

# SKYLINES

Monthly Newsletter of Skyline Soaring Club, Inc. August 2017



Photo Vern Kline

## President's Message

**Dan Ernst**



Photo: Tom Motinger

Skyliners,

In case you haven't been looking at the flood of congratulatory emails, the Week of Training at Petersburg was a smashing success. Moving to Petersburg for the Week of Training was the brainchild of Chief Flight Instructor Piet Barber. Piet saw the beauty of training at W99 with its advantageous set up of parallel paved and grass runways, convenient mid-field access, and low traffic volume. His vision turned out to be correct and the club was able to launch a record number of flights during

our stay including 52 in one day! But the real proof of success was the six first solo glider students and a first glider solo for Chief Tow Pilot Steve Zaboji.

Beyond the numbers, the power of a club atmosphere was evident. Many people volunteered their time as instructors, tow pilots, duty officers or BBQ masters. Everyone worked hard to move gliders when others were flying. Breakfast and dinner were social occasions where the day was planned or analyzed, and stories were told. And nestled among the mountains, Petersburg airport is a beautiful place to see the moon rise and the sun set. All in all a good show. Thanks to one and all that made it possible.

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We are very pleased to announce that soaring safety expert Burt Compton will be with us on Sunday September 3rd to provide a Soaring Safety Foundation Site Survey of Skyline's operations. Burt will observe our operations from the start of our day to the finish and then provide a debrief and hold a question and answer session. We are going to try to arrange either a BBQ at the field or a room at Joe's Steak House. Many thanks to Dick Edge for contacting Burt and setting the date.

Front Royal will once again host the Virginia Air Show on Saturday August 26<sup>th</sup>. The airport is effectively closed during the show and Skyline typically launches only a few instructional flights that double as demonstrations for the crowd. We also display a glider and take questions from visitors. Reggie usually needs a little help with people marshalling arriving aircraft from the performers and a few fly-in attendees. We normally have a liaison officer to coordinate in real time with Reggie. If you are willing to take on that responsibility, let me know. We are shooting for an additional three volunteers. It is usually a great show so I recommend you come out and watch it.

We have recently received a "Checkride Prep Book" from Kaye Ebelt. This an amazingly complete compendium of useful information and narratives of past Checkrides. We will post it on the website. This was obviously no small project. Thank you Kaye for all of the time and effort you put into this. You'll always be a Skyliner, no matter where you reside!

Reggie has been approaching folks with trailers and gliders tied down in the grass area near the pole barn hangars and telling them that they will need to move to the parking ramp sometime. Although there is no schedule, yet, the county will be advertising the pole barn hangars for sale for salvage. If there is no buyer, they will just be demolished. Stay tuned.

I am writing from the 1-26 Championships at Texas Soaring Association in Midlothian, only just a little south of the Class B airspace of Dallas. Our own Bill Vickland is the contest director. TSA have been great hosts and the racing has been very competitive. Perennial winner Ron Schwartz (who flew 1,000 KM earlier this year in his 1-26 out of Blairstown, NJ) is being challenged. I have made one retrieve and enjoyed the reward of a cold beer (it was 100 degrees yesterday) and a great Mexican meal. Contests are fun, even if you don't fly in them. You should try it some time.

As we march into the dog days of summer, things are rolling along pretty well. Week of Training more than made up for the sorties and revenue lost due to the poor weather earlier in the year. Let's have a safe and productive (and also have some fun!) last month of summer.

Cheers,  
DAN



Bill Vickland, 1-26 Championships contest director. Held at the Texas Soaring Association in Midlothian, TX.

## *Preparation for an FAA knowledge test*

**By Joe Lingeitch**

**D**on't get bogged down preparing for the FAA knowledge test. The goal of this article is to motivate you to take the test, let you know what to expect, and provide a little bit of strategy to prepare for it. You can prepare with self-study at home using some of the resources that I mention below. A logbook endorsement from an instructor is required stating that you are prepared to take the test (61.103d).

Passing an FAA knowledge test with a minimum score of 70 percent is required for the private (60 questions) and commercial (100 questions) glider ratings. This article is written from the perspective of preparing for the private pilot glider test; the commercial test is similar but more comprehensive. If you already have an airplane or rotorcraft FAA rating, the test is not required for the glider rating (see 61.63 for more information). Once passed, the result is valid for a twenty-four calendar month period (61.39).

The knowledge test is a timed (2.5 hour limit - plenty of time if you are ready) multiple choice exam that is taken at an FAA approved testing center for a fee of about \$165. The questions are assembled from a database that is continually evolving. While the FAA does not publish the database of questions/answers, there are resources available that compile very good approximations to the actual test

questions. These are useful for checking knowledge retention, identifying deficient areas, and giving you some practice and confidence for the real deal.

The testing centers use computerized testing stations to administer the exam which is closed book (smart phones, googling, or other reference materials are not permitted). You will be provided with scratch paper, a supplementary test booklet that contains figures referenced in the questions, and a pencil. You also are allowed to use a simple calculator, E6B flight computer, and a plotter.

The general knowledge areas covered in the test are listed in 61.105b. These cover the following topics: basic aerodynamics, aircraft systems, flight instruments, FAA regulations and accident reporting, FAA publications/resources, airport operations and procedures, weather and weather services, aircraft performance, enroute flight, navigation and aeronautical charts, communication procedures, aircraft operations, preflight action, and aeronautical decision making.

While this is a rather long and general list, it is manageable if you break it down. I would recommend the following basic resources for your self-study training program: current FAR/AIM, recent ASA private pilot test prep book, VFR sectional chart, FAA Glider Flying Handbook, FAA Pilots Handbook of Aeronautical Knowledge, plotter (for measuring angles and distances), and an E6B flight computer. There are many other resources available, but these are a relatively short and inexpensive list which I have used; don't bury yourself with too many resources. Update your library with your favorites over time. There are also computer-based testing resources available such as the Dauntless Aviation knowledge test prep software. The computer software is useful for generating practice tests or getting real-time feedback when you want to practice a knowledge area.

The strategy I suggest is pretty simple. Use the ASA private pilot test prep book as your self-study syllabus for knocking out the knowledge areas. This book is updated every year, breaks out specific glider related questions, provides a brief introduction of the subject material, and has sample test questions with answers. When you buy the book it also provides an access code to take up to 5 simulated online tests. The ASA test prep book also comes with a FAA supplementary figure book that is pretty similar to what you will use for the actual test. The other reference materials above are useful to backup the material in the prep book.

Set yourself a reasonable schedule to prepare for the test and use the syllabus to keep up the pace. When you think you are ready, take a simulated knowledge test and if you can get a score of about 80-85% then you are pretty well prepared. Take the test as soon as possible; it will be graded electronically and you will know your score when you leave the testing facility.

Call ahead to the testing center and reserve a test time and ask them what materials you will need to bring along. You will definitely need the following items: a logbook with endorsement for taking the test, identification (driver license works fine), plotter, pencil, testing fee. If you don't have your driver's license yet, ask the testing center what is acceptable.

Multiple choice questions can be straightforward, or a bit tricky. Read each question, develop your own answer and then read the answer choices completely - even if you know the answer. If you can't come up with the answer immediately, flag the question and move to the next one. Make a first pass through all of the questions and get all of the easy questions out of the way. Be careful of units (knots/mpg, statute/nautical miles, sectional scale vs. TAC scale, degrees F vs. degrees C), and when you finish early, go through your answers again and look for careless mistakes.

Other Resources:

FAA approved test centers

[https://www.faa.gov/training\\_testing/testing/media/test\\_centers.pdf](https://www.faa.gov/training_testing/testing/media/test_centers.pdf)

A sample private pilot knowledge exam can be found at:

[https://www.faa.gov/training\\_testing/testing/test\\_questions/media/PGLSampleExam.pdf](https://www.faa.gov/training_testing/testing/test_questions/media/PGLSampleExam.pdf)

Online resources for practice FAA test questions:

<http://www.webexams.com/welcome/index>

<http://www.exams4pilots.org/> 

## *CAP National Flight Academy for Gliders*

**By Clark Lundsford**

**C**ivil Air Patrol runs several Flight Academies each year for both gliders and powered flight. The Academy for Gliders provides instructional FAA flights to cadet's ages 12

to 18. There is a national competition to select cadets for each academy and the cadets are typically very motivated to learn and work together well.

The cadet's objective during the first glider academy they attend is to achieve a proficiency level of supervised solo. This requires the cadet to conduct the entire flight with no assistance from the instructor. Cadets typically achieve this in around 15-20 flights. If the cadet attends a second academy, their objective is to gain sufficient judgment and skill to solo. This requires at least 30 total glider instructional flights.



I have been instructing at these academies (used to be called encampments) since 2005 and I really enjoy seeing how quickly the cadets learn and their excitement at achieving supervised and actual solo. This year, I instructed four cadets at the academy held at Ft. Indiantown Gap, PA from June 24 through July 2. We used a nearby airfield, Farmers Pride that has a fairly wide grass runway. Maule MXT 235s were used for towing and SGS 2-33 and Blanik L23 gliders were used for the instruction. The cadets were organized into four Flights, with each flight having 4 cadets, an instructor, and a glider. I

had Charlie Flight and we flew a 2-33.



My two first year cadets achieved supervised solo on their 12<sup>th</sup> flights, even though we had pretty gusty winds and some turbulence that made the tows pretty challenging. This was the second year for my other two cadets. I signed one off for solo (second for the right) following his 30<sup>th</sup> flight and he did a great job.

I will be helping out with another academy in August based in Springfield, Vermont. I'll either be towing or instructing, depending on the need. The company I work for, MITRE, provides me with civic time to support an academy each year, so that really helps with the vacation time balance.

If anyone is interested in learning more about this CAP activity, please let me know.

## WoT Stats and Details

### Piet Barber

Our Week of Training finished with the following statistics:

- Number of days: 4.5
- Number of flights marked as instructional: 158
- Number of first solos (any aircraft category): 4
- Number of first solos (in glider category): 6
- Number of 61.56 flights reviews completed: 2
- Number of instructors during the WoT: 5
- Number of distinct tow pilots during the WoT: 4

Additional WoT details can be found here....

<http://blog.pietbarber.com/2017/07/skyline-soaring-week-of-training.html>

## Junior Contest in Elmira, NY

By Chris Zaboji

Photos by Jonathan Elie

With the peer pressure from JP Stewart, I signed up for the Junior Contest in Elmira, NY, at the beautiful Harris Hill Gliderport. Thanks to the generosity of Keith Hilton I was able to take his LS-3 up for the week and fly that with 10 other single seat juniors from all around the country. At first it was pretty nerve-racking sitting in the grid on Sunday waiting for your turn, but once you were in the air thermaling you would forget about all the noise.

The first flying day for me was Sunday, July 2nd, and I had my first landout. To be completely honest it was on a grass strip not on the sectional but unused by its owner. Thankfully he kept it mowed and it turned out to be a great spot. Before I even got out of BW one of the neighbors saw me come in and showed me the access road. While I waited for my crew to come get me, he invited me to his house where I met his family including a Grandma that was confused as to why exactly I was there.



The next few days were better for soaring, the best being that Tuesday. Thursday and Friday were canceled due to weather but it gave me an opportunity to spend time and hang out with the other juniors. We went go-karting, threw the Frisbee around, swimming, assembled someone's glider inside the office as a prank, and a whole lot more. We were all sad to leave on Saturday, ending probably the best week of the summer for a lot of people.



This week made me want to push myself more and more on cross-country flights, and I would love to see Skyline Soaring become more of a cross country club as well. Looking forward to the Junior Camp in 2018!



## Soaring Into Retirement

By Kaye Ebel

It was great to see so many people at KFRR to honor and celebrate the retirement of our good friend, George. Even though most of you share an interest in flying with George, it is certain that he was much admired and a man who was passionate about working at the National Science Foundation (NSF).



I've known George for four years. I first met him during my interview at NSF to become an Einstein Fellow. Shortly after I was selected and moved to Arlington, George invited me to come flying with him. My first glider lesson was August 25, 2013. That was all it took to get me hooked on gliding. I

joined the club as a transient member soon after earned my private pilot glider rating. Thank you George for introducing me to soaring!

As all of you know, George has worked at the National Science Foundation for the past 35 years. In fact, he is responsible for the formation of the Civil, Mechanical and Manufacturing Innovation (CMMI) Division in 2004, in the Engineering Directorate and has been Deputy Division Director ever since.

When I began my fellowship in the engineering division, I had no engineering background. My education background included teaching math, science and robotics. During my tenure at NSF, George and the CMMI team changed all that. I was sent all over Virginia and the east coast to learn about additive manufacturing (3D printing) and how to best implement engineering education into the classroom. This experience resulted in pioneering a course at Virginia Tech Innovation Center called Engineering Design and 3D Printing. George encouraged me to write a book on the best practices of engineering education outreach. Not an easy task. However, George, also an author, helps to guide me in my desire to become an author myself. Thank you George for introducing me to engineering education and for supporting my book writing efforts.

George's brothers shared many stories about how he enjoyed designing and building things when he was young. It was no surprise that he eventually entered the field of engineering. He obtained a B.S. in mechanical engineering from New Jersey Institute of Technology and went to work for Curtiss-Wright. He completed an M.S. in mechanical engineering, also from NJIT, but still hadn't regained his design abilities. Five years later, he had obtained M.A., M.S.E., and Ph.D. degrees in aerospace engineering from Princeton University. For the next 25 years, he roamed industry and academe in an attempt to understand the theory of engineering design, including time spent at the Jet Propulsion Laboratory, General Dynamics, Princeton University and a consulting firm of which he was a co-founder. He also spent a year in Korea helping to found the Systems Engineering Department of Ajou University. He joined the National Science Foundation in 1982 and, in 1996, became program director for the Engineering Design program where, for eight years, he provided support to others in the field. In January, 1996, he did a stint as Station Science Leader of the U.S. South Pole station. For relaxation, he spends his weekends soaring over the Shenandoah Valley,

and he is a certified flight instructor in gliders (CFI-G) with about 1,900 total flying hours.

Many of you have known George longer than I. I'm sure you also have similar stories to tell. For me, he changed my life. I will be forever grateful to George for giving me a chance and selecting me as an Einstein Fellow.



So George, on behalf of everyone at SSC, I'd like to say thanks for being an inspiration. I would never have become a glider pilot without you.



## *Come see where it all started !!*

**By James Kellet**

**M**any of you (those who've read the "History" portion of the Club's website) know that our organization sprang from the demise of a commercial operation, the Warrenton Soaring Center, which flew out of the Warrenton Airpark, just south of Warrenton, VA. A grass strip with several intersecting runways, it had been an airport since before WWII and, when WSC was flying there, was owned by Charles Beatley, then the Mayor of Alexandria, VA.

When WSC dissolved in 1991, several customers banded together to form Skyline Soaring Club, and promptly moved away from the Airpark. (Ask Shane Neitzey how it all came to be!) It's now owned by Thomas Richards, and there's a very successful skydiving operation (see <http://www.dcskydivingcenter.com/>) based there!

It's an - ahem - interesting field. All the approaches are obstructed! Despite that, on at least a few occasions WSC managed to log over 100 sorties in a single day!

Our very own Pawnee demonstrating a base-to-final approach . . . not your typical pattern, but it did happen!



From time to time, some of the WSC alumni gather for a picnic and reunion there, and the next one will be on Saturday, September 2, 2017. It'll be rain or shine - the skydivers kindly offer their huge hangar for shelter should the weather be inclement. There will be grills to burn meat you might want to bring. Come enjoy a pleasant outing at an unusual airport and see where it all began!



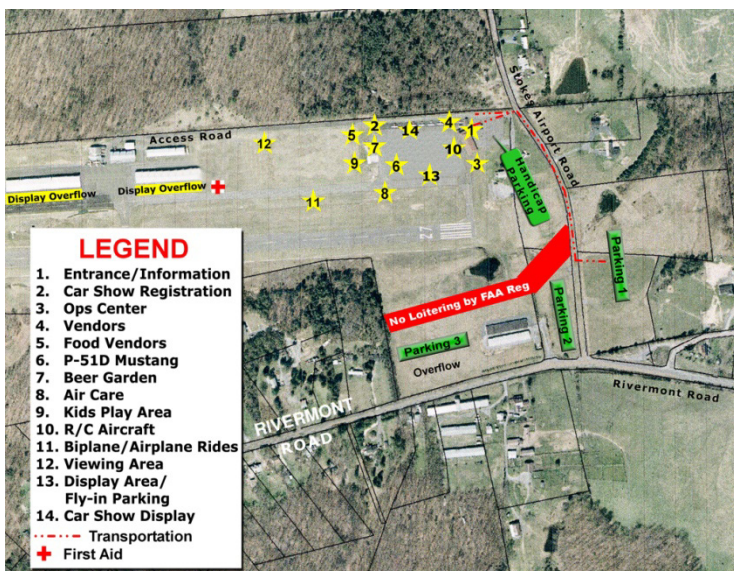
## 2017 Virginia Air Show 26 August

**Dan Ernst**

Please let me know if you are willing to support the airport by working at this event.

Reggie is asking for four volunteers from the club to help out. One of the volunteers will be a liaison with Reggie. Duties will include parking show planes and fly-in visitors and crowd control. We will also display a glider and answer questions.

2016 layout of event and more details on the show: [http://virginiaairshow.com/index.php?option=com\\_content&view=article&id=55&Itemid=72](http://virginiaairshow.com/index.php?option=com_content&view=article&id=55&Itemid=72)



## For Sale: 1971 Schweizer 1-26E

**By Martin Gomez**



S/N 505, 650 hours, great shape, no trailer. Microair VHF, gooseneck mike, Borgelt B40 audio vario. Mountain High oxygen included but not installed. Hangared at KFRR. Contact Martin Gomez at 765-247-2738 or [MLG28@cornell.edu](mailto:MLG28@cornell.edu)

\$11,000

More photos here:

<https://www.flickr.com/photos/xferner/albums/72157656332414976>





Photo provided by Richard Otis

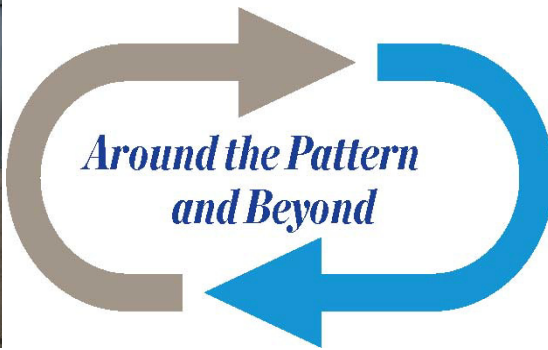


Photo Jonathan Elie

## 500 KM Diamond Distance Task, August 5<sup>th</sup> 2017

**Pilot: Piet Barber**

For details on this flight visit the OLC website at the following URL:

<https://www.onlinecontest.org/olc-2.0/gliding/flightinfo.html;jsessionid=0DCCDA71179A906421A44A309F8290E0?dsId=6017762>

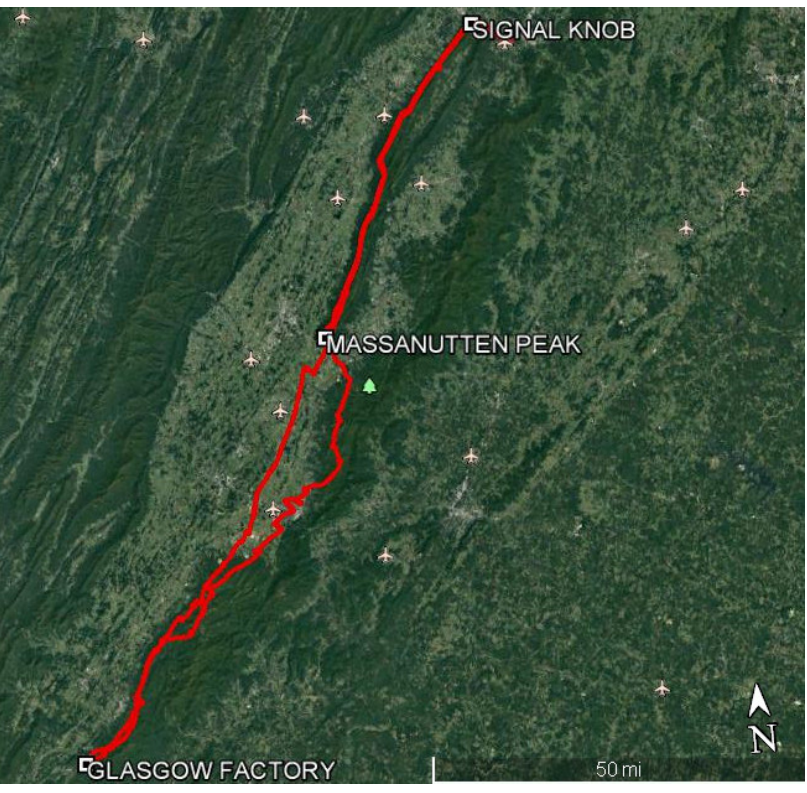


Photo by Vern Kline

- President*—Dan Ernst
- Secretary*—Keith Hilton
- Treasurer*—Steve Rockwood
- Membership*—Tim Moran
- Chief Duty Officer*—Bruce Zivic
- Chief Tow Pilot*—Steve Zaboji
- Chief Flight Instructor*—Piet Barber
- Safety Officer*—Chuck Stover

*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](http://www.skylinesoaring.org)

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