

TOWLINE



**Evergreen Soaring's DG-1000 on November 17th, 2023
piloted by Anthony Puglisi landing at KAWO**
Photo by: Terry Green, Hawg Wild Photography

Table of Contents

SGC/SGCSF Directors & General Information	2
Evergreen Soaring Elects New Board	3
Towplane 79D (C-182) Project Update	3
Letters and Articles	6
XC Mentoring in Methow	6
My first time flying in New Castle, Virginia	8
SSA Juniors XC Camp	9
2024 Ephrata Aerobatic Camp Update	11
Upcoming Meetings and Events for 2023/2024	12
SGC 2023 Year End Banquet December 2nd at 11:00 AM	12



TOWLINE is the Newsletter of the Seattle Glider Council

SGC / SGCSF MAILING ADDRESS
 P.O. Box 7184
 Bellevue, WA 98008-1184

TRAINING CENTER LOCATION
 30 Airport Street NE
 Ephrata, WA 98823
 509-754-3852 [not attended fulltime]



SGC BOARD OF DIRECTORS (2023)

Chairman:	Noel Wade	noelw@seattleglidercouncil.org
Assistant Chair:	Matthew Coleman	matthewc@seattleglidercouncil.org
Directors:	Mike Bamberg	mikeb@seattleglidercouncil.org
	Ron Bellamy	ronb@seattleglidercouncil.org
	Jim Dobberfuhr	jjmd@seattleglidercouncil.org
	Christian Klix	chrisk@seattleglidercouncil.org
	Henry Rebbeck	henryr@seattleglidercouncil.org

2023 VOLUNTEERS & COMMITTEE ASSIGNMENTS

Treasurer	Randy Scott
Secretary	Jim McNeil
Chief Towpilot	Ron Bellamy
Towplane Manager	Chris Klix
Ops Scheduler	>OPEN<
TOWLINE Committee	Dave Lindberg, Dave Reusch, Eric Greenwell, Tom Dixon, Chris Klix
Airspace Coordinator	>OPEN<
Contest Manager (Region 8)	Mike Bamberg
Insurance Coordinator(s)	Randy Scott & Nan Klix
Trailer Lottery Coordinator	Jim Dobberfuhr
Webmaster(s)	Jim McNeil & Noel Wade
Banqueteer	Matthew Coleman
Awards Committee Chair	>OPEN<
Elections Chair	>OPEN<
Facilities Manager(s)	Dennis Vreeken & Nan Klix
Dust-Up Event Coordinator	Mike Bamberg
Methow Event Coordinator	Brad Pattison
WA State Governor	>OPEN<
Towcard Data Entry Focal	Randy Scott

SGC SOARING FOUNDATION BOARD (2023)

Director:	Phil Rose	(exp. 1/1/24)
Director:	Henry Rebbeck	(exp. 1/1/25)
Director:	Mike Bamberg	(exp. 1/1/26)

SOARING SOCIETY OF AMERICA REGION 8 OFFICIALS

Region 8 Director	Craig Funston
Idaho Governor	Tom Dixon
Montana Governor	Greg Mecklenburg
Oregon Governor	Mike Bamberg
Washington State Governor	>OPEN<

DUES & FEES

Membership:

Regular - (includes 1 week of facility use)	\$75
Family - (Spouse/Partner w/facility & voting privileges)	\$35
Youth - (25 years & under, incl. 1 week of facility use)	\$50
Lifetime - (incl. 1 week of facility use per year)	\$1500

Tows (Ephrata)

Hook up and first 1500 feet	\$50
Per 100 feet above 1500 feet	\$1.70
Mid-week surcharge if fewer than 3 tows in a day	\$15 per tow

Aero-retrieve or glider ferry

\$190 / tach hr.

Ephrata Facility Use Fee

Seasonal (April - October, full use of all facilities)	\$100
Weekly (first week included in membership fee)	\$30

Glider Tiedown & Trailer Storage at Ephrata

Seasonal (April - October, reserved trailer spot)	\$220 per glider
Weekly	\$40

Ephrata RV Parking

Seasonal reserved spot (April - October)	\$550
Weekly (8 nights or less)	\$120
Short Term (3 nights or less)	\$60
EV Charging	\$10

Notes:

- All fees are in USD
- SGC and SSA membership required for all tows behind SGC towplanes
- Tow fees are invoiced. All other fees should be paid prior to arrival at Ephrata.

CLUBS & OPERATIONS

Cascade Soaring Society	-	https://www.cascadesoaringociety.com
Evergreen Soaring	-	http://www.evergreensoaring.com
Glider-Rides.com	-	http://www.glider-rides.com
Hood River Soaring	-	https://www.hoodriversoaring.org
High Desert Soaring Club	-	http://www.hdsoaring.org
King Mountain Glider Park	-	https://www.kingmountaingliderpark.com
Puget Sound Soaring Association	-	http://www.pugetsoundsoaring.org
Spokane Soaring Society	-	https://spokanesoaring.org
Vancouver Soaring Association	-	https://vancouversoaring.com
Willamette Valley Soaring Club	-	https://www.facebook.com/flyWVSC



Evergreen Soaring Elects New Board

By Mark Schiller

Members attending the Evergreen Soaring Annual Membership Meeting on 19 November 2023 overwhelmingly voted to elect the following Board Members:

Charles Longley will continue year two of his two year stint as President.

Moses Babayan - President Elect

Tony Puglisi - Operations Director

Mark Schiller - Secretary

Brad Johnson - Treasurer

Membership also voted 42 Yea to 3 No to make the Chief Tow Pilot a voting board member.

The Board will vote to appoint the following Board members in our December Board meeting:

Chief Tow Pilot (new appointed Board position)

Chief Flight Instructor (currently Marshall Woodford)

Equipment Director (currently Matt Coleman)

Charlie Longley laid out his vision for the club as follows:

- a. Put a deposit on a DG-1001 Club Neo (five year waiting period).
- b. Explore the feasibility of building a hangar for our operations and glider storage.
- c. Continue developing the commercial ride program.
- d. Grow the club.
- e. Potentially purchase another single seat glider.

Towplane 79D (C-182) Project Update

By Chris Klix

Turns out I was in Waterville on Monday November, 27th. Nan's nephew was visiting from Denmark and wanted to see his grandparent's gravesite. Since we were in the neighborhood we swung up to Lake Aero in Chelan so I could talk directly to Will Mutter about a serious issue we discovered on our airplane.

As I reported in the November issue, we secured a grant from the SGC Soaring Foundation to overhaul the engine. Since then the engine has been removed and shipped to the overhaul shop in Oklahoma City. The board also approved using all new cylinders for the overhaul, due to the increased reliability they would provide.



A couple weeks ago I was informed by Brad Pattison about a potentially serious issue with early model Cessna's that he heard about in talking with Kyle, from Bushliner at Green Valley airport, that might become an AD on our aircraft at some point in the future. As a result, I talked with Kyle myself and was convinced it was something we needed to have inspected on our aircraft. I therefore informed Lake Aero of the issue and got our board to approve the inspection. As it turns out it was a good thing we did.

We discovered serious cracks in the lower right engine mount stringer.



Here is a picture of the area on 79D that I took to get a better orientation of what the issue is. Just underneath the engine mount attach point is a "U" shaped channel, riveted to the outer skin, that extends all the way back under the cabin floor to the lower wing strut attachment. That "U" shaped stringer is what is cracked and needs to be replaced.

Lake Aero also thoroughly cleaned and inspected all four engine mount stringers with dye penetrant to ensure no other stringers were cracked.



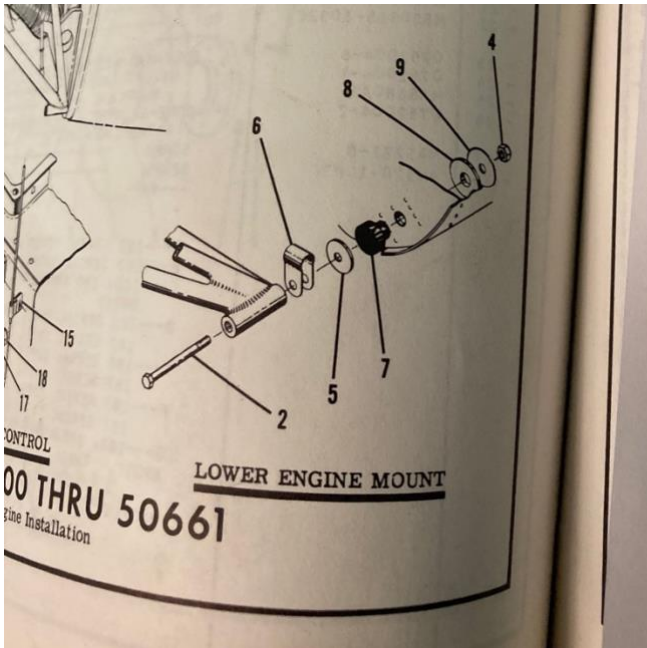
Here is a close-up Will Mutter at Lake Aero took of the same attach point. The black is a rubber bushing that has split, resulting in a loose connection to the firewall. This loose connection is what Will believes caused the stringer to crack.

When I posed the question "should we expect possible cracking to occur in the future at the other three attach points", he said no, because the rubber bushings on the other three corners were still okay, but need to be removed. All four attach points need to be retrofitted so there is no longer any rubber used.

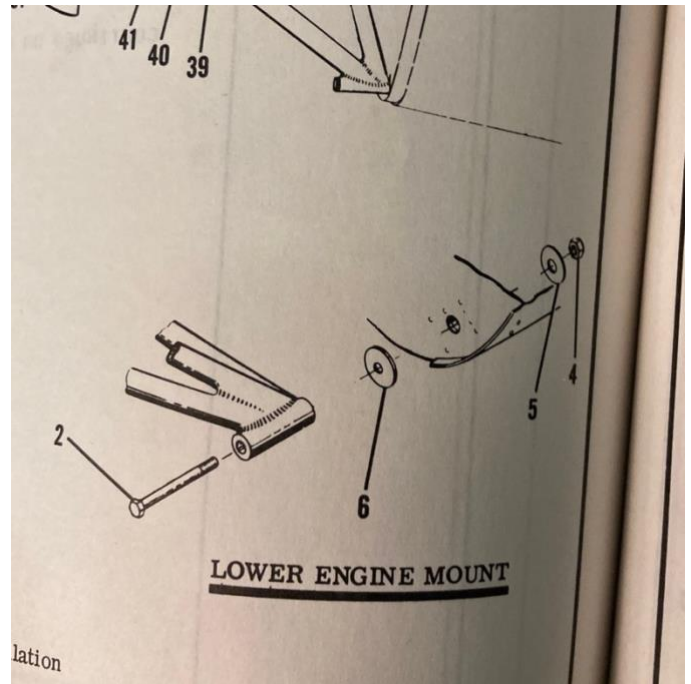


December 2023 *Towline*

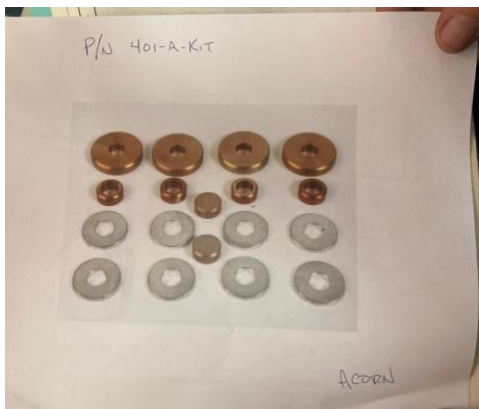
This was a bad idea Cessna had. All Cessna's after about 1963 mounted the engine mount directly to the firewall without rubber bushings.



To the left is what we currently have on 79D. Items 7 and 8 in the illustration are made of rubber.



To the right is the same attach point on Cessna's built after 1963 with no rubber bushings.



Here is a picture of the \$405 Acorn retrofit kit we need install to eliminate the rubber bushings.

While I was there I also placed two containers filled with desiccant in the airplane and made sure everything was properly secured.

The repairs are estimated to be about \$15,000, but we are thankful we discovered it while the engine is removed and still have time to have it repaired before our season starts. If not for Brad's conscientious call to inform me, we might have had to pay for additional labor to remove the engine again upon the issuance of an AD and for the repair grounding our towplane mid-season.

As you are reading this the board is reviewing how we might be able to raise the funds to cover this repair.



Letters and Articles



XC Mentoring in Methow

A glider pilot experiences two transformational cross-country flights in the North Cascades.

By James Cooper - November 2023

In 2019 I joined the SGC DG-1000 group and participated in the Methow OLC Camp for the first time. I had flown an unofficial Silver badge flight (Gold distance) the previous season, so I was excited to be able to join the DG-1000 group and fly with experienced XC pilots in the mountains. Henry Rebbeck and I had back-to-back days scheduled for the event, so we decided to fly together on both days (June 28 & 29).



James Cooper in the DG-1000 (N767SS)

Day 1: The weather during the first day was described by a fellow pilot as “over-development and rain squalls all around.” Weather like that

seemed a little intimidating to me at the time, but as I discovered with Henry, such weather can present interesting soaring opportunities as well.

Most pilots who flew that day remained in the Methow Valley and within glide slope of Methow, Twisp, or Lost River. Cloud bases topped out around 8,500 ft. with significant height variations visible, particularly where different air masses converged.

On tow we headed towards Twisp before veering north to the foothills and releasing in promising thermal. Our initial climb took us east towards Bear Mountain, and Henry explained the importance of flying on ridges with a healthy stall speed margin and enough kinetic energy for an escape to the valley if needed.



Henry Rebbeck: Overcome the tendency to pull-up; train yourself to dive towards the ridge



We then headed north towards Granite and Old Baldy Mountains, and along the ridge we encountered a number of scud clouds. This type of cloud forms as a result of increased low-level relative humidity, and Henry hypothesized that this was occurring due to converging air masses along the ridge. He then demonstrated that lift can be found by flying parallel to the vertical face of these unstructured clouds. This was a big eye opener for me.



Henry: Fly up close to the face of a scud cloud to find the strongest lift

In the following video clip, Henry and I and are joined by Brad Pattison (LS-8) and Tory Tolton (DG-300) in a thermal. Cumulus clouds, scud clouds, overdevelopment and rain showers are all visible:

<https://tinyurl.com/2pzx8ya>

We then flew further north near Tiffany Mountain before heading back along the same ridge, continuing south to Finley Mountain and Mount Leecher to the east of Twisp. From there we headed west towards Carlton and Mission Peak, but we were again hindered by overdeveloping clouds. Even with these weather constraints, Henry demonstrated that lift can be found in the vicinity of overdeveloping rain clouds. After finding some modest lift near a rain cloud, we headed back to the Methow valley and grinded the local slopes near Winthrop before returning to Methow airport.



Finding lift near a rain shower

It was a challenging afternoon, and all of us did our best to respond to the dynamic weather conditions and stay aloft.

Day 2: Our next flight the following day was a true mountain soaring experience.



With 10K-11K ft. cumulus cloud bases as far as the eye could see, we flew along a northern route similar to the day before, but we continued deep into the Pasayten Wilderness. Although were within a few miles of the Canadian border, we decided to



turn back to maintain a safe altitude margin to Lost River and Methow airports, 25 and 40 miles away. After returning from the north, we flew over the Sawtooth Wilderness and Washington Pass as well.



Spectacular scenery at Washington Pass

For the most part we stayed high (~10K ft.) by catching thermals and lift lines and along the tops of mountains and ridges. Although we did get an opportunity to try and catch a thermal on the face of a mountain ridge at the low point of the flight.



Trying to find lift (or not) on North Gardiner Mountain at 8,200 ft.

The following video clip shows us flying close to the ridge while trying to find lift on North Gardiner Mountain: <https://youtu.be/sKXdnK4AllQ>

While we didn't connect with useable lift on that ridge, we did find a good thermal nearby which allowed us to continue and fly down and up the Sawtooth Wilderness mountains, which run roughly parallel to Lake Chelan.

I would like to thank Henry Rebbeck for these two XC mentor flights, which were wonderful flying experiences and effective coaching sessions. Lessons I learned from these flights have been applied on subsequent XC flights, including my official Silver Badge flight in 2022.



XC mentor pilot Henry Rebbeck

One of the pleasures of dual flight is not only sharing the experience with another pilot, but also the increased opportunity to record and share some of the experience with others. I hope you have been able to experience a little of the Methow magic that we experienced in 2019.

OLC flight logs:

6/28/2019: <https://tinyurl.com/ysrfp8wu>

6/29/2019: <https://tinyurl.com/2p9vs49a>

James Cooper

Evergreen Soaring

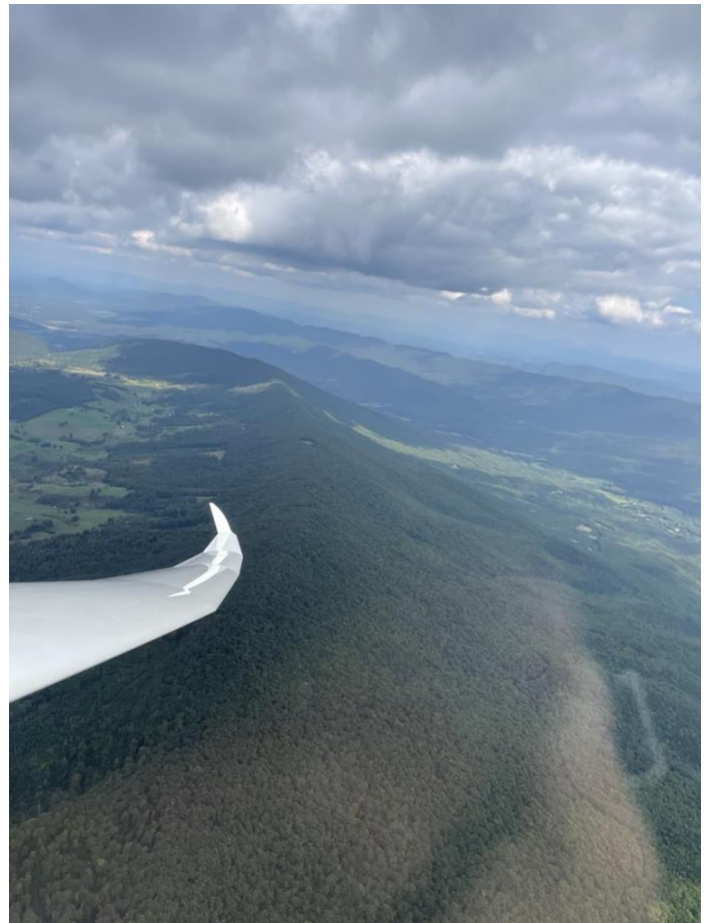
My first time flying in New Castle, Virginia *submitted by Jonathan Hart*

Earlier this summer I got a call from Chris Schrader of SandHill soaring in Michigan asking me if I would be interested in coming to Virginia to get checked out and fly their club's Discus during the Region 4 South contest. SandHill Soaring Club has a great program going with a Discus 2CT that they will take all over





the east side of the country for a Junior member such as myself to come out and fly a contest in. The first day was rained out and overcast clouds. The second day (Monday) was the best day of the whole week! I was in the DG505 with CFIG John Harte from SandHill who was giving me the area checkout as well as the Discus checkout. We got down 200' off the ridge and flew speeds between 85 and 100kts for 30 miles straight and could have gone farther! I had never gotten to run ridges like this before.



The rest of the week was pretty good thermal conditions but no more ridge flying. After the second day of flying in the 505 I got my checkout in the Discus. That's an amazing glider! I got to fly two days in the DG and three days in Discus. New Castle is a very technical site to fly and I played a very conservative game flying there as it was my first time at that location. Over all it was a great week of soaring and a fun site to visit!

SSA Juniors XC Camp

Submitted by: Brian Hart

The SSA sponsors up to two Junior-specific cross-country camps each year, and they often have insufficient interest or resources from any club to hold even one.



I am working out the feasibility of doing one of these at Ephrata next year (2024) and possibly continuing in subsequent years. We have an ideal venue, and this is another way to reinvigorate the location as well as put Ephrata prominently on the national soaring map while contributing greatly to juniors' soaring experience. The plan would be for a six- or seven-day camp before or after the Region 8 contest, and it would require that each junior attendee have an opportunity for one XC flight each day, with or without a mentor. Last year, the only such camp was in Silver Creek, Illinois; it was well-attended (11 juniors!) and very productive. From their pre-camp information, I infer that they ran this concurrently with a general XC camp, so that is a possibility, so long as it does not dilute the juniors' daily flight opportunities.

The short story is this: each junior pays a flat rate of \$250 that covers room & board and one tow per day. The SSA collects that money from the juniors, then supplements it to cover the host organization food, housing, and tow costs when disbursing it to the hosting organization. The SSA takes care of the majority of publicity, and I am already working with the SGC on the logistics, but I need tentative commitments from mentors and glider owners for four things before I even submit an application to get this onto the SSA calendar by December. Please email or call me directly at brian.hart@hartcraft.com or 360-772-0613 (no texts, please!) if you think you can help.

- How many, if any, juniors in your organization are very likely to attend. We have five or six at Hood River Soaring—assuming we can get enough gliders to allow them each to fly every day.
- Mentor availability. There is an assumption of morning & evening XC-related classes and as well as in-glider mentors. There is no requirement that CFGs be involved, but CFGs that come must donate their time. Some formal CFG activity may be required in the form of endorsements for solo flight in specific gliders or 90-day signoffs that occur during camp week.
- Two-place glider availability. Who is willing to bring their (personal or club) two-place glider? This ties closely to #2 above, since most any two-place glider would be accompanied by a mentor.
- Single-place glider availability. Juniors can bring their own, but I am asking here if any of the clubs would send their solo gliders to the event with their juniors. These would probably be reserved for juniors from your own club attending the event or would require that the attending junior join your club.

To get some perspective on how these things go, there was a great article in the August 2023 issue of Soaring, or you can sign into the SSA to get to the online version here: <https://magazine.ssa.org/viewer?y=2023&m=8&p=12&o=0&q=>.

Given that we can generally get two decent XC flights per mentor/glider per day, this would require a 2:1 junior-to-glider ratio, whether all solo, all mentored, or some combination of the two.

The format is very flexible so long as it includes integrated room & board and some combination of classroom and flight XC training and practice (we could even bring Condor simulators). Flight goals are 1-1/2 to 3 hours per day per junior, so I would expect most of the flights to be in the area encompassed by Ephrata, Waterville, Mansfield, Hartline, and Wilson Creek. A junior bringing a personal glider would not have to share and thus may be able to do longer flights. This would probably require formal junior-to-glider and junior-to-mentor assignment on the first day or before camp begins. I envision something like 7:00 breakfast, 8:00 – 11:00 training and preflight briefings, then launches off and on between 11:30 and 15:00, debriefs after



flights, dinner at 17:30, and classes from 19:00 – 21:00 each evening.

You can get a sense of the formality of the planning here on the host application page <https://www.ssa.org/camp-host-site-registration-application/>. The SSA kicks in some dollars for event insurance and for training materials. The official rules are here on the SSA site <https://www.ssa.org/camps/>. Be sure to look at the “Cross-Country Camps” section, which has a different set of parameters and rules than other camp types (Event/Contest). But here are the core requirements:

1. Junior means under age 26, licensed or not.
2. This is not a primary training at this event. Juniors must have already soloed in order to attend but can be licensed or pre-licensed. Although A, B, C, & Bronze Badge are preferred before camp, juniors can work toward Bronze or Silver badges at the event. We could certainly require at least passage of the Bronze Badge written test
3. Limit of 20 juniors
4. Juniors may bring their own (or their club's) solo gliders and/or fly with a mentor in a mentor- or club-provided two-place glider.
5. There must be enough gliders and mentors for each junior to be able to fly each day, weather permitting. They can fly all solo, all mentored dual, or a combination of the two. There is nothing preventing non-juniors from flying at the same event or even sitting in and learning so long as each junior is provided an XC flight opportunity each day.
6. Base cost of \$250 includes one tow per day, up to six days. Additional tows (relights, tows for Bronze Badge, spot or covered-altimeter landings etc.) are the only things that can be billed directly to the junior. They cannot be charged glider rental, housing, food, or CFGI time.

Note: I am working on a long-shot proposal to obtain funds to purchase and maintain a number (four or five?) single-place gliders to keep at Ephrata for the purpose of junior use at events like this. While we cannot count on this happening, it is much more likely to happen if I get an overwhelming response here indicating participation. My hope is that I can take enthusiastic mentor support here to potential donors in support of getting those gliders.

2024 Ephrata Aerobatic Camp up-date

Submitted by Chris Klix

Unfortunately, Shad informed me he is leaving AZ Soaring and will not be able to do the Aerobatic Camp this spring. However, with as much interest that we have, I am not giving up on this. I have since talked to Jason Stephens (Owner of AZ Soaring). He said Shad is taking a job back home in Colorado to be closer to his Dad, whose health is declining. He hopes Shad will be able to come back and work for him again at some point in the future. Jason said for him to come to Ephrata and do it himself, it would need to coincide with his son's school breaks, since he takes him to school each day.

AZ school breaks are:

Spring Break: March 11-22

Summer Break: May 24th - July 17th

Fall Break: Sept. 23rd - Oct. 4th



After talking to him about our soaring season, weather, and when might work best, we agreed that the Fall School Break might be the best time to do it. However, I need to get your input to see what others think is the best time for such an event, given the school schedule Jason gave me. It would need to span at least 7 or 8 days. If everyone that expressed interest participates, it could be anywhere from 50 to 70 or even more flights. Jason said he can do about 10 flights per day, but it would be best if Shad can help split up the workload, especially if we get a big turnout. We would need to spread out the participants through-out a 7- or 8-day period so everyone is not there at the same time. I think it would be nice to also have some evening seminars, either by Jason, Shad, or maybe from even from one of our local IAC Chapter 67 members.

Please -mail me at Chris.Klix7@gmail.com and let me know what time frame you think would work best for this event.

Upcoming Meetings and Events for 2023/2024

- SGC Banquet (McMenamins Anderson School) December 2nd @ 11:00 AM
- SGC December General Meeting (on-line) December 4th @ 7:00 PM
- SGC Board Meeting (on-line) December 12th @ 7:00 PM
- Ephrata Dust-Up (tentative) May 25th to May 27th, 2024
- Methow Encampment (tentative) June 15th to June 22nd, 2024
- Region 8 Contest TBD 2024
- Mackey, ID July 8th to July 21st, 2024
Contact: Tom Dixon, 208-867-6953 or fdixon@msn.com
Local accommodations are limited, reserve early!
- Ephrata Glider Aerobatic Camp (Tentative, see article above) Summer or Fall 2024?

SGC General Meetings are held online the first Monday of the month at 7:00 PM, Jan through May & Oct through Dec.

- All pilots can join by clicking going to the [SGC website homepage](#) and clicking the link under "UPCOMING EVENTS"

SGC Board Meetings are held online every second Tuesday (recently changed from Wednesday) of the month at 7:00 PM

- SGC Members are welcome to attend. [Email the SGC Board](#) to request a meeting link.
- A representative from each Club in the Region is invited to attend for maximum coordination & mutual benefit!

--Chris Klix, 2023 SGC Board



SGC 2023 Year End Banquet, December 2nd at 11:00 AM

Submitted by: Matthew Coleman

Location: McMenamins Anderson School
18607 Bothell Way NE, Bothell, WA, 98011

Cost: \$65; Purchase tickets on the SGC website.

Join your fellow SGC soaring enthusiasts at the 2023 SGC year-end banquet and awards ceremony. Let's celebrate your achievements, milestones and successes. Come regale those around you with tales of glorious endless lift and cumulus filled skies, or perhaps land-outs, bags of vomit and the thermal that got away. Make soaring to-do lists for the winter and strategize what you can do in preparation to be more successful next year. Also, hot topics may include next steps for strengthening our soaring community in the Pacific Northwest.

Doors open at 11:00, brunch is served at 12:00. The annual awards will be presented following the meal. Space is limited to 40 people. Get your reservation!

Share your photo memories of 2023 for the slideshow. Don't be shy, we'll actually take any soaring photos. Send anything you have to: awards@seattleglidercouncil.org

On behalf of the SGC Board of Directors

Thank you to the Towline Publishing Committee and all the volunteers that contributed to this newsletter! This publication is such an important communication tool in helping keep SGC the heart of the PNW soaring scene.

Please send any articles/pictures for submission in future publications to:
Towline@SeattleGliderCouncil.org

Note: Deadline for submissions is 7 days prior to the end of the month preceding the issue.

