

## PA 46 ACCIDENT REVIEW

The Balked Landing

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NTSB Identification: CEN11FA253
14 CFR Part 91: General Aviation
Accident occurred Tuesday, March 29, 2011,
in Monroe, Mich.
Aircraft: PIPER PA46-350P,
registration: N619VH
Injuries: Three 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.

On March 29, 2011, about 1604 Eastern Daylight Time, a Piper PA46-350P, N619VH, impacted a field southeast of the departure end of Runway 21 at Custer Airport (TTF), Monroe, Mich. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 flight was operating on an instrument rules flight plan. The pilot and two passengers were fatally injured. The flight had departed from Bedford County Airport,

Bedford, Pa., about 1426 and was en route to TTF.

A witness reported that the airplane was unusually low and still flying at a high rate of speed with its landing gear retracted when it flew over Stewart Road. The airplane continued at a high rate of speed as it crossed over the trees adjacent to Runway 21.

Radar data indicates that the airplane's speed was 132 knots, at an altitude of 800 feet, and a heading of 207 degrees when it was about 0.5 miles from Runway 21 (4,997 feet by 100 feet, grooved asphalt).

Examination of Runway 21 noted 37 marks within the runway surface consistent with propeller slash marks that began about 2,000 feet down Runway 21. Material consistent with material from the airplane propeller was located in the area of the slash marks.

Examination of the main wreckage revealed that the landing gear was in the retracted position and the flaps were in the retracted position.

This is looking like a failureto-extend-landing-gear accident combined with a stall/spin on the go-around. It is highly likely that the events leading to this crash were pilot error and entirely preventable. According to the AOPA Nall Report, 75 percent of General Aviation fatal crashes are directly the result of pilot error. Chapter 11 of the Airplane Flying Handbook (FAA-H-8083-3A) states that the most common pilot operational factor involved in retractable gear airplane accidents is: Neglected to extend landing gear.

An inadvertent gear-up landing is going to be expensive, incon-

venient and embarrassing at the very least, but it is not likely to be fatal or even injurious. As we see on a regular basis, a late decision to go-around can be vastly more dangerous. Low altitude stall/spin accidents are rarely survivable regardless of pilot skills and training.

Consider carefully the thought process that goes into your decision to land. Psychologists tell us that if a decision is made too soon, every bit of evidence collected from that point forward in time will be used to confirm the correctness of the premature decision, whether the evolving evidence continues to support that decision or not. This is a sinister psychological fact of human nature. Overcoming this noble distraction requires continued honest assessment and a practiced procedural approach.

Making the decision too late has its own peril. In fact, this decision, like most pilot decisions, cannot be made quickly because hasty decisions are all too likely to be incorrect. Instead, consider briefing the landing each time while applying your checklists, flows, memory items and Standard Operating Procedures just as you would in other flight segments. An SOP manual contains, among other things, a series of preplanned actions. In other words, the decisions are already made.

How does this play out tactically? Consider lowering the gear only when you lower the nose for the runway. This could be on a long final, the downwind leg, or the base leg depending on weather, altitude and distance from the threshold. When you "go down," put the gear down, introduce 10 degrees of flaps





and reduce power to 18 inches/20 inches/300 pounds (Malibu/Mirage/Meridian-JP). This should get you very close to 120 knots which makes you a Category B aircraft and gives you energy for a safe circle or missed approach (with additional power). By combining a descent, gear extension and 10 degrees of flaps, we build a consistent expectation of 120 knots. If this expectation is not met, you can now re-evaluate by asking the question: What did I miss?

This PPC (pitch/power/configuration) will also put you within the second notch of flaps speed. After the runway is in sight and you have decided to continue, add full flaps because extension of the second notch will have scrolled your aircraft into the white arc (flap extension speed).

Have a flow and use it. A flow is not a memorized checklist, It is a visual consideration of key items reviewed at key intervals before, during and after flight. For example: "Runway in sight"; Consider carefully the thought process that goes into your decision to land. Psychologists tell us that if a decision is made too soon, every bit of evidence collected from that point forward in time will be used to confirm the correctness of the premature decision, whether the evolving evidence continues to support that decision or not.

"3 Green"; "Landing clearance is received (landing light on)"; "The runway appears clear"; "Suggest we continue..."

When it is time to commit to the landing, idle the throttle or power lever and move your hand to the yoke. This is a crucial step to prevent the fast-twitch muscles in your arm and hand from doing something your brain didn't want them to do, such as attempting a goaround with a damaged propeller.

Remember, your SOP is your personal version of a "hard deck" or Operations Specification, not a personal minimum. Once you have adopted your SOP, don't ever violate it because, it represents

your personal Safety Management System. You can build on this SOP each time you train. Do it the Same Way Each and Every Time (SWEET).

Looking at the big picture, we can see that the safety record of the PA46 remains egregiously high even after a great deal of scrutiny by the FAA and NTSB. The insurance industry is attempting to reduce the frequency and severity of PA46 accidents by requiring approved training annually. However, this training is not well-defined by the insurance industry.

I am not suggesting that PA46 pilots spend more money or time on training. I am suggesting that PA46 pilots educate themselves about effective training and then endeavor to get their money's worth. Effective training won't take any longer or cost any more. AMMOPA

Fly Safely – Train Often Dick Rochfort, ATP, CFII Master Instructor

About the Author: A former corporate pilot and primary flight instructor, Rochfort is a full-time master instructor providing insurance-approved initial and recurrent pilot training, pre-pur-



chase consultation, relocation and expert witness services to the PA46 (Matrix, Malibu, Mirage, and Meridian) community worldwide.