Controlled Flight Into Terrain During Takeoff - Clayton, Ga.

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Clayton, Ga. – 26 Jul 2014
NTSB Identification: ERA14FA359
14 CFR Part 91: General Aviation
Accident occurred Saturday, July 26, 2014, in Clayton, Ga.
Aircraft: PIPER PA-46-310P, registration: N248SP
Injuries: One Fatal.

This is preliminary information, subject to change, and may contain errors. Any errors in this report will be corrected when the final report has been completed. NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report.

On July 26, 2014, about 0850 EDT, a Piper PA-46-310P, N248SP, impacted trees and terrain shortly after takeoff from Heaven's Landing Airport (GE99), Clayton, Ga. The private pilot was fatally injured, and the airplane was destroyed by impact forces and a post-crash fire. The airplane was registered to a corporation and was operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Daytime, instrument meteorological conditions prevailed for the flight, and an instrument flight rules flight plan was filed. The flight, originating at the time of the accident, was enroute to Aurora, Ill. (ARR).

Two witnesses were standing outside on the ramp and observed the accident airplane before departure. The preflight, engine start and taxi appeared to be routine. There was fog present at the time, and it was "rolling up the valley," which was a frequent event at the airport. The lateral visibility was about 1,000 feet below the fog layer and obscured above. The elevated terrain, surrounding the airport, was obscured by the fog.

The pilot back-taxied to Runway 5 and initiated the takeoff. The airplane became airborne about 2,000 feet down the 5,062-foot-long runway. The witnesses observed the landing gear extended, and the airplane seemed to drift to the left after takeoff. They heard the engine running normally, with no change in the sound, until the crash. They heard two distinct "booms" about four to six seconds apart. They ran down to the departure end of the runway to look for a crash site and could not see the wreckage, or any smoke or fire, due to the fog.

The airplane crashed into elevated terrain, in a heavily wooded area, about 1,500 feet north of the departure end of Runway 5. The elevation at the crash site was about 300 feet higher than the elevation at the departure end of Runway 5. A majority of the wreckage was consumed in a post-crash fire. All major structural components of the airplane were accounted for within the wreckage debris path. Numerous tree limbs were scattered along the debris path with smooth, angular cuts through the limbs.

The aircraft maintenance records for the airplane were provided to the investigation team shortly after the accident. According to the records, an annual inspection of the airframe, engine and propeller was performed on June 11, 2014, at a total airframe time of 3,593 hours. At the time of the annual inspection, the engine had accumulated 532 hours since the last major overhaul. The annual inspection was the last entry in the logbooks.

The pilot possessed a private pilot certificate with airplane single-engine land- and instrument-airplane ratings. He reportedly lived at the fly-in community surrounding the airport and was instrumental in its development. He reported 4,200 hours of total flight time on his third-class medical application, dated March 5, 2014. *(See Illustration on Page 32)*

AUTHOR'S COMMENTS:

We know that low visibility is frequently a primary suspect in General Aviation accidents and, while "safe" does not imply risk-free, I believe properly mitigated risk is only acceptable when the reward is sufficiently high.

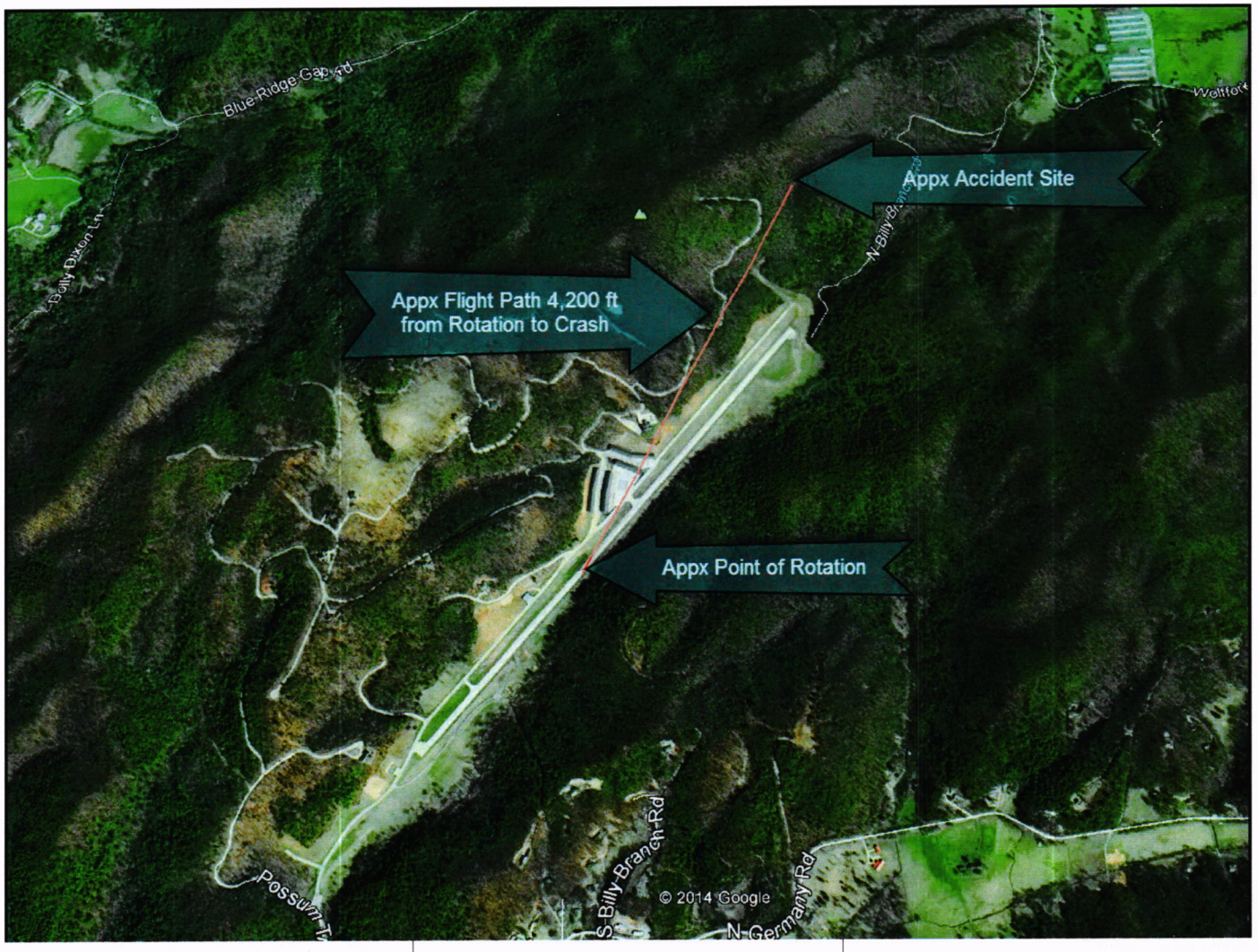
Ah, yes, subjective at best, I know, but if the accident pilot had been carrying whole blood for a sick child would the risk have been any less? I think not; yet we can probably all agree that even the greatest reward does not justify unmitigated risk. It is the pilot's responsibility to understand all of the risks and objectively mitigate or reject them or terminate the flight. This is a tall order for any aviator, especially a single pilot General Aviator with no operations specifications or any other printed guidance beyond FAA regulations.

It would be easy to criticize this pilot's flying skills since he failed to climb at an appropriate rate or maintain his likely intended course, but if we did we would be (proverbially) "watching the wrong hand." All human pilots (and I know of no other kind) are prone to a phenomenon known as "confirmation bias." This is the psychologist's term for a prevalent and strong tendency to subconsciously construe new information, regardless of its quantity or quality, in such a way as to support and confirm a belief, which is already held.

Our success (or lack thereof) as General Aviators is measured by reviewing accident rates and causal factors. According to the Nall Report, the news is still less than good. General Aviation flies 20 percent of the hours in the U.S. but is responsible for 80 percent of the accidents. Pilot error is the cause of more than 75 percent of these accidents. The vast majority (80 percent) of pilot-error accidents involve pilots who fail to stay within the limits of their relevant experience and training in an aircraft that is functioning normally.

In light of these observations, I encourage each pilot to consider himself and his aircraft a flight department and adopt a procedural framework of checklists, flows, memory items and SOP to aid critical decision-making and avoid falling prey to the confirmation bias which is normally present in the heat of operations. Organizations, which have adopted this concept, have dramatically cut their accident rates .

According to FAA order #8260.46E, a private airport authority may conduct an obstacle survey and submit it with a request for an instrument approach and an obstacle departure procedure (ODP) where necessary. There is evidence that the GE99 airport authority



(ABOVE) The aircraft crashed left of the extended centerline approximately three-quarters of a nautical mile from the point of rotation in rising terrain 300 feet higher than the field elevation.

did this at some point. However, at the time of this writing, no instrument approach or ODP exists in the FAA database for GE99. Even if an ODP did exist, it would have stipulated visibility minimums higher than those existing at the time of the accident.

In any case, it's clear that the accident aircraft crashed outside any protected area the FAA might have approved, so perhaps this point is moot. The risk of drifting off the intended course and/or not maintaining a safe climb rate should be apparent and well understood by all; however, no procedure should ever be conducted which relies on the hope or expectation of climbing above a layer of fog in time to rely on VMC for terrain avoidance. In fact, the aircraft does not know whether the pilot can see or not, nor does it care.

The PA-46 SOP I use does not allow for takeoff in this scenario because of the "VFR only" status of the airport. I would have had to wait for the FAA standard one-mile visibility and a ceiling at or above the OROCA (off-route obstacle clearance altitude) for the departure area. Period. No exceptions — not even for delivery of whole blood for a sick child.

In summary, the desired and expected outcome on any flight can only occur consistently if you insist on the procedural discipline to operate the one best way, the same way, each and every time , using well-vetted checklists, flows, memory items and SOP specific to your make/model of aircraft. This method of flying will simplify tasks, free up mental bandwidth and it will clarify and improve your critical decision making. You will be on a path to becoming a safer, more confident pilot. I encourage you to take the next step. Ask your flight instructor to provide you with excellent training. It will probably require you to make some changes, but it doesn't cost any more or take any longer.

The accident information in this article is based solely on the official NTSB report of the accident and is intended to bring the readers' attention to the events depicted in that report. It is not intended to judge or draw any conclusion about the aircraft or the skills, training, actions or inactions of any person, living or dead. MMOPA

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