rigging around" before the accident.



Federal Aviation Administration

Memorandum – Inspector Statement

Date: December 29, 2020
To: Accident File N156AP
From: Scott Childs IIC
Subject: Accident # SO1119028 Sharpsburg, GA

On 03/20/2019 at approximately 1508 Eastern Standard Time, a light sport SLSA Apollo Monsoon (weight shift control trike), N156AP, s/n 000013 crashed at Rolling Meadows Airfield in Sharpsburg, GA. The pilot sustained serious injuries and was airlifted to Atlanta Medical Center. The flight originated from KFFC Peachtree City, GA at approximately 1430. Day, visual meteorological conditions prevailed with winds variable at 4 knots from KFFC METARS data.

I was notified at 1533 local time by the regional operations center. I arrived on scene at 1605 local. The site had been secured by Coweta County Sheriff's office and the county fire department was also on scene. I conducted an examination of the accident scene, took photographs, and gathered memory cards from a go-pro camera and the aircraft flight computer. The pilot in command's father was also on scene. The father stated that his son just purchased the aircraft from Oregon and that he experienced flight control issues the day before. I asked him how the aircraft was transported to Georgia and he stated it was transported via truck with the wing removed. I asked for more information on the wing installation/rigging but the father had limited data. I released the aircraft back to the family at 1700 local.

The crash scene showed that the aircraft attempted to land from north to south. Small tree limbs were damaged just north of the wreckage site on the west side of the airstrip. The aircraft impacted the base of two large pine trees about 6 feet off the ground. The force from the impact caused one pine tree's top to shear off. The impact caused the fiberglass fuselage to shatter and spin around coming to rest at a NW direction. The engine/rear wheel assembly was separated and lying on the ground. Both carbon fiber propeller blades were shattered. The left side of the wing leading edge was driven up into the trees with the wing struts/weight shift linkage bent around the tree. The right side of the wing was broken and resting on the ground. The trike seating area was broken apart but still attached to the wing and hanging from the tree. The fuel tank was breached and the ground was soaked with fuel. The impact caused the ballistic recovery system to fire and the parachute rocket impaled the pine tree.

I discovered a youtube video of the aircraft for sale from 2017 by Evolution Trikes. I contacted the company and spoke with a trike expert. He stated that they sold the aircraft to the previous owner in Oregon. He stated that weight shift control trikes are very difficult to learn because all of the controls are reversed, especially high performance trikes such as this one. He said if the winds are over 20 mph to hangar the aircraft and that they are sensitive to UV light.

The go-pro videos revealed the PIC had control issues with the aircraft. The first several videos were dated 03/17/2019, timestamped 14:39, 14:57, and 15:14. These first videos are in real time with audio. They show him flying the aircraft from Rolling Meadows to KFFC. The flight was very unstable but he was able to land at the airport. Upon engine shutdown he calls his wife and makes several statements such as "good news I'm alive I didn't crash", "the wing is a pain in the a**", "missed approach at our place", "wants to sell the sport wing", "had to fight it the whole time", "doesn't like it", "difficult in the wind". The crash video was recorded in fast forward with no audio. It is dated 3/20/2019 and timestamped 15:57. The crash video shows control inputs that steer the aircraft into the trees. Control bar is full left and forward which would cause full right steer and nose up.

I contacted the previous owner and he confirmed that the aircraft wing was removed for transport via truck from OR to GA. He stated that the buyer had a total of 12 hours flight time in trikes. He said that he had to persuade him to

truck it back to GA as he was wanting to fly it home. He directed him to get more flight training from an instructor before operation. He also instructed him to get the local expert from GA to help install the wing. The seller also stated that the wing was not original. The original wing was an Aeros Profi and that the manufacturing representative approved the wing change to the Cheval 12.4 via letter of authorization. The Cheval wing is a sport wing that is smaller and less forgiving. According to the FAA SLSA directory, the only wings approved for the Monsoon are the Aeros Profi and the GT5. I contacted the company that approved the wing change, (Silverlight Aviation) and was forwarded a copy of the LOA.

I contacted the FBO at KFFC and they did provide hangar service for N156AP on 03/17/2019. I spoke with a ramp worker who stated that the aircraft had been tied down outside with the winds picking up before the aircraft was moved into the hangar. The worker also stated that he heard the owner say that he installed the wing himself.

I received a phone call from PIC and some pilot and aircraft logbook information on 5/14/2019. His pilot logbook shows 5 hours and 3 landings from 2010 in N94326, which is a WSC trike. He said that he missed rigged the wing the day before and then switched some rigging around before the crash. He stated that he has not received a regulatory check ride nor a weight shift control endorsement/rating and that the aircraft did not have a current annual condition inspection. The only maintenance record sent was the engine logbook that shows the initial install check.

Of the nine responsibilities, I marked yes to airworthiness due to the non-certificated improper maintenance/rigging of the wing. I marked yes to airman competence due to the lack of WSC training/rating and lack of flight review. I marked yes to FAR violation for the items above and for the aircraft operation out of annual condition inspection.

SCOTT CHILDS IIC