

Spring Flying

By Chris Hope, Master CFI

What a Spring. Or has Spring actually arrived? Warm enough in February to turn the lawn sprinklers on. Then a half of a foot of snow in March, followed by another half of a foot a week later. In April we see the young girls out in shorts and halter tops, followed by freezing temps and cold rains for the first of May. Who can figure out flying with that weather? Fortunately, if you look at the situation in the right light, it is all great.

I have the good fortune to be able to fly with a lot of different friends, new and old. Sometimes I find myself with a fellow pilot, someone who knows the language of flying, someone that doesn't need any explanations. Often I find myself with a new pilot or passenger, a person who is just discovering the joys of our world of flight. And there is always something new to share.

In late February, a few days after a snowstorm, we had a flight across central Missouri. My friends had flown the route before, but always when the fields were clear of snow. What a difference. The fields and lakes all looked the same – flat and white. Landmarks that we had often used for navigation were camouflaged by the snow. Even many of the county roads seem to hide from us. But with a crystal clear sky, visibility was truly unlimited. Normally the only pilots who get 100 miles of clear skies are our friends in the Southwest, but today that was ours as well. Plus, we got that bonus of the pepped-up climb rate that cold weather always brings.

On a rare warm day, with the winds back down to something tolerable, I was able to meet with a young man in middle school who was interested in a Young Eagles flight. (These are free flights

sponsored by the EAA for kids aged 8 – 17.) Because I had two empty back seats, I invited his mom and younger sister to come along. What a joy to let this young man experience the fun of taxiing (and keeping the plane on the centerline) and flying by himself. Do you remember the first time you realized that you really could perform a level turn, maintain a constant bank, and actually roll out on the heading of your choice? He had a ball. And of course the comments from Mom and Sis are priceless. Neither of them had ever flown before, and both were talking about their next steps.

In April, a different kind of flying fun. While checking out a private pilot in a Cessna 172 for insurance purposes, I was looking for something a little different to do. He had flown a number of Cessna aircraft in the past, so this flight was just pro forma, so I asked him if he had ever flown a chandelle or a lazy eight. After giving me a blank look, we both guessed that the answer was "No." So, we took an opportunity to line up on section lines and roads and tree lines for something totally new for this pilot – the world of air maneuvers that don't involve stalls. We flew steep spirals. Starting from 4,500' AGL, we flew a descending circle around a point on the ground, all the time keeping the circle perfectly round and dealing with a 25 knot wind out of the west.

Then, the challenge of making a 180 degree turn, while simultaneously performing a maximum performance climb, rolling out on the reciprocal heading with the airspeed just above the stall. And of course, the first 90 degrees includes a smooth roll in, and the second half includes the roll out. And did I mention that we are going to

handle this constantly changing bank and airspeed with perfectly coordinated rudder control? After hearing, "Wow, this is fun", I introduced lazy eights.

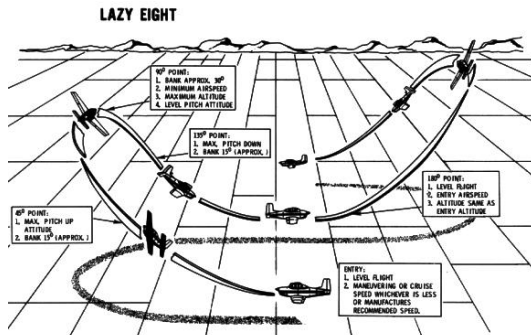


Figure 11-82 Lazy Eight

Lazy eights are so named because a person outside of the plane would see the aircraft perform a path relative to the horizon in the shape of an eight. First, an arc above the horizon, then a movement down to and past the horizon to a point as far below the horizon as the previous point was above. Then, back up, and reverse the direction. From inside the plane, we see a climbing turn of 45 degrees, then a continuation of the turn for another 45 degrees as the nose of the aircraft falls to the horizon and below. Then, for the next 45 degrees, the nose continues to its lowest point, and then for the last 45 degrees we roll out of the descending turn, to end up with a level flight attitude and a turn of 180 degrees.

But wait, there's more. Let's not just roll out of the turn. Let's continue the turn to perform the same maneuver in the opposite direction.

And why do we perform these maneuvers? Because we can.

A few days after following the hawks in the sky, just because we can, I had an opportunity to introduce a different experience to a student pilot. Recall that all students are required to fly three hours in actual or simulated instrument conditions. Whenever I can, I like to

take my students, both private pilot and instrument pilot, into actual weather.

The day was perfect – cloudy, and drizzly. (My wife says that I am nuts, to get excited about a day when the "sun don't shine." But I revel in it.) The ceilings in our local area were reported between 800 and 1,000 feet overcast. And pilot reports indicated that the tops were around 4,000 msl. With a local elevation averaging 1,000 msl, this would put us into the clouds at around 2,000 feet msl, and back out on top about 2,000 feet later.

We went through a thorough review of the use of basic instruments. And we discussed that the goal of this practice was to recognize the sensations that we experience when we accidentally find ourselves in the clouds. And although we understood that a non-instrument rated pilot was not expected to fly an instrument approach, we talked about the procedures required to actually conduct flights in this environment.

And, then, it was time to launch and fly to the Kansas state capital for some great airport restaurant lunch. Flight plan? Filed. Clearance? Copied. Take off, maintain a wings level climb by referencing the heading indicator. Then, within just a minute or two, the wisps of clouds are racing by the wing tips and the side windows, and immediately we are enveloped in the big cotton ball of the cloud. Although the attitude indicator tells us that the wings are level and the nose is above the horizon, and the altimeter is indicating a climb, our body tells us that we are in a turn to the right. Working to maintain a wings level flight, and then a few minutes later we sense the sky becoming much brighter. We are still in the clouds, but now we feel that we are in a bright cloud, not that dark grey thing we entered a few minutes ago. And before we have time to think about that change, we see

ourselves coming out of the top of the clouds. And as we level off a few hundred feet above the clouds, we see a horizon of billowing white in all directions.

And with all that, a new level challenges – maintaining a conversation with a radar controller who is helping us to conduct our flight to Topeka, and then descending back into the clouds for our landing. And then finally, we descend out of the clouds – we first see snatches of the green and brown ground below us. And then, hallelujah, we can see out the front window and there is a long runway, stretched out before us. What an experience.

Finally, one additional experience to remind of how large the world of aviation

can be. Working with the local chapter of the Commemorative Air Force led to an invitation to take the stick in the back seat of their Fairchild PT-19. No need



to ask twice.

Look Mom, no roof!

There is a whole new world to

experience when the cockpit is open.

So, with summer here at last, get out and find some new flying experiences for yourself. Don't be content with "okay". Force yourself to a higher standard. Find some new experiences. And have fun flying.

Don't just practice until you get right. Practice until you don't get it wrong

Chris Hope has taught fledgling and experienced pilots for nearly 40 years, mostly in the Kansas City area. Chris holds flight instructor certificates for single engine land and sea airplanes and multi-engine land planes, as well as for instrument training. He holds ground instructor certificates for advanced and instrument training. Chris is an FAA Gold Seal Flight Instructor and a Master Certified Flight Instructor. Chris serves as a member of the FAAS Team in the Kansas City area. His website is www.ChrisHopeFAAFlightInstructor.com