

SKYLINERS SPREAD THE JOY! Piet Barber

On Sunday, November 12, a brand new soaring club – the Central Pennsylvania Soaring Association – began operations at Centre Airpark (N16)!



And among the original 33 founding members, guess who was helping them?? Yep, Skyliners. Inactive member Chris Groshel provided his personal SGS 2-33, being towed by the club's

newly purchased C-182. The club's founding members reads like a who's who of experienced glider pilots, and includes current Skyline members Shane Neitzey and Jim Garrison, in addition to our inactive members Chris Groshel and Frank Banas.

Their first general membership meeting was held on January 27th, and if you'd like more information contact Janine Acee, President, at julietniner@gmail.com



MARK YOUR CALENDARS!!

Nine AM to noon, Saturday March 9 at the firehouse across the road from the airport. MANDATORY Safety Meeting AND annual membership meet. There will be an election for two members of the Board of Directors - - so, ready to campaign?



BUILDING AN AIRCRAFT IN CONTEXT Scott Bradley

I built a 2 place, single engine, high wing aircraft, a Glastar. My first flight was in 2008. It cruises at 120 knots and when high, and cold, burns 8 gallons an hour. It is very efficient at turning fuel into noise. It has a range of 5 hours – a little shy of a typical flight in Piet's QQ.

Let's explore building an aircraft from a kit using common themes.



The Glastar kit comes in one big wooden crate

The law of thirds: The total cost of the build will be about 3 times the cost of the kit. I paid close to \$30k for the kit, and the complete plane cost about \$90k. People may say they can do it cheaper, and you can, but I wanted a factory new Lycoming and some dependable, and expensive, Garmin toys to put in the panel. I built it to be IFR capable, but I am a total VFR day flier.

The law of 50% done, and 90% to go. Even when it starts looking like a plane, there is just so much detail work left to do. However, if the builder is bragging about 50% done, knowing they have 90% more, that is the equivalent of final glide. It took me 6.5 years (5.5 years in my basement), and toward the end, I had a neighbor's help, as I could not rivet the wings by myself. He stuck it out and we completed the other 90%. I got a lifelong friend out of the deal.



Setting the dihedral angle in the basement. It is set with a little trigonometry, and a 35foot string (barely visible) and bubble level; it is low tech but effective.

Builder or Flyer. They say people are one or the other, but rarely both. If you do not love building (the ultimate DIY) then it is going to be a long, onerous process. If you love flying, it is a long time and a lot of work before you fly. Many pilots give up on flying, while building, as they juggle just so many hours in a day. You won't discover who you are until it is over. Flying is functional (for me); the plane gets me there faster than the car. I may be a builder at heart. Flying gliders is fun – even if only from point A to point A. Maybe I am a builder and a flyer.

Why Build. In my case, I did not get primary flying lessons from well-financed schools (e.g., Aviation Adventures) in relatively new aircraft. I learned in analog era planes that were ridden hard and put away wet. Thus, I wanted a new plane. Since I was a DIY guy, I believed I could build a better plane than someone who built planes they would never flight-test themselves.

Build Quality is Important. One would think that 5,000 near perfect rivets (lots of do overs) indicates an attribute such as methodical or systematic. I am neither, nor sure I am good at paying attention to details. However, following directions and checklists are my superpower. I do appreciate the search for perfection, and it is a good build principle. Patience is key, and I am

always working on that. Everybody brings different personalities to the process.



Left: Outboard wing with top aluminum skins off and shows the extra fuel tank with transfer pump. The outboard fuel can be pumped to the inboard main fuel tank (not shown). A bell crank is shown for the ailerons. Right: Father-in-law shown with a wing mounted in a jig to ensure it is square – no twist.

There may be certain characteristics that may not serve us well. As an example, I was looking at someone's in-progress build and noticed a cowling screw was sitting proud, half-way into a nut plate, and it was tight. The builder moved onto something else. I could never do that, I would tap (rethread) the nut plate right then and there, and not move on. It bothered me. I later learned that the same plane had a mechanical issue in flight. Anecdotes may not be "data," but we must try to learn and emulate successful habits when possible.



The Elevator build sequence is tedious: Clecos (right) are used to hold parts together for fabrication. Lots of holes are drilled, fitting, redrilling, and finally rivets. **Extra Eyes:** Building comes with challenges. Sometimes the instructions are ambiguous, parts do not seem to fit like I think they should, or the there is a single step in the build manual that says, "Install everything forward of the firewall."

There are builders' groups and other expert sources we can use. But who provides the day-today quality oversight – before the FAA designated inspector comes to look over the completed project? That oversight is my wife. She does not work for the FAA, but you'd never know it. She was a vigilant inspector and helped ensure a highquality build. There are many times where she would question my work or question my approach to solving a build "challenge." I am glad she was there to provide oversight. And she helped me buck a lot of rivets, too.

Finally, at the end we are required by the FAA to display on the panel, in front of the passenger, a label that reads: "Passenger Warning-This aircraft is amateur-built and does not comply with the federal safety regulations for standard aircraft." As a rule, I do not have passengers, so the placard does not get a lot of use. A nervous passenger can rest assured, I can build a better plane than a Cessna. Which reminds me, hubris is the 6th personality trait we need to guard against. [Note to Students: There are 5 hazardous attitudes all pilots should avoid. Google it for more Info.]



How do you get a plane out of the basement? Double wide basement doors are helpful. Bring it up to the street in pieces. There was a parade of 6 cars that followed the tow truck to the airport.



There is no place like home in Manassas. The 2023 version of N414SJ.



BOARD OF DIRECTORS SUMMARY Keith Hilton, Secretary

I must apologize, I haven't provided a Board of Directors meeting update since May. Life gets in the way. I must assure you though that your Board of Directors has been quite busy. They meet about every six weeks via Zoom videoconference. The following is an update from the June, July, August, October, November 2023, and the latest meeting held on 18 January 2024. The next Board of Directors meeting is scheduled for 9 March 2024 right after the Skyline Soaring Club Annual Membership and Mandatory Safety meeting that will be held from 0900 – 1300 at the Fire House next to the Front Royal Warren County Airport.

Your treasurer, Ralph Vawter, does yeoman's work keeping the Club's finances straight. He continues to note that the Club is in good financial shape. In an effort to streamline the Club's accounting, Ralph moved to an on-line Quickbooks solution and solicited the assistance of some Quickbooks experts to ensure the account was properly set up. The online accounting system will make it easier for an assistant to help with the bookkeeping and eventually turn over accounting duties to another Club volunteer.

Ralph noted that it was time for the Club to investigate a new bank that would accept digital payments (like Zelle) that all the young kids are using. He looked at Capital One, Chase, and a few other banks. He considered Republic Bank, but the consensus was a "brick and mortar" bank would be best. He ended up selecting Truist with a branch in Front Royal. Truist accepts Zelle (with a 1% fee) as an electronic payment method. You may have noticed that you can pay your annual Club dues and flying charges via Zelle. Ralph has since moved all accounts to the new bank and has received new credit cards for the tow planes, Andrew Nelison for tow plane maintenance, and an "emergency card" that will be available as needed.

The acquisition costs to the Club for the Discus donated by Fred Winter were: \$2,800.00 for insurance and \$800.00 for Virginia State Sales Tax. The Board discussed the value of the new "donated" Discus CS and how much we should insure it for. The "old" Discus is insured for \$50,000. Even though we only paid Fred \$1.00 for the Discus, the Board voted unanimously to insure it for the same \$50,000 as the "old" Discus.

The Club signed new hangar leases with Warren County. The new lease was approved by AOPA and the other airport tenants. Ralph noted that the hangar lease went up by \$127.00 per month.

Ralph evaluated the Club's fixed expenses vs Club dues (Club dues are set to cover fixed expensed) and as a result of prudent management of the Club, recommended that no change be made to Club dues at this time.

The charts below provide a great summary of the Club's finances from 2023. It should be noted that we just spent \$3,800 from the Avionics Fund for ADS-B OUT equipment for the new Discus. That is not reflected in the charts. Ralph will provide an expanded version of these charts at the Annual Membership meeting.

Operating Results Jan 1, 2023 – 12/31/2023

▶ Total Revenue	\$155,185
Membership Dues	\$50,780
Sailplane Rental	\$24,576
Towplane Revenue	\$60,942
▶ Hangar Usage	\$ 6,900
Initiation Fees	\$ 7,500

Net Operating Results 2023

►Total Revenue	\$155,185
►Total Expenses	\$130,181
►Net Revenue	\$ 24,352

Operating Results Jan 1, 2023 – 12/31/2023

\$128,812
\$33,427
\$27,664
\$ 9,255
\$12,197
\$27,452
\$ 1,795
\$ 2,130

Checking (Includes the following) \$95,184	
► Engine Fund \$40,000	
► Recovering Fund \$13,000	
► Operating Reserve \$10,000	
► Capital Fund \$ 6,000	
Avionics Fund \$ 4,000	
► Available Cash \$22,184	

Your Membership Officer, Tim Moran, has the unenviable task of telling prospective new student members that they must go onto the Club's wait list. That list averages around 35 people. The current wait list is as low as I ever remember at 27 students. Rated glider pilots can join the Club without being put onto the wait list. Club membership is pretty stable hovering around the 100 – 105 mark. The current Club membership is right at 100 Active members.

The Board continually discusses the wait list and how to deal with it at nearly every Board meeting. Over the year, there was an extensive discussion on the pros and cons of putting a hold on the student wait list as well as abolishing the wait list completely. Shane Neitzey asked if it would be appropriate to move students on the wait list to the top of the list if they have completed the FAA knowledge test. Zilora asked if it rated power pilots should be moved to the top of the wait list. Ultimately, the Board decided to keep the status quo and let the instructors and Membership Officer handle the student load as they see fit. As a note. The Board voted to set the minimum SSC student member age at 13 years old.

Our Club is extremely fortunate to have nineteen instructors. Your Chief Instructor, John Noss,

continues the job of wrangling those instructors into a cohesive team providing world-class instruction to our Club membership. At the July Board meeting, John noted that our percentage of instructional flights (instructor on board) is 63% of total flights so far this year, it usually runs around 55%. Some of that is probably due to lots of student demand, but also because of decreased flying by regular rated members, especially private glider owners, due to generally dismal soaring weather.

John also noted that one of the topics of his SSC Instructor caucus was dropping the two different before-takeoff checklists (on the cockpit cards) and replacing them with a single one that is tailored to our operation and our gliders with a more logical order. He also noted that before he joined the club, there was an SSA effort to bring together experts from across the country to settle on an improved single checklist for the glider flying handbook, that got some traction towards evolving CBSIFT, but never got full buy-in. The Board approved John's recommendation to combine the before-takeoff checklist into an SSC specific before-takeoff checklist.

If you were not aware, our very own Erik van Weezendonk got himself appointed to the Warren County Airport Advisory Commission. Big picture, Warren County has a Board of Supervisors, and two of those members regularly attend the Airport Advisory Commission meeting which is held roughly once a quarter. It is great to have Skyline Soaring represented on that commission. Erik provides an update to the Board after each commission meeting.

Erik noted that he had been appointed by the Airport Advisory Committee to head a subcommittee to develop Front Royal Airport operations policies/procedures. Skyline Soaring member Todd Morris is the Skyline Soaring Club representative on Erik's sub-committee. If you have ideas to improve operations at KFRR I suggest you let either one of them know. On a positive note, Erik noted that the county will be purchasing an "airport crew car" for use by pilots landing at the airport that wish to explore Front Royal. The Board discussed at nauseum, and "fought" with Warren County to get key fobs for the KFRR flightline gate. Ron Wagner suggested putting a lockbox by the gate with a key fob for the gate. The consensus of the Board was that was not a good idea and we would be pressing our luck. Thus, the key fob saga continues.

For the past year, at every Board meeting, the Directors have discussed what to do with the Sprite. The Board would like to keep the Sprite for member use, but without a hangar to store it in, it is deteriorating rapidly. Thus, the Board made the decision to sell the Sprite. After extensive discussion, the Board voted to sell the Sprite and trailer to Club members for \$10,000. If no Club members made an offer, the Club would list the Sprite for sale for \$13,000 on Wings and Wheels classified adds.

Originally, after an offer by Club member Tim Bookwalter, the Board voted to sell him the Sprite for \$8,000. However, that deal fell through. At the meeting in January, after some discussion and recommendation by Erik van Weezendonk, the Board voted to sell the Sprite to CPA Soaring for \$5,000 to assist this startup club get off the ground (pun intended). CPA Soaring currently has a tow plane and a Schweitzer 2-33 for training. They're operating as a club and have students and rated pilots flying out of University Airport. It should be noted that Chris Groshel is one of the founders of CPA and is an inactive member of SSC (because he lives in State College PA). Chris used to be an SSC BoD member.

The Board also considered storing the Sprite in Bill Burner's hangar in Woodstock over the Winter. With the pending sale of the Sprite, this may be a moot point since we hope it will be sold and moved to CPA before too long.

The Board approved purchasing the ADS-B OUT equipment for the PW-5 but were waiting on the proceeds from the sales of the Sprite. When the sale to Tim Bookwalter fell through, the Board recommended going ahead with the purchase of the equipment anyway since we had sufficient funding in the Avionics fund.

As you should have seen in emails a few months back, the Board voted to remove the special currency of a two-year field check from the field of operation from the SSC Operations Manual (Paragraph 3.1.5). Another change the Board approved for the Club Operations Manual allowed the Safety Officer or Chief Instructor to ground a member if warranted after an incident, pending an incident report and further training if appropriate (Paragraph 3.1.8). These changes have been posted to the Club Operations Manual.

Carlos Troncoso recommended, and the Board fully supported, a new feature for rated glider pilots to be incorporated into the Club website. The new feature would add information to the SPR and would provide an email notification to SSC rated glider pilots notifying them that their flight review expired and notice that their 90-day currency expired. As a note: A big disclaimer needs to be included that clarifies that the notification is only a friendly reminder sent using Skyline SPR records ONLY and that it cannot be used for any official business. I don't believe the feature has been incorporated yet.

Jim Kellett recommended to the Board that we need to ACTIVELY be searching for a new airport. Not just chatting over beers, but mounting an organized and focused effort to find an alternative place to fly. He used the example of being thrown out of New Market airport, the change in KFRR airport management, skydivers, and medivac helicopter services with which we are in sync, for how long? It would be wise, I think, to actively explore other options so we don't get caught with our pants down. At one time in the past, we had an active airport search activity, but we've been at KFRR so long with "friends" that we've become, I think complacent. The Board was empathetic but took no action.

Chris Carswell suggested that the Board think about reducing the cost per hour of the Discus to something significantly less than the ASK. He noted that it's only three dollars less but comes with a penalty of having to assemble it. Alternatively, he recommended including a maximum charge of two hours to encourage use in cross country. After much discussion, the Board decided to set a maximum charge of three hours for a single flight in any one of the Club gliders.

Piet Barber noted to that Board that he has secured a fully functional FAA Wave Window over Petersburg and was willing to organize a wave camp. He also noted that gliders that have transponders will be allowed into the wave window. Gliders without transponders must remain below FL180. He went on to say that the best time to do this would be somewhere around the 24th of February to the 3rd of March. Piet said that Mid-Atlantic Soaring is interested in donating a tow plane to this effort. Having just one tow plane there would kind of suck for the people stuck on the ground waiting for the 5 other people in front of him, each doing a 5000' tow. Piet is investigating installation of oxygen bottles into the ASK-21s. N321K has the hardware for a bottle. N341KS does not. We would also have to find oxygen bottles that fit in the glider. Piet noted that there will be a lot of downtime in between the wave days, we could have some adhoc flight instruction on those off-days, too. At the January Board meeting the Board voted to allow Club gliders and the Pawnee (flown by an SSC tow pilot) to be used for a Wave Camp headed up by Piet Barber. The Board stipulated that the Club gliders could only be flown by SSC Club members.

Ron Wagner was seeking funding for a Condor flight simulator for the Club. The consensus of the Board was that the Club really doesn't have any place for it and is not interested at this time.

Andrew Neilson recommended to the Board that we install canopy flasher lights in our gliders to help with "see and avoid." The Board briefly discussed Andrew's recommendation. Additional information was provided to the Board via email. The Board tabled the issue until some additional research could be completed. Tom Ward addressed the Board at the January meeting. He noted that the SSEF had five applications for scholarships. They awarded one for the Trexel scholarship and two SSEF scholarships. Tom also noted that the SSEF is running low on donations and asked that the word be put out for donations at the Annual Membership and Safety Meetings.

Andrew Neilson showed the Board a lead ballast weight that he fabricated for LS-3 BW. He said he could also make custom ballast weights for both Discus. He just needs to make a pattern then can fabricate the weight.

Steve Paris volunteered to be the new Gator Meister. The Club still has an open glider trailer "meister" position open. If you would be willing to take on the responsibility of getting the trailers inspected every year and ensuring they are clean, properly tied down, and ready to transport a glider, please let me or one of the Board members know.

As a note: - Stephanie Zilora and Erik van Weezendonk's terms on the Board end this year. Anyone interested in running for a Board of Director's position should submit their names, with a campaign pitch to Keith Hilton or one of the Board members not later than 28 February. Voting will be conducted on-line from 1 – 7 March. The winners will be announced at the Annual Membership and Mandatory Safety Meetings on 9 March.

GLORY FOR THE GLIDER PILOT An Explanation of the Masthead Photo

The optical phenomenon called a "glory" is a circular rainbow-like display that forms around rhe shadow of an object that is visible on the surface of a cloud. Several explanations have been posed. See https://www.treehugger.com/what-is-a-glory-4869619

I had the distinct pleasure of viewing one of these around the shadow of my glider many years ago when cruising along the upwind side of a rotor cloud.



Inc. is a private, 501(c7) nonprofit 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

Skyline Soaring Club, Stephanie Zilora - President Ron Wagner - Safety Directors Robert Jacobsen Jim Kellett Jim Perlmutter Peter Ross Erik van Weezendonk Stephanie Zilora

> Keith Hilton - Secretary Ralph Vawter - Treasurer

Officer Tim Moran - Membership Officer Shane Neitzey – Chief Towpilot John Noss – Chief CFI

Ken Ring - Hangar Meister Ertan Tete - Field Computer Meister Chris Carswell – Chief Duty Officer Mike Ash - Duty Roster Chief Piet Barber - Webmaster Brian Clark - Assistant Webmaster Jim Kellett - Newsletter Editor

Evan Dosik - ASK-21 (N321K) & Grob Meister Guido Kramp / Rob Jacobsen – Discus Meister Richard Good – Sprite Meister Steve Paris – Tow Vehicle Meister Andrew Neilson -**Towplane Meister** Keith Hilton – ASK-21 Meister Peter Melenson – Club A&P Matt Vosika -**Organizations Liaison** Officer