

SHARING A THERMAL AND MORE

Tim Bookwalter

On Sunday May 14th I was flying a club ASK-21 with a passenger, Walker Phelps, who was a rated power private pilot on his first glider flight. (Walker also gets credit for the awesome photos accompanying this article). Walker was having a blast as I looked for thermals in the proximity of the Front Royal airport. After a 3000-foot tow, we hung around "the rocks" for a bit maintaining altitude in a weak thermal, then headed east towards the Front Royal airport to see if there were any stronger thermals over the open fields. Down to 2500ft MSL I was thinking it would be a short flight until we found a nice thermal and climbed steadily up to over 4000ft MSL. Walker was amazed at what we accomplished with no rotating thingy on the nose remarking that we were now higher than our release altitude. We were soon joined by the other club ASK (Rob Jacobsen with a passenger) and the PW5 (Chris Jones).



The other club ASK-21 sharing thermal at same altitude

I asked Walker to help keep an eye out and he dutifully made regular callouts where the other gliders were in relation to us. While I was PIC and solely responsible for our safety, I was also happy to have the input from my passenger to help keep track of the other two gliders. We were all correctly turning in the same direction, and I never felt there were any safety issues, but it did make me think about how many gliders I would be comfortable sharing a thermal with. I recalled a conversation around the terminal where a more experienced pilot said he was good up to five then was out. There is no specific rule, but each pilot needs to judge his experience and the situation and decide what is or is not safe. I was comfortable

with two others, but a fourth may have made me nervous at my experience level, or even the three of us if I did not have the extra set of eyes.

What happened next is also easily predictable, and I am pretty sure most seasoned club members can tell a similar story from their experiences. The thermal died and the three gliders all entered the pattern within a minute or so of each other. The PW5 (Chris Jones) went first. I don't recall him calling the grass safety area, so following him into the pattern I made a radio call that I would land in the grass safety area. On downwind I noticed that Chris did land in the grass so I adjusted my pattern slightly and made an updated radio call for 28 on the pavement. As I was turning base, I heard Rob Jacobson calling downwind. With Chris stopped in the grass, Rob then called me on the radio and requested I land long.



Rolling out on final with PW-5 in the grass and power plane on taxiway

I reminded myself that flying the airplane safely is still my number one task and judged my speed and altitude deciding that I would be fine stretching out the landing roll. I leveled out just above the runway but instead of flaring I closed the spoilers slightly and flew down the runway for what seemed like an eternity but was probably two seconds. I flared, landed, and did my best to keep it rolling to the end. However, we had about a 5kt tailwind on 28 so once I lost control authority on the rudder I had to apply brakes to ensure I didn't hit a runway light and stopped about 100ft short of the end of the runway. We exited the glider and looked back

to see Rob coming to a stop well behind us at the runway midpoint.

I recalled from training various instructors discussing options when multiple gliders are in the pattern together, including using the grass, landing long to provide spacing for a glider landing directly behind, or even the possibility of landing on a taxiway. Two is relatively easy if the grass is in good shape, but three or more requires more coordination. Using radios helps, but it is also important to maintain a good visual scan. In my case I missed the radio call that the glider in front of me was landing in the grass, but I made the adjustment without too much difficulty because I was paying attention. The last two Ls of the FUSTALL checklist are Lookout and Land. These are not something you do once when completing the checklist, but constantly from entering the pattern until full stop. Up to this point, I had only shared a thermal and been in the landing pattern with one other glider. Adding a third definitely upped the game to be attentive and stressed the importance of good radio procedures and paying attention to what's going on. It was a fun flight, and Walker left interested in adding a glider rating.

A final note, the FAA <u>Glider Flying Handbook</u>, 2013, page 10-9 discusses collision avoidance and procedures for entering, exiting, and flying in a thermal with other gliders.



Andy McGowan

Congratulations go to Andrew (Andy)
McGowan. Andy soloed for the first time on
June 18, 2023. After some starts and stops
Andy decided to take a pattern tow to 1500' for
his first solo. After separating from the Pawnee,
Andy encountered lift and decided to take it

and turned the short pattern flight into a full 42-minute flight.
Appropriate celebration and congratulations ensued.



Emma Tetley

Congratulations go out to Emma Tetley for earning her third soaring scholarship. Emma started with an SSEF scholarship. She followed that up with a Discover Soaring scholarship through the SSA. Now Emma has garnered another SSA scholarship, the Costello Scholarship. There are two flavors of this scholarship, a pre-solo and post-solo scholarship. Since Emma had soloed prior to earning this scholarship, she qualified for the second variety. This means that Emma will have to pass the FAA Knowledge Test to qualify for the entire scholarship.

I contacted Emma's mother – Kristen – for a little more information about Emma to give us some insight. Here is what the proud mother had to say.

Emma is a Cadet Captain with Civil Air Patrol and her squadron's cadet commander and AE officer. She is also serving on SC Wing's executive staff this summer as an evaluator and is attending a Space Operations Academy at Cape Canaveral through Civil Air Patrol (an NCSA) in July.

She is a member of King William's 4-h shooting sports team. She serves as her club's secretary. She was 1st place individually in the outdoor skills competition (orienteering) for the state of Virginia in the May Hunter skills challenge. Her team won 1st overall in the competition. She also won third place in public speaking in the spring air competition and her team won 1st for archery. She was also selected last year as a

Virginia Shooting Sports 4-h ambassador. She was nominated and has been selected to attend national 4-h ambassador training in Nevada this coming August. She shoots skeet, trap, 22 rifle, and bow.

Emma is a member of Twin Rivers Dairy Goat 4-H club where she serves as public affairs officer. She shows her dairy goats in the State Fair of Virginia. Last year, she won a herdsmen award for helping other competitors and was the premier exhibitor for the recorded grades. Her goat, The Celtic Fire, won grand champion in the 4-h show for the recorded grades. She also won the 1st place college scholarship from the State Fair of Virginia for the dairy goat show in 2022.

Emma works part time for Chic-fil-a to help earn money for her flying expenses.

She dances for the Rhodes Academy of Irish Dance and has danced since she was 5. She is a preliminary championship level dancer (the second highest level). She enjoys performing in St. Patrick's Day performances with her school.

Emma has a 4.0 GPA with Seton Home Study School out of Front Royal where she just finished her sophomore year. She has been accepted into Regent University's early college program and will be taking classes with them this fall.



With the guidance of SSA Instructors, Skyline members continue to rack up accomplishments that go beyond the FAA minimums by demonstrating soaring skills (not just gliding skills)! Here are some recent recipients of SSA Soaring Badges awarded by SSA instructor Chris Norris:

Narisa Zobell, "A" Badge, 8/22/22 Scott Bradley, "A" Badge, 6/26/23 Chris Carswell, "B" and "C" Badges, 6/26/23 Rainer "Uwe" Jettmar, "C" Badge, 6/26/23 Chris Jones, "C" Badge, 6/27/23

And another one awarded by SSA Instructor Ron Wagner:

Bob Good, "Bronze" badge, 6/28/23

Congratulations to all!



COFFEE WITH A NEW PILOT

Mark Moran
Interview by Marcelo Morichi

When did you take your practical test?
 A: May 28, 2023



A: Paperwork, about 30 minutes. Oral exam, about 2 hours. Flight test, three

1. How long did it last?

- flights (under an hour). There were two practical tests scheduled for that day. Mine was scheduled to begin at 1300 local time. I got to the airport at 0800 that morning, in case I wanted to do a flight before my test.
- 2. Who was the tormentor (Designated Pilot Examiner)?

A: Piet Barber. Prior to scheduling the check ride, I did a lot of flying with Ron Wagner and Brian Clark, and Brian was my endorsing instructor.

3. What were the flight conditions that day?

A: Winds were out of the east (80 degrees true at 5 knots), visibility was 10 statute miles, clouds were overcast at 4,900 ft with the ceiling descending as the afternoon progressed. Temperature was 21 Celsius, dew point was 8 Celsius, altimeter 30.05 in. Hg. For all three flights, we used Runway 10 at Front Royal Airport.

4. How many flights did you complete? What do you remember most vividly about that flight?

A: The practical test was three flights, but I chose to do one instructional flight that morning, prior to the practical test. I knew that one of the three check-ride flights would likely be a premature termination of the tow (PT3). I had never done a simulated rope break from Runway 10 at 200 ft before. Since I arrived at the airport around 0800, I asked Ron Wagner to go up with me for a training flight that morning, so that I could try doing a simulated rope break at 250 ft on Runway 10. As it turned out, Piet's morning practical test was cancelled because the person was sick, so that morning, Piet was instructing other students.

When my turn came up for my instructional flight, Ron and I were in the ASK-21 waiting to takeoff. The tow pilot, Jim Bierstine, pushed the Pawnee's throttle forward and the towplane and glider began to speed down Runway 10. I was making my callouts (e.g., "land on runway, land in field to the left") and, at about 150 ft AGL, I hear Piet on the radio, "I recommend you cancel the simulated rope break." As it turns out, he was flying with his student in the other ASK-21, and they were in the pattern about to land on Runway 10 (so there was the potential for the two gliders to be landing on the same runway in opposite directions).

I radioed back to the traffic that we were cancelling the simulated rope break. I was a bit annoyed that I would not get to practice the 250-ft simulated rope break that morning. Ron and I quickly decided to simply do a pattern tow. Although I was annoyed that I would not get to practice the PT3 that morning, Ron told me that the experience that I ended up having (i.e., planning for a PT3 then cancelling it at the last moment), might have actually been better for me than doing the PT3.

When I finally did my three check-ride flights, the PT3 flight ended up being a wing rock by the tow pilot, at about 1500 ft AGL, so I released, made my radio calls, did my FUSTALL checklist, and essentially did an unexpected pattern tow, landing on Runway 10. The weather conditions that day did not favor thermalling (the ceiling had dropped to about 4,300 ft), but, on my third flight, I was actually able to do some thermalling to stay up a bit longer than the normal sled ride! When it was over, I was pleased with my flying on the three flights, and I guess the DPE was too since he passed me! I could barely believe that I had done it. I was very happy!

5. The knowledge test tends to be something many student pilots procrastinate on. What's your helpful advice for them?

A: Just get the written test done and out of the way. It is good for two years (24 months). I used the Skyline Soaring Club online syllabus, read the FAA's 2013 "Glider Flying Handbook," and read the two Russel Holtz books ("Glider Pilot's Handbook of Aeronautical Knowledge" and "Flight Training Manual for Gliders"), which I find are better than the FAA's Glider Flying Handbook. I also used the Dauntless GroundSchool app.

6. Who was your first passenger after you became a pilot?

A: My practical test was at the end of the flying day, so I did not take up any passengers that day. The next weekend, I was out of town on a business trip to Indianapolis, so I did not fly a glider that weekend. The next weekend, I got my backseat checkout done with Brian Clark, but I'm not sure if you would count that as a passenger, but I was the PIC, so perhaps Brian was my first passenger. This weekend, I hope to get a checkout in the PW-5, which is a single-seat glider, so that will not be a passenger flight!

7. What is your most memorable flight since you become a pilot?

A: Well, the backseat checkout flights (I did two) were certainly memorable, especially since Brian wore a hat with a wide brim, so I had to crane my neck left and right to see the tow plane. After the first checkout flight, Greg Ellis asked me, "Well, did you see the towplane wings sticking out the side of Brian's head?" And I said, "No. The brim of Brian's hat was so wide, I could not see the towplane wings, without craning my neck to one side or the other."

8. What are you goals as a glider pilot for the next two years?

A: I have done a backseat checkout in the ASK-21. I want to get the PW-5 checkout done. I tried last weekend, but the crosswinds were too high (below the 12-knot crosswind maximum for the glider) but, given that this was to be my first flight in this glider, I felt that the crosswinds were too much for me. I have my A Badge (solo) and my B Badge (over 45 min. flight), but I would like to work on getting other badges and continuing to improve my flying skills, especially in the area of thermalling!

9. If you met with Mark when he started his flight lessons, what advice would you give him?

A: Read the books. Fly on a consistent basis. When flying the glider, if you see the glider begin to deviate from its intended course, make small corrections, and make them early. Stay ahead of the aircraft! It definitely took me longer to get my rating than some others. But along the way, everyone was always very encouraging and willing to give me tips/advice. During my training, there was the whole COVID-19 shutdown, flying with face masks, and I also had a bike accident in 2021 which derailed my flight training for a couple of months. I was an ab initio pilot, starting in my mid-fifties, and did not play video games when I was younger, so I may have lacked some of the hand-eye coordination that others have. I wish I had learned to fly when I was younger, but that's not how things worked out for me.

10. What are the two things that Skyline Soaring Club does well in developing new pilots? What is the one thing that could be improved?

A: Having many different instructors/CFIGs is a double-edged sword. On the one hand, you learn something new or special from each instructor. On the other hand, you don't have the consistency that you might have flying an airplane, where the norm is to have the same instructor (or maybe two) for your flight training. The SSC online syllabus is very good! The student progress record (SPR) is very good! I wish the club could start all ab-initio pilots using a flight simulator. I know that some clubs have these and use them heavily in training. In SSC, since we don't have our own club house, we don't have a place to store a flight simulator, so people simply tend to have their own in their homes. I did get to fly Piet's simulator, and Shane's simulator. And I now have my own copy of Condor, the soaring

simulator, which I think is useful for keeping your head in the game in the off-season.

I would be remiss if I did not make a shout out to people who have helped me along the way. I thank my wife (Inger), my family (who put up with me spending so much time at the airport), my brother, and Tim Moran (who is an excellent glider pilot and was the spark that made me want to become a glider pilot). I thank all the flight instructors that I flew with. There are too many to name then all, but here is a partial list: Brian Clark, Ron Wagner, John Noss, Joe Lingevitch, Rufus Decker, Allison Diaz, Ken Ring, Joel Hough, Chris Norris, Shane Neitzey, George Hazelrigg, and Bob Sallada. I really appreciated the support of so many members of the club (including Andrew Neilson, Stephanie Zilora Neilson, Richard Good, Rob Jacobsen, Jim Bierstine, Kevin Barrett, Tim Bookwalter, Tenko Dimanov, Paul Mayon, Andrew McGowan, Hugh McElrath, Marcelo Morichi, Todd Morris, Jim Perlmutter, Peter Ross, Ertan Tete, Greg Ellis, Keith Hilton, and many more)!

And a great thanks to Piet Barber, who has served as one of my instructors, is a DPE, and does so much for the club.



GOING THE DISTANCE Andrew Neilson

Not a metaphor! I did actually go the distance. On June 10th, 2023 I had the opportunity to go (intentionally) where I'd never gone before, which is well outside glide range of KFRR. Flying cross-country in a glider has been on my mind for quite some time. I've managed to complete my Silver duration and altitude, but that 50km flight was still beckoning. So began the hunt to find the perfect day, or at least the day that gave me the best chance of success!

With any flight, there is always planning and preparation. Did I plan this flight to the last degree the night before? Not really.....okay no. I reviewed Skysight daily to get a feel for the forecast conditions and general weather from other sources. In particular was the wind direction. My plan was to fly upwind towards my goal. That way, if things weren't working out, I could run downwind and cover a lot more ground. I would have already figured out where the lift was and would have a fair chance of finding it again.

In a way, planning for this flight began in the spring of 2019 when I was building tail-wheel time in a Piper Cub. The instructor/owner of the airplane was giving me a real introduction as to just how many places in Virginia that there are to land that aren't marked on any map. There also have been many flights where I've been watching the ground, evaluating fields for their landing potential. Over the past couple of months, I'd planned this particular route on SkyVector, mapping out all of the small local airfields. I configured the task in the Oudie and had it ready to load. Having access to a C-172, I was able to fly the route at 1,500 ft AGL and get a visual on each individual airport. I wanted to familiarize myself with the route of intended flight so that new things were minimized. I also ensured that the Oudie IGC was "legal" for the flight and sent it out to California to get it recalibrated.

I mentioned the "night before" as part of the planning. Intelligence on flying conditions comes from many disparate sources, not the least of which is one of our most experienced pilots sending out an email stating that the next day looks like a day to go get the boomerang! Yes, that's totally legit. You can then go and check the online sources and figure out what that pilot is seeing. Another nugget of useful information is when you go to the field and you see QQ being assembled and NG is on the ramp. Then you've got an excellent chance of having a great day in the air. Talk to our more experienced pilots about your oals. They

are a diamond mine of tips, tricks, and information! The other intel source on the day of is FlightRadar24. Since our ASK-21's and other gliders have ADSB-Out, we now have real time data on the current soaring conditions. Not only can you tell that the gliders are staying up longer, but you can infer the strength of the thermals and where the thermals are. When I saw that both K's were climbing over a thousand feet above their release altitude, then I felt it was time to launch.

Another aspect of X/C flight planning that we're all familiar with is having a retrieve crew on stand-by, having the DO's phone number, leave your keys, that sort of thing. Do you have a protein bar or two? What about something to drink? Bug spray (if you land in a field, you just might become dinner for a variety of ticks)? Sunblock? Chances are you're going to be sitting for a while until your crew gets there. Bring a book or at least a USB battery to charge your phone while you wait. It would SO suck to land out only to find out that your phone battery just died. Has your SSA approved flight recorder been calibrated recently? Maybe have another recorder as a backup?

Now that the planning is done, it's time to launch. I had set my start point at Signal Knob and my task was to fly to Laird's Knob, which is about 41 miles to the south. Once I started the task, I then started to thermal. My goal was to be no lower than 6,000 feet MSL before I started south. After bragging on the CTAF that I was above 6,000 ft, I remembered to raise the gear and started to head south. Once I got to Woodstock, I found that the thermals were inconsistent and hard to center (my shoddy flying didn't help much). To complicate matters, these were blue thermals, so I had to guess as to where they were. I was getting uncomfortably low, around 2,000 ft AGL, so I started to make my way towards Burner Field. I knew that since the sun was shining brightly, that there was an excellent chance that all of

the dark roofs and asphalt in Woodstock would be producing something usable. I was right. I quickly climbed from 3,000 ft MSL to just over 7,000 ft. I kept track of where I was, which way the wind was blowing, and where my potential land out spots were. One thing I had read about thermalling when racing is that you should not waste time with weak thermals and try to find stronger ones. I found that the advice also applies even when you're not in a hurry. You could spend a whole lot of time working a weak thermal and only gain 100-200 feet. Remember that every minute you spend in a thermal, you're adding a minute to the back-end of your flight. If you waste too much time, you could find yourself in a situation where the lift shuts off and then someone is going to have to come and get you. Since I was routinely getting thermals of 6-8 knots, and sometimes even more (it's so nice to see the vario pegged at 10 knots up), I didn't pay much attention to thermals that were 4 knots or less. I used those to fly in a straight line. Gradually, I could see my distance to target was dropping. 10 miles, 5 miles, 2 miles. Then I got the beep from the Oudie saying that I had completed my task! A whopping 23 mph average speed! It took me two hours to travel the distance.

The flight back was very instructive. I had to remind myself that yes, the task was completed, but I really didn't want to have someone (Stephanie) come pick me up. I felt it would be much easier to fly back to Front Royal and avoid disassembling in a field somewhere. It was very easy to get complacent and just fly in a straight line. Having a nice tailwind was a big help. In straight lines, my ground speed was 75-80 knots versus 50-55 knots on the way down. At 25 miles, I was within glide range of KFRR. 45 minutes after I left Laird's Knob, I was at 6,500 ft at KFRR. I then decided to just play around with the clouds and see what type of cloud did what. I really didn't care if I fell out at that point. My mission was accomplished, I was

back in the area, and I could land anytime that I wanted to.

Here's the thing about finishing the mission. It can and does affect your mindset. That could get you into trouble if you're not paying attention. The other thing about the end of the flight is that if you've completed your mission, there's no reason to not come in and land. Sure, you could stay up longer (which I did), but then you have biological factors to consider, including fatigue. I could have stayed up a lot longer, but decided that I had nothing more to prove and that my task was done. I didn't want to risk fatigue causing me to make a mistake that I could not recover from.

After managing a decent landing, our Beloved President came out to help me get the glider off the runway and begin disassembly. The heat and humidity increased my fatigue level quickly and there were a couple of times I needed the help of others to get things finished properly and safely. Never be afraid to admit that you're tired and need help, even to the point of putting someone else in charge. We're a Club and a community and we watch out for each other.

Overall, it was a memorable event. The very first time I "cut the apron strings" and ventured away from the security of knowing that I had a familiar runway to land on. There have been times in the past that I've gotten uncomfortably low and had that sinking feeling in the pit of my stomach. The idea of landing out scared me half to death. The interesting thing about this flight is that once I accepted the fact that landing out was a distinct possibility, the apprehension went away. Never once was I nervous. Sure, I was getting low around Woodstock, but I had an option that I was getting ready to use. My train of thought was more along the lines of "Well, this will be embarrassing!", but that was the extent of it.

I have discovered in my travels that the training we receive in our Club is top notch. By the time we get our certificates, we've been trained to a high standard. I'm very grateful to everyone who has contributed to my flight experience, be they CFIG's, Rated Pilots, or Students. I would not have had a successful day without you. Thank you very much.

Oh by the way, I did get my Silver Badge. #7403





skyline Soaring Club, Inc. is a private, 501(c7) non-profit organization, dedicated to the enjoyment and promotion of the sport of soaring. SSC is based at the Front Royal-Warren County, Va. Airport and is an affiliate club of the Soaring Society of America. For information about the club go to www.skylinesoaring.org

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