

How Slow Can You Go?

By Rob "Smokey" Ray

On my annual trek to Idaho in my RV-4 *The Bandit*, I was approached at the fuel pump. Helpless, I awaited the interrogation: "What is it?" "Did you build it?" And, always, "How fast will it go?" I was ready with my usual answers. Only this time the individual who approached me was an RV driver, military pilot and friend of mine. He asked me if I had heard of the RV-4 that "packed it in" while attempting to land up at one of my favorite backcountry strips. I hadn't, and the news troubled me. I couldn't for the life of me figure out how the pilot had lost control attempting to land at that airstrip. I went over and over it, trying to re-create in my mind every move he would have made during the arrival. In the end I found myself more puzzled than ever. I eventually concluded that somehow the pilot must have stalled his RV-4 at low altitude in the final turn to land with no altitude to recover.

So how do we fix the problem? In most cases it boils down to training and practice, pure and simple. People just don't practice enough slow flight in their airplanes, period. I was blessed during my early flying experience to fly from short grass strips with tall trees around them in very hot, muggy weather. It didn't take long to learn how quickly a small airplane could kill you if you didn't fly it right. Any Alaska Bush Pilot worth his salt can tell you how short he can land his airplane within a couple of feet and how slow he can safely fly it within a knot or two. I have operated my RV-4 off a 950' one-way grass strip for almost ten years. No, I don't have a tail hook, special brakes or a net barrier. What I do have is a lot of practice landing on short strips. After 1500 hours in my RV-4 I can tell you how slow my airplane will fly in all configurations and how short I can land and stop it. I can also tell how far it will roll before lifting off on a hot day.

How did I do all that? During my initial test period, I really worked on slow flight. I wanted to know exactly how slow my RV-4 could fly and how short it would land and take off. I practiced at full, half and $\frac{1}{4}$ fuel. I climbed to 5000' AGL and practiced clean, $\frac{1}{2}$ and full flaps. I simulated climbing, descending and approach to landing stalls, with and without flaps. What does all this gain you? Confidence in your machine! I know that I can fly final in my RV-4 at 1700 RPM, 75 MPH indicated at full flaps and, anywhere below $\frac{1}{2}$ fuel, pull power just above the grass blades at full aft stick and 60 indicated with a 100 fpm ROD, land, add brakes and stop in under 400'. Your mileage may vary. Practice, practice. Even if you never land off pavement, it could save your life someday if you did.

It could save your life, even in familiar surroundings. Let's say you are landing at your home field and get distracted in the traffic pattern or your usual routine is interrupted somehow. You pull a bit hard on the pole to align with the runway and a slight airframe buffeting and lightness on the ailerons occurs while you are fo-



Learn the capabilities of your airplane and you too can put it in the weeds...safely.

cus outside. All your instincts tell you to go around, but the old pride comes in and you try to save the approach. You allow airspeed to decrease, AOA to increase and suddenly without warning, the airplane quits flying, very close to the ground and you fly a perfectly good airplane right into terra firma.

My friend Lori teaches mountain canyon flying in Idaho. Her clients range from flatlanders and people who fly off 5000' paved airstrips to 10,000 hour ATP and military pilots. Her first lessons occur way above pattern altitude practicing, you guessed it, slow flight. She teaches how to recognize the subtle warnings a configured airplane (*your* airplane) shows of impending stall/spin and need for go-around. Yep, they practice going around. You don't want to make your first go around at a 2000' airstrip at 5000' MSL in a canyon. You have to learn to fly slow, and not be afraid to go around when it isn't right. Her students graduate with a keen sense of their capabilities and their limitations.

Van designed a wonderful airplane but it's not magic. Like any airplane it can kill you if you let it. So it boils down to "P-6" again. Prior Planning Prevents P—Poor Performance. I add "Practice" to the equation. If you are a new RV pilot and want to get better, ask someone for advice, and training. There are many RV drivers (me included) who love to talk about flying and provide tips and even instruction to new RV drivers who want to get better. Don't be afraid to ask for help. There is a wealth of printed information on slow flight and max performance of aircraft. For starters I recommend the following:

- *Guide to Bush Flying* by F.E. Potts
- *Roll around a Point* by Duane Cole
- *Wager with the Wind: The Don Sheldon Story*
- *Glacier Pilot, the Bob Reeves story*
- Several *RVator* articles written by Van.

For training in mountain canyon flying go to my friend Lori's website www.mountaincanyonflying.com

So next time you see me at the pumps, don't ask me how fast my RV-4 is. Ask me "How *slow* it will go?"