

July 17, 2020

Paul J. Petrella

Inspector Report

N2716P Aircraft Accident – Cortland , NY – N03 Cortland County – Chase Field

FAA ATQA Accident # **A-EA-23-20-010**

NTSB Accident # **ERA20LA246**

On July 13, 2020, at approximately 0933 local, N2716P, a Piper PA-22-150, SN: 22-5280, performed an emergency landing immediately after lift-off from runway 24, at N03 (Cortland County – Chase Field). Pilot in Command (PIC), Mr. Richard James Neno, Private Pilot [REDACTED] was in the pilot's seat. Mr. Douglas Martin Anthonson was a passenger, in the co-pilot's seat. Mr. Neno was taken by ambulance to the local hospital for evaluation. He sustained minor injuries. Mr. Anthonson sustained mild injuries. The aircraft suffered substantial damage. Aircraft is registered to Richard Neno. Mr. Anthonson called FAA Inspector William Abbott on his cell phone, and notified him of the accident. Inspector Abbott notified the FAA ROC. I was assigned to the accident on July 13, 2020.

On July 13, 2020, I responded to the accident scene, and arrived at 1145 local. I was met by Cortland County Sheriff, LT. Chad Burhans, the airport manager, Mr. Dan McLaughlin, and passenger, Mr. Doug Anthonson. The aircraft was several hundred feet off the end of runway 24. Upon introducing myself, Mr. Anthonson stated he was the mechanic, and had recently completed significant work on the aircraft. He stated, due to the way the aircraft handled upon takeoff, he believed he rigged the ailerons improperly. I informed Mr. Anthonson of the FAA Compliance Program, and issued him a paper Pilot's Bill of Rights and Compliance Philosophy brochure. I performed a walk around of the aircraft. There was no evidence of fuel leaks, and no post-crash fire. Mr. Anthonson had removed the aircraft battery, and de-activated the emergency locator transmitter (ELT). I then proceeded to photograph the scene. The aircraft sustained substantial damage. Both propeller blades were bent gently aft, from the middle of the blades out. The nose gear was collapsed, and the lower cowling sustained significant damage. The left landing gear was collapsed. The left wing tip sustained significant damage. The fuselage was bent at a sharp angle to the left of the aircraft. The aft, underside of the belly, the rudder, and the right elevator appeared to have impact damage. I performed a continuity check of all flight controls. The ailerons moved in the opposite direction of the control yoke. Right aileron applied at the yoke, resulted in the right aileron deflecting down, and the left aileron deflecting up. Left aileron applied at the yoke, resulted in the left aileron deflecting down, and the right aileron deflecting up. At this point, I informed the Cortland County Airport personnel, the aircraft could be moved.

At this time, I conducted an interview with Mr. Anthonson. Mr. Anthonson stated he had recently completed a lengthy restoration of N2716P. He stated he had completed the paperwork, and he and Mr. Neno were conducting a post maintenance check flight. He further stated he had checked the aileron deflection, and cable tensions, but forgot to check proper movement. Mr. Anthonson stated he read the aircraft checklist to Mr. Neno prior to departing runway 24. He stated the checklist covered "controls". Mr. Anthonson stated neither he nor Mr. Neno, verified aileron movement in the proper direction, only

freedom of movement. He stated there was only a gentle breeze, approximately 4 or 5 MPH, quartering into the right front of the aircraft. He stated the aircraft lifted off with no issues. Mr. Anthonson stated as they began the takeoff climb, the right wing lifted slightly. He stated Mr. Neno input right aileron, but the right wing rose even more. He stated Mr. Neno told him something was wrong. He stated Mr. Neno announced he was putting in right rudder, to level the aircraft. Mr. Anthonson stated the aircraft partially leveled. Mr. Anthonson stated the aircraft then began to roll to the left hard. He stated Mr. Neno announced he was going to attempt to land the aircraft because it was not responding properly. He stated Mr. Neno reduced the throttle to idle. Mr. Anthonson stated the aircraft landed hard in the grass off the end of runway 24. He stated he felt the landing gear collapse, and the aircraft came to a stop. He stated he exited the aircraft immediately, and assisted Mr. Neno to exit the aircraft. This concluded my interview with Mr. Anthonson.

At this time, I performed a review and photographed the aircraft maintenance paperwork. The paperwork indicated Mr. Anthonson had removed and replaced the aileron flight control cables. I photographed Mr. Neno's pilot's log, which was with the aircraft maintenance records.

On July 14, 2020, Mr. Neno emailed me a written statement describing the accident. Mr. Neno stated he did not perform a check to verify proper direction of the ailerons prior to takeoff, only freedom of movement. Mr. Neno stated the takeoff was normal. Upon takeoff, he stated the right wing began to raise, He applied right aileron, and he stated the right wing came up more. He stated he applied right rudder to level the aircraft wings, and crab into the wind. He stated when he relaxed the rudder, the aircraft continued to bank left. Mr. Neno stated he applied significant right rudder to keep the aircraft level. He stated he struggled to maintain control of the aircraft, and decided to land. He stated he reduced power, and rapidly descended. Mr. Neno stated he applied full right aileron and full right rudder in the descent. He stated he had minimal control over the aircraft. He stated he attempted to flare the aircraft above the ground, but lost more control over the aircraft. Mr. Neno stated after the crash, he noted the right aileron moved down with right control input.

On July 14, 2020, I performed a telephone interview with Mr. Richard Neno. I requested a copy of Mr. Neno's pilot certificate and medical. Mr. Neno emailed photos of his pilot certificate. Mr. Neno stated he did not have a current medical. I asked Mr. Neno when his last medical was. Mr. Neno stated it was in the late 1990's. The FAA database showed Mr. Neno's last medical as a third class medical in 1999. I informed Mr. Neno of the FAA's Compliance Program. I asked if Mr. Neno he operated other aircraft. Mr. Neno stated he owned two light sport aircraft, besides N2716P, and flew them regularly. I informed Mr. Neno the Piper PA-22-150 was not a light sport category aircraft, and requires a valid medical to operate. Mr. Neno stated he understood. I informed Mr. Neno an operations inspector would follow up with him regarding this matter. Mr. Neno recounted the accident details again, with no differences from his statement. He again stated he did not check for proper aileron control input, prior to takeoff.

On July, 15, 2020, I emailed Mr. Neno a digital copy of the Pilot's Bill of Rights and Compliance Philosophy brochure.

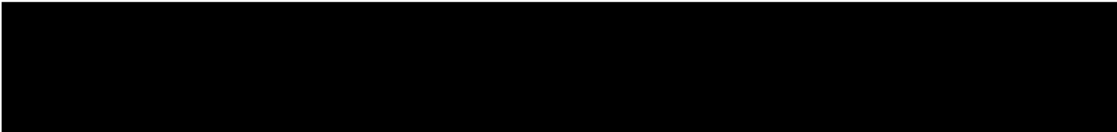
On July 15, 2020, I met with Mr. Neno at N03. I asked Mr. Neno if his pilot's log book was complete. Mr. Neno stated it was not, but he had a supplemental log in the aircraft. I photographed Mr. Neno's supplemental flight log book. The log was a red notebook labeled "N2716P". The log book began September 13, 2014.

On July 15, 2020, I performed an inspection on N2716P. On removing the access panels from both wings, it was noted the aileron balance cable that runs from the left aileron to the right aileron, was connected to both aileron control horn upper attach points. In accordance with the Piper PA-22-150 parts catalog, this cable should attach to both aileron control horn lower attach points. The aileron input cables on both ailerons, were connected to both aileron control horn lower attach points. According to the Piper PA-22-150 parts catalog, the input cables should attach to both aileron control horn upper attach points. The right hand aileron input cable, and the balance cable were twisted around each other, outboard of the mid-wing cable guides.

On July 15, 2020, I met with Mr. Anthonson at the aircraft, and showed him my findings. Mr. Anthonson stated he must have inadvertently swapped the positions of the aileron balance cable and the aileron input cables. Mr. Anthonson stated he failed to verify proper direction of controls after replacing the aileron cables. Mr. Anthonson provided me with a written statement of his recollection of the accident.

Due to the age of this aircraft, there is no maintenance manual provided by Piper. The Piper Owner's Handbook for Operation and Maintenance, and the PA-22-150 Illustrated Parts Catalog, show the balance cable connected to the aileron control horn lower attach points. Piper Service Bulletin No. 181, titled, "Replacement of 1/8 - 7 x 19 Flexible Stainless Steel Control Cables", shows the aileron balance cable connected to the aileron control horn upper attach points.

This concludes my investigation into the accident of N2716P, Piper PA-22-150, SN: 22-5280, on July 13, 2020, at Cortland County – Chase Field (N03).



This is a true and accurate account of the interviews and investigation.

Paul Petrella  
Aviation Safety Inspector  
Federal Aviation Administration  
AFG-ROC-FSDO-23

Paul Joseph  
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