

The Monthly Newsletter of Skyline Soaring, Inc. August 2018

SKYLINES

President's Message

Dick Garrity

Since our last newsletter two of our student members have been rated PPL-G. Congratulations to PETER ROSS and MAX FISHER. At least two other students are nearing their practical tests. Ratings being earned is the most positive sign of our training efforts.

The Club is now in its second half of OPS for 2018. Our OPS numbers have not caught up to those of previous years even after the boost of WoT. Our best year is still 2012. Our membership is constantly changing and with a continuing up tick. The rating activity has allowed the Board to accept new student members who come from the 'Waiting List'. The Club has also seen a surge of glider rated applicants. Those coming from the WL are both ab initio and power transition pilots. Some of our new members are quite young and are getting an early start to their flying endeavors. Rated glider pilots applying are accepted as Introductory Members and bypass the WL.



Photo Dick Garrity

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Lots of comments always about the WL which has been in effect for a couple of years. Its existence came about with the realization that students weren't progressing through training or completing training in anywhere near a reasonable time. The instructors asked the Board to manage the intake of members needing initial training.

The Board has discussed the need for better balance between our many membership categories. One category is young teenagers who generally are not able to operate our rolling ground equipment, participate in a normal rotation of Duty Roster cycles and have limited glider push power. Another category is Family Members, what ratio of Family members to Full Members is appropriate? We keep in mind that our membership ages span from early teens into the eighties. Most new members start as Introductory members. Some applicants could qualify to become Full (Probationary) members during initial application. During the 45-day Introductory period prospective members are highly motivated to fly often and meet other club members so we get to know each other. This is an important time where the prospective new member decides to continue and the Board decides to extend an invitation.

In the last newsletter I clarified the Clubs IRS 501 status and briefly touched on the Skyline Soaring Education (SSEF). The SSEF provides the best avenue for anyone to support SSC particularly with glider acquisition. We need to get smart about this and make it work! Why?

Currently SSC's primary source of funding our Capital Acquisition Fund is with or Initiation Fee. 100% of this fee goes into the CAF none goes towards operations. New members alone don't provide enough funds in the near term to replace and add gliders to our fleet. Tow planes need to be included in this funding. If we added ten members a year, to acquire a 35K glider would take seven (7) years. Please recall that at the Safety Meeting I mentioned our next threshold for acquisition could be 150K, would take us thirty (30) years to acquire that. Members are clamoring to move quite a bit faster. Initiation fees are only a small part of the dollars needed as new gliders are increasing every year in price. So, what's new here? Our Club's immediate glider need could be one that serves students after they solo, and could be adequate for all member use and this could be either a single or two place glider. Either or both would be suitable for transition to the Discus.

We train our students and do initial checkout in the K and Grob. After solo both groups transition to the Sprite, which is usually a shock to most students. Also, the Sprite has a pilot weight limitation which we bump into frequently. This means that these pilots must continue to build time/flights in the two seat gliders which are in high demand. Our needs include a reasonable intermediate, retractable gear, glass glider that would lead the licensed pilots to the Discus or a glider of their own. This is what the Club has done best for over 25 years, moving pilots along resulting in many getting their own glider often with partners. How many gliders should the Club own? Some think there is a magic number, or a perfect ratio of members to gliders. You may hear or think of ratios between 15 to 25 as workable. (?)

Hopefully you've noticed a question in just about each paragraph. You may think there are easy answers solutions to each one. If you've got the answer let me or any other Board member know. We'd like to hear from you.

Earlier this month I was very happy when all the moons aligned and I checked out in the Discus. My personal schedule was the reason it seemed to take so long for the event. The glider was a delight to fly from first TO movement until the wing dropped after stopping on the runway. I didn't set any records with assembly or disassembly which didn't hold any secrets.

Every airplane is different- that's why we practice and get guidance from someone experienced. After the flight I did need to review the weight and balance to learn that the tail weight was measured at 68lbs. What does this number mean to you? My next step is studying the electronics manuals so I can turn them on and really fly a modern glider. Recognizing there are just two checkout instructors for the Discus the Board is encouraging instructors, with incentives, to get acquainted and fly this glider so they would be agreeable to sign off a cockpit check and a qualification flight which could be like a 'spring check' if you're proficient. Plan for your

checkout!

Holiday Party is coming soon...December 1st ...location TBD but is planned to be at a favorite location. Waiting for confirmation.

Fly Safe...Have Fun



Safety Corner....Let's Drive it Like You Stole It!

Erik van Weezendonk

Ever heard that line? It's typically a joke (I think) in reference to a rental car. The whole idea is that you're either traveling for work, or for vacation, but regardless, you've got wheels from Avis, Hertz, Budget, whomever and the car is yours. Totally your responsibility. Here's the great thing, though...as much abuse as you heap on that rental car, at the end of the trip, it's going back to that company. It's a rental....so you can drive it like you stole it and there's no accountability.

Ok, safety dude, what in the Tom Flynn does that have to do with me? Funny you should ask. I've received a few emails in response to my diatribe last week about tow ropes and Grob wings, etc. However, one of the more refined members wrote and mentioned that Visigoths (aka Vikings, aka Barbarians) weren't know for delicate treatment. Here's my thinking for this months Safety Corner: We need to treat this equipment (not just gliders, I'm talking about ALL of our stuff) as though it's our own. Funny enough, it actually is. The club owns the gliders (most of them) and the gators, and the tow ropes and all the stuff in the hangars. So, though from a lawyerly or corporate standpoint we're not all equal partners, we basically, by joining have become like shareholders. SSC is our company and we want it to succeed. Do we treat the equipment appropriately?

If you took Dad's car out for Senior Prom, you treated it nicely. If you serve a fancy dinner, you're probably more gentle with the fine china and crystal ware. So, as we assemble gliders, drive Gators, hook up tow ropes, and fly club ships, let's all treat them like we own them. A bit more gently, carefully, and as though it was your own. If we continue along this line of thinking, we can make our safety culture even better. Taking pride in our club is like being a shareholder in the company you work for. You want continued success, and continued improvement. We could all become better pilots, start doing cross-country trips, go to wave camps, win contests, earn more OLC points, whatever. Soaring has lots of facets, but nobody is going to care if we're not safe doing it. Let's start by being smart and treating our equipment as though we own it. Look in the mirror and promise the person looking back that you'll do better.



Let's hear it for our 'students'!

Bob Sallada

For some strange reason, the other day I thought a bit about the 'students' I've seen in my decade-plus with SSC. Quite a diverse group, overall - young, old, big, small, "cool" or humble.

Many of them have, or have had, impressive professional careers in the 'real world'; Some aviation-related, some not. It must seem strange for someone to abruptly be called 'a student' (even worse, an Ab Initio!) when maybe they've been calling the shots in their own professional careers for quite some time. Some have a lot of flight hours in non-gliders, others just a few, and others have never set foot in a sailplane. In different ways, it must be quite a 'jump'. I still remember, longer ago than I'll admit, how strange it felt to be flying an aircraft (not to be confused with 'airplane'!) with no engine!

I frequently ask prospective new Club members 'why' and 'why now'? From the 'mature' crowd, it's usually something to the effect 'been interested a long time but haven't had the time/money until now'. Responses from the 'youngsters' vary from 'it's the first step in learning to fly' to it's pretty cool and might impress the girls (or boys). A personal note – while I do think that glider-flying complements other types of flying, I don't espouse it as the first step to flying 'real airplanes'. 'Sky sailing' is a sport – if that's not the main objective, save up your money and go for a Cessna flight training program.

Our Introductory Membership offers a great opportunity to truly explore the degree of interest in taking on the task of glider-flying. I wish I knew the percentage of folks who hang-in beyond the 45-day period. Of course, even within that group, there are a sufficient number who, while maintaining a Probationary Membership, become virtually 'invisible' and just never show-up. And, financially speaking, I imagine that ain't all bad for the Club!

For the group who truly 'buy-in', it takes a big-time commitment and slug of time, often at the expense of your 'normal life'. This is the part that I got to thinking about the other day – the dedication that this relatively small group puts forth. The initial part of the 'hill climbing' is steep – long commutes, risk of lousy weather, short training periods, and being in many respects, very much 'on your own' to understand and prepare for all the 'wickets' required to become 'rated'. In regard to the latter, the emerging "Club Bud" program is designed to help with whatever mentoring and advising might be required of new, inexperienced folks, but we'll have to see how that ultimately works out.

The balancing of 'student's and 'old hands' is always a challenge in both a strategic and tactical sense. I personally think that the Board and general membership should always be thinking of improved ways to "keep everyone happy all the time", which, if discovered, will be something akin to a 'perpetual motion machine' (which, even with today's technology, I think is still impossible), but don't let that stop you from questioning and suggesting based on your broad range of individual organizational experiences.



Curmudgeon's Corner- Put Your Money Under Someone's Wings!

Jim Kellett

Everyone says they 'support getting young people into soaring'. And here's a way to put some of the money that you're already spending into service toward that goal!!

Who doesn't use Amazon these days for purchases? Well, did you know that Amazon will donate 0.5% of the cost of your Amazon Smile Eligible purchases toward any charity you choose? And this is NOT added to YOUR cost, so you're spending the money anyhow! Choose the Skyline Soaring Educational Foundation, that provides scholarships for young pilots, as your charity! Many Skyline members are already doing this - and the SSEF has received \$200 in donations just since May of this year!! Just go to <https://smile.amazon.com> and get started!



Classified Ad

Mike Christensen

For sale: 1/3 interest in SF-9 DG 300. I bought a power plane, do not have time for both birds. Contact Mike Christensen at (703) 989 4299 or christensenmw@verizon.net for details.



Let's Talk Tow Ropes

John Noss

It appears we got the attention of quite a few members recently with emails about the inspection and repair of tow ropes, which is encouraging. When you hook up your glider to a tow plane, you are unavoidably placing a lot of trust in the safe condition of the rope. A break on takeoff while you can still land straight ahead on the airfield is not a big deal, assuming you are mentally prepared. A break on climbout above a few hundred feet and can return to land is not a big deal, assuming you are prepared. A break at the departure end at low altitude with no great place to land straight ahead is a very big deal, and it should really drive home to every glider pilot the importance of making sure you have done everything possible to ensure the link between your glider and the tow plane is safely up to established standards.

The current configuration of our tow ropes was briefed at the 2018 Spring safety meeting, and the slides describing the rope construction and maintenance are online at http://members.skylinesoaring.org/RESTRICTED-DOCS/SSC_2018_TowRopes.pdf. If you have not reviewed this document, please do it now. This design was chosen to ensure that it complies with FAA rules for tow rope strength (80%-200% of glider weight), manufacturer operating manual directives for our club gliders, and the design limits of the release mechanisms on our tow planes. The rope itself is 1500-lb test dacron polyester hollow-braid, which is light, relatively easy to splice, and resistant to stretch and abrasion and ultraviolet exposure. The glider-end weak link is a Tost pair of 500 daN (1124-lb white) links, which gets us under the 1200-lb design limit for the Husky Schweizer release. The towplane-end weak link is a pair of 600 daN (1349-lb blue) links, which gets us inside the FAA (1%-25%) increase over the glider-end link. [One deca-Newton (daN) is 2.248 pounds of force, if anybody is interested in the conversion.] There is a 7-ft adapter at the glider end to ensure that the weak link does not scrape the glider during low tow or boxing of the wake. For the Sprite and private Schweizer gliders, a polypropylene adapter goes behind that to provide a compatible Schweizer ring (and the 1/4 " polypropylene is yet another step down in the weak link chain with a test rating of 1000 lbs).

On a typical day, the duty crew (probably the ADO) is the first to bring a tow rope to runway, and inspect it before use. If you find anything not up to standards, you should bring the rope back and get another one. If you can fix the problem on the spot, do it. Most importantly, if there was something wrong, it is critical to tell the DO about the problem. If the rope is not serviceable, put a big taped label on the reel and make sure the board and the next duty crew know that it needs repair. I was surprised to find that lots of members did not know what to look for when inspecting the rope. It should be common sense to all of us, but here are some reminders:

- No knots - If a glider has been towed on a rope with a knot in it, the rope is no longer serviceable. If you cannot easily loosen the knot with your fingers, it has towed a glider. Knots typically form at the glider end of rope while flailing around after the glider has released. Knots typically form at the towplane end when it is dropped before landing, and accidentally passed through a loop while being pulled back for the next hook-up. If you are hooking up a glider, pay close attention to the first and last ten yards of the rope, and watch the entire length as it is pulled forward.

- No burns - If the rope is wrapped around an object on landing (like the perimeter fence), or pulled under the main gear of a glider, it can be quickly burned and abraded. Sometimes this will only appear as additional fraying, but usually it will be easily visible as blackened and crystalized (weakened) fibers. This means the rope is not serviceable. When hooking up a glider, if the towplane is not on the same side of the glider that the rope dropped, do NOT let the towplane pull the rope forward unless you are there to keep the rope away from the main gear wheel, using a metal hook. Do not try to guide the rope with your hand or foot, that is just asking for an injury.

- No frayed rope - The dacron ropes are very resistant to wear, but if something happens to damage the rope, it is important to look at each of the 12 strands in a worn section. If one of the strands is completely severed, the rope is not serviceable. If even half of the fibers in one strand are severed, the rope is not serviceable.

- No broken plastic parts - The tow rope connectors are protected with plastic tubing sheaths, and there are three plastic whiffle balls ahead of the glider-end weak link to provide enough drag to keep the rope from hanging too low on landing. If any of these parts are broken or deformed, please just replace them. If you don't know how, get a new rope and make sure the bad one is marked and reported. There should be three zip ties on the clear plastic tubing which protects each connecting ring. If they are missing, replace them. To replace a clear plastic tube protector, snip the zip ties, pull the tubing back from the ring, loosen the rope on the ring and slide it off, then put a new tube on the rope, put the rope end through the ring to form a secure larks-head loop, and secure the protector with three new zip ties. If a whiffle ball is crushed or torn, replace it. We are now putting three plastic balls ahead of the glider weak link, typically two softball-size and one baseball-size, in order to generate enough drag on a rope to keep it from hanging down too far on final.

- No broken metal parts - The metal parts of the tow rope assemblies include rings, shackles with bolts and nuts, weak link sleeves, and weak links. The tow rope tutorial shows how they fit together. The rings are generally rather tough to damage, though the Schweizer rings are a bit softer than the Tost rings. The shackles are soft, the sleeves around the weak links are soft, and the thread ends of the bolts are soft. If any of these parts get ground down they become unserviceable. If the nuts on the shackle bolts are turned down too far, leaving more than a thread showing, then the threads can be damaged, and when the nuts are removed for inspection, the damaged bolt threads will destroy the nylon locking nut inserts, requiring replacement. Each weak link includes one element with round holes on each end, and another with elongated ends on each end. The design allows for the round-hole element to fail in a momentary hard pull, but the elongated-hole link will not fail until the shorter one has given way, and a sustained hard pull breaks the next link. This is the Tost-recommended combination. If you ever look inside the end of a weak link barrel and see a difference in the lengths of the two weak link elements, then it must be disassembled and inspected.

Operationally, there are some important things to watch out for. A tow pilot will do his best to arrive steep and long enough that the rope does not come close to the perimeter road or fence, and clears with enough altitude that a tractor-trailer would not get dinged by the trailing end of the rope. But we cannot see the trailing end as we land. If you, as a duty crew member or anybody else on the airfield, notice the rope is too low on final, you must absolutely make sure the tow pilot knows before his next tow. Clearing the fence can be difficult if there is any tailwind component, especially in the Husky. If we hit a passing vehicle or pedestrian with the end of a tow rope, the club will probably never operate out of Front Royal again, so this a big deal and everybody needs to help watch. On the other hand, if the tow pilot releases too late and the towplane-end of the rope drops on the runway, that is also something that needs to be adjusted, so tell the tow pilot. Dropping on the runway damages the metal parts,

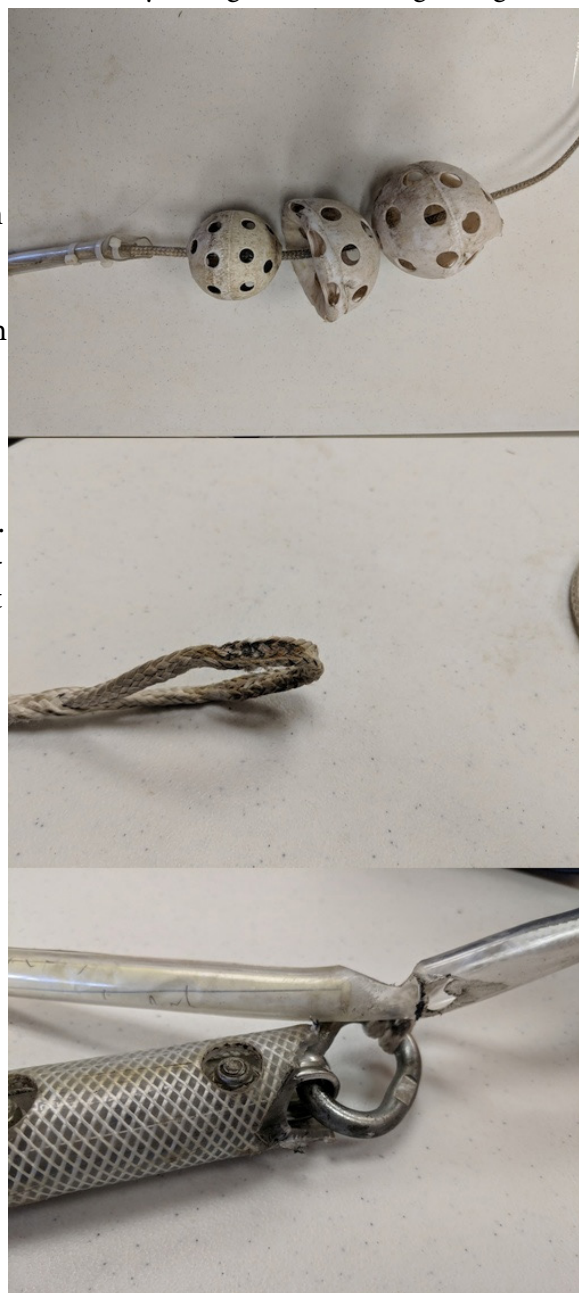


Photo John Noss

and leaves the rope where it could be picked up by a spinning prop on the next airplane to take off or land.

As a Pilot-In-Command of a glider, you also have an important responsibility to report any known or suspected hard pulls on the rope. If you are practicing slack line recoveries, or experience one for real in turbulence, and your reaction to the outcome is surprise that the rope did not break, then consider it a hard pull requiring inspection before the next tow. Tell the DO to take the rope out of service, and have somebody qualified disassemble the weak links and look over the entire length of the rope, including the loops around the rings. The major things to inspect for include a fractured weak link inside the sheath, a burnt/crystallized rope where it loops around the ring, and any broken strands in the rope itself. If you DO experience an actual rope break, do NOT automatically release the rope that is still attached to the glider! We fly over moderately-populated land around the airport, and cannot afford to drop rope hardware on people or property, if we have a choice. Unless you are concerned that the trailing rope part might be dragging in trees or terrain prior to an off-field landing, please just bring it back to KFRR, release it crossing the threshold on landing, and have the duty crew retrieve the hardware.

We recently conducted two tow rope clinics at the airfield and now have another dozen or so members up to speed on inspecting and maintaining and building tow ropes. I intend to keep doing this monthly, and encourage everybody to participate when you can. Time permitting, I will also be happy to do some one-on-one training with anybody who asks.

Don't be the weak link!



Winch Tow Clinic

Hugh McElrath

You may have seen the ads in Soaring magazine for Karl Striedieck's winch tow clinic at Eagle Field, his private strip on top of a ridge near State College PA. I signed up for the August 4-5 session and was one of three lucky students. Karl (many times national champion) is a great host and put us up in his house for the night, provided breakfast and lunch (at the field). We each got a total of 10 flights in his new-model Duo Discus. The Corvette engine-powered winch provides strong acceleration and we released at 900-1000 feet in around 18 seconds (!) One must get used to being pressed back in the seat and then a prompt pitch up to 45-50 degrees - and then pitching over to a moderate dive as you release (or the towrope back releases automatically first). Karl puts you through a number of "zooms" to practice the pitch over, which you must hold until the nose is as far down as it was up and flying speed has returned. Then there is landing on a slightly irregular field with some side-to-side slope - so you land with one wing high and opposite rudder. After the copious rain we were just skidding along on the grass and standing water - Karl had to spend awhile the next day hosing out the landing gear well. The final flight is a release below 250 feet with pitch over and landing ahead on the remaining runway. Fred Winter, who owns the club ASK-21, was there as ground crew; Karl's neighbor runs the winch and his kids kept us entertained doing cartwheels in the mud, hooking up the tow rope, running the rope back to us with the 4-wheeler, etc. So you learn a new skill and get practice landing in conditions more like a landout than our home field. For \$250, it's a helluva deal - and you get a flight review in the bargain. (Shh - don't bring it up to Karl how much more the other guy charges...) I'm going back for seconds as a guy-in-the-back-seat with Karl in the Duo at the Region 4 North contest Columbus Day week. Maybe some of that cross-country magic will rub off on me...

A short video of a launch at Eagle Field: <https://drive.google.com/open?id=1cBnEDTI84uGKdQBidxP-jcIF4T89hb3P0>



Burner Family Day

Bill Burner

The next Woodstock Fly-In/Family Day is scheduled for Saturday, September 29th. The rain date is Sunday the 30th.



Photo Bill Burner



Aerial view of the airfield.

Photo Bill Burner



Looking North, as if on a tight base leg for Runway 03



SAFETY ALERT

All members should be alert for unknowing people on the ramp and around the gliders who are possibly unaware of the dangers of a taxiing tow plane. Please review our OPS Manual 2.10 Visitor Control. Safety awareness is everyone's responsibility. Be safe and have fun at the field.



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 or e-mail welcome@skylinesoaring.org

President—Dick Garrity
 Secretary—Keith Hilton
 Treasurer—Steve Rockwood
 Membership Officer—Tim Moran
 Chief Duty Officer—Bruce Zivic
 Chief Tow Pilot—Shane Neitzey
 Chief Flight Instructor—Piet Barber
 Safety Officer—Eric van Weezendonk

Newsletter Editor—Maryam Ali- xiaomaryam@gmail.com

Directors— Bill Burner, Ken Ring, Evan Dosik, Dick Edge, Richard Garrity, Keith Hilton, Dan Ernst

Name that Skyliner!

(Credits to Reynolds Renshaw for the creative idea)

Members, let's have some fun. Every month, I'll post an old picture of someone and some pieces from their bio for the rest of you to try and guess who it is. First person to get it right picks the next candidate!

Last month's feature was Bill Burner.



Dropped out of East Carolina.

Was an agressor troop during Operation Moosehorn.

Received NASA's Group Achievement Award.

Learned to fly gliders at Warrenton Soaring Center circa 1979.

Who is this Skyliner?

Skyline Soaring Education Foundation

Remember them? Please continue to fund our youth scholarships and give the gift of soaring. Visit ssefva.org

