

Aircraft Accident Narrative – N8656K, 1947 Stinson 108-1 Serial Number 108-1656 – August 2, 2021 – Approximately 2:20PM Alaska Time

A friend, his 13-year-old son and 5-year-old daughter were to be going on a short sight-seeing flight around the area with me.

A pre-flight inspection of the aircraft revealed no defects or issues requiring attention. The fuel tanks were approximately half full, estimated at less than 20 gallons total. The tanks contained 87 octane ethanol-free gasoline. Sump samples of the left and right tank revealed no water or debris in the fuel sample. A sample of the fuel from the gascolator revealed no water or debris contamination either. The oil level indicated between 6-7 quarts. No leaks were noted under the cowling and all appropriate mechanical connections for the throttle, mixture, and carb heat controls appeared normal.

The father – (approximately 175-180 pounds) was placed in the right rear seat position to ride with the 5-year-old daughter – (approximately 30 pounds) in the left rear seat position. The rear seat was a sling net-type seat manufactured by Atlee Dodge for the Stinson 108 series aircraft. Seat belts (lap only) were available and used by both passengers in the rear seat. A square boat cushion/flotation device was placed in the left rear seat for the small child to sit on as well.

The 13-year-old son – (approximately 125-130 pounds) was placed in the right front seat and I (approximately 230 pounds) occupied the left front seat.

Total passenger weight was estimated at no more than 570 pounds. Fuel weight was estimated to be no more than 120 pounds. Therefore, the total load was estimated to be no more than 690 pounds which was less than the 766-pound useful load on the last weight & balance revision for the aircraft as currently configured. No baggage was carried on the flight, only small personal items such as cell phones, a PLB, and an InReach device, and an iPad mini with suction mount.

The passengers were provided a safety briefing to include operation and proper adjustment of the seat belts, doors, windows, and location of emergency communication devices. The 13-year-old's shoulder harness was adjusted by me to prevent forward contact of his chest and torso with the control yoke when he was leaning in the full forward position.

The aircraft engine started promptly with three squirts of the primer and the throttle cracked open. Oil pressure immediately indicated in the green on the oil pressure gauge. Radios and lights were set, and pre-taxi checklist completed while the engine idled at 1000 rpm for approximately 5 minutes. The current weather and altimeter setting was obtained from the Soldotna airport with the use of the iPad mini running the FlyQ EFB software and the pressure setting was dialed into the altimeter.

The aircraft was taxied to the beginning of runway 26 and a run-up check was conducted on the paved runup pad. Magneto check indicated no more than a 50-75 rpm drop for each magneto. Application of carb heat produced an appropriate drop in RPM. Oil pressure was in the green and oil temperature was rising into the normal range. Throttle was returned to idle at approximately 1000 rpm. Flaps were set to the first notch. Mixture control was confirmed in the full rich position. Fuel was set to the left tank as the gauge indicated the quantity in the left tank was slightly more than that indicated in the right tank. Carb heat control was confirmed in the off or cold position. Yoke controls were free and correct for the

control surface operation. A final check of the passengers to make sure they were belted in and all windows and doors were closed and latched was confirmed. I made sure that front passenger's feet were not in contact with the rudder pedals. Brake pedals only exist on the pilot side of this aircraft.

Take-off roll began from the run-up pad at the beginning of Runway 26. The throttle was smoothly applied to full power and the control yoke was placed in the neutral position. The tail did not "fly" from the neutral control yoke position, but I attributed that to the passengers in the rear seats as I rarely operated the airplane with passengers in the rear seats. Upon reaching 70-75 mph indicated airspeed, I rotated back with the control yoke and the aircraft quickly left the runway and climbed to approximately 100 feet. As the aircraft approached the departure end of runway 26 the aircraft ceased climbing but initially, I was able to maintain altitude for the first few seconds. The flaps were left in the deployed position at the first notch. My right hand remained on the throttle with it in the full forward or maximum power position. As we crossed over the trees at the departure end of runway 26, the aircraft began to settle. So, I continued to "fly" the airplane while manipulating the control yoke to maintain forward airspeed while keeping the aircraft above the rising trees. Power to the engine did not "feel" like it was normal or maximum after departure. I don't recall looking at or noticing an RPM decrease on the tachometer, but the aircraft did not "feel" like it was making full power and it sounded as if the power was decreasing in a slow but steady fashion.

It became clear to me that the airplane was not going to be able to maintain safe forward flight. Only one option existed – continue to fly straight and try to manage the aircraft energy as best as I could. I knew not to attempt an "impossible turn" for return to the field at low altitude and slowing airspeed. Only a few seconds passed before I knew we would be making contact with the trees. I spoke "hold on" over the intercom and I instinctively tried to hold the airplane off the trees which allowed the tail to make contact with the treetops first – slowing us down further. As the aircraft slowed it sort of "pancaked" onto the tops of the trees rather than fly "into" the trees. The trees happened to be evergreens and other soft wood trees from 8-12" in diameter and 40-60' tall. The weight and forward motion of the airplane caused the trees to fold down underneath the airplane carrying us to the ground in a nose-down attitude. We came to rest with the nose of the airplane and spinner almost in contact with the ground while the tail of the aircraft remained 12-15' in the air. The airplane was roughly at a 45-degree angle and slightly tilted to the left or pilot's side. The main gear on the pilot side was almost touching the ground while the passenger side main gear was 4-6 feet in the air.

The impact with the trees and ride to the final resting position was surprisingly gentle from what I would have expected. There were no penetrations by tree limbs into the passenger cabin. Upon coming to rest, I checked to make sure everyone was conscious and uninjured. Fuel was running down the outside of the windshield at a significant rate. Therefore, I instructed everyone to leave any belongings and get out of the aircraft immediately. The position of the aircraft in the trees made it best to egress out of the pilot-side door. Therefore, I exited first. I helped the 13-year-old crawl over the pilot seat and exit next. Then I was handed the 5-year-old by the father from the rear seat area through the pilot door. I passed her to 13-year-old standing behind me on the ground and helped the father exit the rear area of the cabin through the pilot door. We immediately climbed up a small, wooded incline to a small ATV trail that was adjacent to the crash site approximately 10-15 yards away. Because I was concerned about a post-crash fire, I did not risk moving any electrical switches or turning off the master switch out of fear of producing a spark or an ignition source.

Once we were on the ATV trail and moving away from the accident site, we realized that none of us had our cell phones – as they were left in the airplane. Mine was attached to the control yoke running the FlyQ EFB software and the father's was in the seat back pocket of the front passenger seat. Therefore, we walked back to the airstrip and to my hangar to call the Alaska State Troopers. Evidently, none of the area residents saw or heard the aircraft crash into the trees. We stopped at the closest residence after walking out of the woods and knocked on the door, with no answer. The mother and other sons had watched and videoed the take-off – but after we cleared the trees, they assumed that we were flying over a river or lake nearby when we disappeared from view. They did not hear any noise associated with the crash, so they went inside my hangar home to wait for us to return. When we arrived at the hangar – they thought that we had already returned with the aircraft and landed. I used the mother's cell phone to call the Alaska State Troopers.

After the Troopers arrived, I went with them back to the crash site and only then did I turn off the Master power switch and turn the fuel selector switch to the off position. All other switches and controls were left – and continue to remain – in the position that they were in when the aircraft came to rest. Personal belongings were retrieved. The aircraft remained in the woods until August 4, 2021, when it was pulled from the woods and taken to my hangar for secure storage. The aircraft remains secure in the hangar, and nothing has been done to the aircraft from the instrument panel or forward of the firewall.

Upon review of my FlyQ EFB software, the total flight time from take-off until when the aircraft came to rest in the woods – was 48 seconds. Photographs of the damaged aircraft, the crash scene, and the take-off video captured by the mother were provided to the FAA and NTSB representatives by email the day following the crash.

William F. Stinson, pilot, and aircraft owner