



STEVE KROG

COMMENTARY / THE CLASSIC INSTRUCTOR

Always Strive To Be Better

Proficiency is worth the investment

BY STEVE KROG

EAA AIRVENTURE OSHKOSH 2022 has come and gone. For those who attended, it stirs the juices for wanting to fly — and wanting to fly better. Thousands of takeoffs and landings were observed, always in our own mind comparing those operations to the way we individually fly. This feeling is quite common and should instill in each of us the drive to always be a better pilot.

But how does one go about following through on being a better pilot? There are several things to consider. What airplane are you flying? What skill level are you? How often do you fly? What type of runways and volume of traffic do you deal with when you go for a pleasure flight? Are there lesser traffic airports nearby where you might practice?

The increased fuel cost should not prevent you from maintaining proficiency. If you fly once a week for an hour and your aircraft burns 8 gph, the increased fuel cost ranges between \$16-20 per hour. Isn't your life worth \$20 per hour to maintain proficiency? What about the life of your passenger, family member, or friend?

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I have a good Ohio friend, John, now retired, who owns a Piper J-3 Cub, and he is always striving to be a better, safer pilot. Each year, usually in late summer, he travels to Wisconsin and schedules four or five hours of concentrated flight instruction to maintain and hone his skills.

We usually start out doing some air work in the Cub such as slow flight and stalls and stall configurations, including cross-controlled and secondary stalls. Then we finish the hour with steep turns to exact headings while holding a constant altitude. If weather conditions permit, we'll do a spin or two just to stay sharp. Sometimes we repeat this phase depending on how comfortable he feels with these maneuvers.

Moving to phase two, we practice normal takeoffs and landings, usually three-point on a turf runway. Assuming all goes smoothly, we then move to wheel landings on turf. After four or five good wheel landings, we work on crosswind takeoffs and landings, both three-point and wheel, again on turf.

John is based at an airport with hard-surface runways only, so the obvious next step is to repeat the entire takeoff and landing series on hard-surface runways. These are always fun; he begins a little apprehensive but then relaxes after several operations. To improve rudder skills, I'll handle the stick and the power on some of the takeoffs, only giving him the rudder pedals. Power is advanced enough to bring the tail up but not enough to fly. John has to keep the centerline straddled in this configuration for about two-thirds of the runway length. Then power is reduced, which allows the tail to settle. Again, he must keep the aircraft on the centerline. Two or three trips up and down the runway, and his rudder input skills are greatly improved.

The next phase of training is focused on short- and soft-field operations. I frequently refer to this as the “How well do you know your airplane?” phase. Most everyone who flies a Cub regularly knows there are only three airspeeds to remember — 38, 60, and 122 mph. Stall speed is 38 mph, climb and approach speed is 60 mph, and never exceed speed is 122 mph. But have you ever tried to fly the Cub at 50, or 45, or even 40 mph? If your Cub is rigged properly, these speeds are attainable. However, don’t try this without practice at a safe altitude. Don’t try this at low altitude or in the traffic pattern if you’re experiencing gusty winds or turbulence. This exercise is meant to explore the envelope of the Cub while increasing pilot capabilities, so practice at a safe altitude in good weather conditions.

Once comfortable maintaining full directional and altitude control at these slower speeds, it’s time to put them into practice. We’ll pick a spot approximately one-third of the way beyond the approach end. This spot becomes our desired touchdown or spot-landing point.

The practice is to fly the approach at the normal 60 mph. Begin slowing the airplane to 50 mph as you cross the approach end. Maintain altitude at approximately 10 feet above the runway adding power to do so. As you near the spot-landing point, begin slowly reducing the power you’ve been carrying and continue with the flare. Done properly you’ll be able to softly land on the desired spot plus or minus about 10 feet.

Included in this phase of training is practicing hard slips left and right. I find it amazing that many pilots have never been taught or practiced slips. And for some who have seen a slip, they are quite wary of demonstrating one. It seems the coffee klatch hangar flyers have shared incorrect information about the dangers of a slip. This becomes apparent when conducting flight reviews when the pilot demonstrates a slip to land. A slip, when done properly, is as safe as well as useful maneuver.

When we start with the slips, we’ll first do them at a safe altitude to get the feel as well as the correct control inputs. A road is selected to be the simulated runway, preferably with a crosswind. Beginning at an altitude approximately 1,500 feet AGL, establish a slip into the wind and maintain directional control, keeping aligned with the road. Hold the slip for 500 feet. Then level off, make a 180-degree turn, and again align with the road. Now establish a slip into the wind while maintaining alignment and hold the slip for 500 feet before leveling off.





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Once comfortable performing slips at a safe altitude, it's time to put them into practice in the traffic pattern. For the first two or three approaches I have the pilot turn final holding excess altitude. Then I have them perform a slip to land. If done correctly, the landing will be smooth and short. However, if they let the nose drop, considerable speed ensues, and the landing and rollout will be quite long. Remember, the purpose of the slip is twofold, to dissipate both excess altitude and energy to land on a short runway.

If you're comfortable in performing the maneuvers mentioned earlier, practice them for a few minutes each time you fly for pleasure.

After several approaches of this nature, it's time to tighten the parameters and add a 50-foot obstacle to the approach end of the runway. Additionally, I want to be safely stopped without using heavy braking in less than 1,000 feet.

The final exercise is the performance of soft- and short-field takeoffs. Usually, an individual is only exposed to these maneuvers for an hour on hard-surface runways in preparation for the checkride. Here at Hartford Municipal Airport (KHXF) we have turf to work with so we can perform these takeoffs in real world conditions. If the individual demonstrated proficiency and is up for a challenge, I'll take them to a nearby private strip with a 1,100-foot runway. Now we get to do short-field takeoffs and landings for real.

In summary, I'll ask the question again. Is your life worth spending an extra \$20-\$40 a few times per month to be a better, safer pilot? If you're comfortable in performing the maneuvers mentioned earlier, practice them for a few minutes each time you fly for pleasure. If you're uneasy with some of the maneuvers, don't be afraid to ask an instructor to fly with you for an hour. It just proves that you truly are dedicated to being a better, safer pilot. *EAA*

Steve Krog, EAA 173799, has been flying for more than 40 years and giving tailwheel instruction for nearly as long. In 2006 he launched Cub Air Flight, a flight training school using tailwheel aircraft for all primary training.