Making timely decisions: Dubuque, Iowa.

BY DICK ROCHFORT, ATP, CFII, MASTER INSTRUCTOR

NTSB Preliminary Report
NTSB Identification: CEN15FA008
14 CFR Part 91: General Aviation
Accident occurred Monday, Oct. 13, 2014, in Dubuque, Iowa
Aircraft: PIPER PA 46-310P, registration: N9126V
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 Oct. 13, 2014, at approximately 2305 CDT, a Piper PA-46 airplane, N9126V, collided with trees and impacted the ground near a residential area following a missed approach to Runway 36 at the Dubuque Regional Airport (DBQ), Dubuque, Iowa. The private pilot, who was the sole occupant, sustained fatal injuries. Dark-night Instrument Meteorological Conditions (IMC) prevailed throughout the area and during the approach. An Instrument Flight Rules flight plan was filed for the flight, which was conducted under the provisions of Federal Code of Regulations Part 91. The flight originated from the Ankeny Regional Airport (IKV), Ankeny, Iowa, at about 2200 CDT, and its destination was DBQ.

AUTHOR'S COMMENTS:

The following comments are not intended to provide comprehensive training on safe instrument flight. However, I do want to address some common causal factors for this type of accident and provide a few procedural ideas that you might readily implement to make yourself a safer, more confident pilot. This article is based solely on the official NTSB report of the accident and is intended to bring the your 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.

The PA-46 community has had some low-accident periods from time to time, but the average number of fatalities over the last five years is more or less the same as the five prior years and each five-year period before that. While it fluctuates from year to year, it remains roughly twice as high as the rest of General Aviation. The vast majority of these is adjudicated to be the result of pilot error. This is not good. We should do better.

FAA Safety Team Manager Eric Minnis says that 15 percent of day VMC General Aviation accidents involve a fatal injury. Night VMC doubles the rate to 30 percent, and IMC doubles it again to 60 percent. This trend leads to a compelling observation: The aircraft cannot see. It will gladly hit (or not hit) whatever you point it toward (or not). Let us then consider why the accidents continue.

Engine failure accounts for 1.5 percent of General Aviation fatalities. If we discount the ones that are pilot-induced (mostly fuel starvation), this number drops to .75 percent. If we discount aircraft that are known by the pilot to be non-airworthy, the number drops again to .375 percent.

As of this writing, I see only three real possibilities with respect to the cause of this particular accident:

1) Engine failure: The pilot suffered a complete or partial loss of power during the missed approach.

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Preparing for a low-altitude engine failure is an important part of your training. It should be completed in your aircraft within FAA standards for the commercial pilot with a qualified instructor, but it should not dominate your training program. If you spend more than five minutes of a two-day recurrent training program discussing and practicing engine failure you are, figuratively speaking, "watching the wrong hand." The most likely scenario

for loss of power is fuel starvation; after that, mismanagement of power application or mismanagement of alternate induction air tend to be the main culprits.

I offer the following suggestions for managing the risk of a low-altitude engine failure or a perceived engine failure:

a) Get regular maintenance from an experienced type-specific mechanic whom you trust.

b) Use a well-vetted SOP to manage all aspects of flight, including fuel supply. You can use mine if you like: RWRPilotTraining.com/pa46-sop.html

c) Use alternate induction air properly. Please visit my website for an in-flight demonstration on this important topic: RWRPilotTraining.com/aircraft-systems.html

If you are flying any PA-46, you should consider yourself lucky. In my opinion, it is the most capable GA aircraft available today, and it is getting better every year. The M350, M500 and M600 are proof of this concept.

d) Use proper technique ("open hand"). Push the power up along with propeller and mixture when adding power above 75 percent.

2) Spatial disorientation leading to loss of control

Press the "GA" button if you have one; if not, use the red autopilot-disconnect button, pitch 8½ degrees up straight ahead, while adding full power. Verify positive rate of climb. Retract gear and flaps promptly but without rushing. Trim for the flight director bars. Verify airspeed rising above 110 knots and engage the autopilot. If you are significantly past the missed-approach point and an ODP exists, you should be using it, regardless of weather. Climb at the rate required for the ODP. After that, consider 130 knots in the climb for ice penetration and Va. If you have a FLC (flight level change - FILCH) button, use it. Do not talk to ATC except to say "stand by" until you are verified cleaned up, on the autopilot and established in the climb.

The key to benefiting from pitch-power-configuration is to know the resulting

airspeed for a particular pitch/power/configuration.

There aren't too many left, but if you fly an older Malibu with Gar Kenyon hydraulics, there are some exceptions to the aforementioned procedures. Check with your flight instructor for the modifications to these procedures.

3) Loss of situational awareness leading to CFIT (controlled flight into terrain)

The best way to stay ahead of the airplane is to "not get behind." This is easier done than said. Have in mind two things at all times — those things that you prefer, and those things that you will accept. Everything else is, by default, responded to with "unable." Each task inside the final approach fix should be considered in its simplest form. For example, runway in sight – consider landing. Runway not in sight – go around.

Good decisions are timely and are made from limited options, which are well-rehearsed. Anything else leads to guesswork and the use of fast-twitch muscles. When this sequence of events is not done well, it is sometimes implicated in serious accidents. The use of call-outs (memory items) during the go-around is a time-honored way to get the task done in proper sequence — and without distraction — in the single-pilot environment.

The go-around is exactly like a takeoff: Pitch/power, cleanup, trim up, autopilot on. Procedural discipline will greatly assist the pilot with consistent results. Proper training is the key.

Insist on excellent training. It doesn't take any longer or cost any more. Excellent training is aircraft-serial-number specific, and it is based on the procedural discipline associated with the proper use of checklists, flows, memory items and standard-operating procedures (SOP). When you commit to this process, you will become and remain a more confident, competent and safe pilot.

Each PA-46 owner/pilot is his or her own aviation safety management team, and no safety-management system will be policy unless you decide to make it so. I encourage each of you to make it a policy to make proper use of checklists, flows, memory items and SOP. If these techniques seem familiar, thank you. It is nice working with you. If not, consider learning more.

Here is a link to the PA-46 Pilot Reference Library: RWRPilotTraining.com/training-library.html

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Fly Safely - Train Often

Dick Rochfort is an airline transport pilot and Master Certified Flight Instructor and has been a full-time flight instructor for more than 20 years. He provides excellent training and related services exclusively to PA-46 instructors, owners and pilots worldwide through his company, RWR Pilot Training and the Professional Association of Pilot Instructors of which he is a founding member. If you would like more information on this or other strategies for improving the safety of your flying, or if you have comments or questions, you may contact Dick directly at mail@rwrpilottraining.com. This article is available for reprint upon request. MMOPA