The Monthly Newsletter of Skyline Soaring Club, Inc. May 2018



President's Message Dick Garrity

Skyliners,

Welcome to our replacement Pawnee tow plane which is already forcing our Duty Crews into quick step! At first sight the color and paint scheme will get your attention. But it's the 260 HP engine that's the attention getter and reshaping our operations. Pilots be ready! This tow plane is back on the ground in about 8 minutes ready for the next tow. Will you



be ready? Cross country pilots are already realizing they can load up on water as the added load is easily handled by 424BY. Should we have a nick name for BY? This could rival the naming of the Gators.

Thank you, Shane, who delivered the Pawnee to us in his inimitable determined fashion from Scotts bluff,

CONTENTS President's Message | 20m Multi-Seat Nationals | 1971 1-26E For Sale | Curmudgeon's Corner PIOs | Pics from May 27th | Civil Air Patrol Checkout | Teaching Kids at Frederick Douglass ES Name that Skyliner Then taking off behind a cold front in high pressure he flew for two days, a one leg fourth day to FRR by 10AM. Welcome home to both.

Volunteers...Our Club has its normal scheduled activities as shown on our Duty Schedule. Other activities, not shown on the DS, pop up in both known and unknown manner. Extra volunteers cover these pop-up activities. Shane covered picking up the Pawnee. Then the Grob required transportation to Gehrlein, near Erie, PA for repairs on short notice. Guido Kramp quickly stepped up to trailer the Grob. The Grob's return was again covered by Guido and Eric Van Weezendonk who needed a check out on how to get to Gehrlein. It's our volunteer spirit that makes it possible for us to cover the unexpected on short notice. Thank you to all and everyone for being ready to step up when called and able.

Now having two tow planes available I'm feeling a big relief. My concern has been about the Club being able to perform our basic purpose. Please take a moment to review our By-Laws, Article I-Purpose and Operating Philosophy.

Where will the focus of the Board be now about other replacement and additional equipment and facilities? Regarding the latter there is little news know about the large hangar or other airport construction. We know a gap exists in the post solo and single seat transition glider line up. The Sprite is not a logical step from the Grob or K for solo time building or to our high-end Discus. This intermediate gap needs a reasonable performing and priced glass single seat and should be the focus of the Board. This type of glider best fits our Purpose and Operating Philosophy.

See you at Burner's next weekend.

20m Multi-Seat Nationals Piet Barber

Day 1, Try 1

JP Stewart and I participated as a team at the first 20 meter multi seat national glider competition, hosted in Mifflin, PA. I arrived on Sunday to very stormy weather. As far as the weather was concerned, the outlook for the week was not promising. The practice day was cancelled due to rainy weather. The first day was cancelled due to no lift, and an incoming thunderstorm.

On that first day, instead of complaining about the weather, JP and I used that opportunity to test out the water ballast system for QQ. I have never put water into the glider before, and we knew that testing it on a cloudy day

would be better than trying it on a day that mattered. We calculated how much water we could put in the wings, and it turns out that it wasn't that much. At max gross weight, we were operating at about 5 or 6 US gallons of water in each wing, plus about 8 liters of water in the tail. After filling it to our maximum gross weight, we timed how long it would take to empty all of the water ballast.

Tuesday came and looked bad, but better than Monday. The task was assigned, and the fleet launched at 12:45. JP and I climbed in strong thermals and briefly followed Karl Striedieck. We left the start cylinder on our own at the first



That's the crowd lined up behind us.



Moments after the land-out, looking toward the angry weather

opportunity. We cruised under cloud streets to get to the first turnpoint.

Our strategy was to simply get into the turn cylinder, and head back the other direction to the second turnpoint. Unfortunately, we were suckered by a few clouds that looked great, and we ventured further into the cylinder. In a matter of moments, the 4 knot thermals disappeared and were replaced by huge dark angry clouds rapidly approaching. A few other gliders were suckered into chasing these beautiful clouds. Two other gliders joined us in the futile search for lift. We gave up, gliding around from failed thermal to failed thermal. I had picked out a nice landing strip. The two other gliders were motor gliders. They popped out their engines, and motored home. Since

QQ is a pure glider, we watched them motor away, whilst we planned our outlanding. We landed at a private grass strip called Snook.

After landing, JP went to look for the owner while I stayed with QQ. The rain started, accompanied with gusty winds. I got into the glider to keep it from blowing away. JP found a local resident who was watching the in-

coming storm on his radar, saw us land at the airstrip, and drove over to see if he could help. The best way he could help us out would to be to block the wind a little bit. I asked him to put his car in front of QQ's left wing to block it from the incoming wind, make it less tempted to fly away with a good gust. JP put some tires on the lower wing. I stayed in the cockpit with the parachute on and the belts strapped, just in case all of our measures didn't keep the glider from flying away. JP stayed in the car, dry.



After the storm passed, I got this picture.

The rain came at its strongest at that point. A

little bit of hail... maybe pea-sized. The whole time I was wondering if the hail was going to get bigger and start smashing the canopy. I was also wondering why I chose this sport. I kept left rudder and left stick and forward stick, and I popped out the spoilers when the gusts got stronger.

The storm passed after what seemed like forever in that cockpit.

Frank Banas showed up with my pickup and the QQ trailer to retrieve us. What a sight for sore eyes!

We scored pretty well, because everybody else landed out, too. Unfortunately, not enough pilots made the minimum distance for the day, so the day was canceled. I think we would have fared pretty well if the scoring had counted for that day. One crew, piloted by Juan Mandelbaum, in Lima India, made it all the way around the course. They got into wave after punching in between two cells of thunderstorms.

Our first attempt of Day 1 was canceled when nobody could make it around the course. We retried day 1 a few days later. In the meantime, I was living in a tent and somehow managed to stay dry. I left my shoes outside of my tent on the first night, and they were drenched in rain. They never really dried out, so I spent the rest of the week in sandals or completely barefoot, which isn't that strange for me.

* * *

Day 1, Try 2

The actual Day 1 happened on the fourth day I was there, on Thursday 17 May. I woke up that morning, saw a very overcast and grey sky, with low lying clouds everywhere. When I crawled out of my tent, I was pretty much resigned to not having another flying day. We all wondered out loud if there were going to be enough contest days to even have a contest. The rules said we needed 3 or 4 days of flying for it to count. At this point, the only good day that was in the foreseeable future was Sunday, followed by Monday... maybe.

We put QQ together, "Might as well play the game" JP said. The morning briefing was held, and the weatherman noted that the day will have a brief opening where it will be soarable. The day looked like thermals. We launched the fleet. JP and I were at the front of the pack again, and were nice and high when the start gate opened. The task was an out-and-return to Lockhaven PA. It was a mostly blue day, so sticking close to other gliders was really the best strategy for the day. We stuck close to Mike Robison (Lima), Al Simmons (Papa) and Karl Striedieck (Kilo Sierra). We tip-toed northwest.

A very high overcast cloud started to move in, shutting down much of the surface heating. JP and I made it to our turn cylinder, found a good thermal over the "Talladega bowl", and had enough altitude to make it back to the airport -- or so the computer said. JP felt that there ought to be more lift down the Nittany mountain range, so we headed that way. Nothing. We limped back toward the airport, now well below the minimum altitude to make it over the mountains to get to Mifflin. We passed over Egg mountain, and hoped for the best over a little valley where Route 322 cuts through the mountains. We scratched in 0.5 knot lift for a short while, hoping that the milky high layer of overcast would move out of the way to give us some lift. I pride myself on scratching, so I took over. I was watching the flight computer to tell me if we still had enough altitude to make it to our bail-out airport, Centre Airpark. I found a bird circling, and followed it. We caught a good 4 knot thermal, the best of the day, and finally got high enough to get over the last set of mountains to get back to the airport. I wanted to keep climbing, but JP reminded me that this is a contest, and you don't get extra points for a longer flight. JP took the controls and performed the finish line, pull-up and land.

We ended up scoring pretty well. Many of the heavier gliders landed out or started their motors. We tied for third place for the day. Not a bad start!

Day 2

The next morning started much the same way the first day started:

There was an easterly wind that may have enough strength for a "backside ridge day."

Much like our normal operations at Front Royal, Mifflin has ridge days when there is a strong Northwesterly wind. And also like Front Royal, there are a limited number of days where the wind comes from the east making the other side of the ridge usable. This was one of those rare days. There was absolutely no convective lift at all, but the winds were probably strong enough to make it a ridge day. Also worrisome was that the winds were almost due east at 090, and the ridges favored more of a southwesterly flow for the ideal perpendicular updrafts.

The Contest Director for the day -- John Good -- set up two tasks. One task had us go further down the ridge, and the second task had a shorter distance. The first task was discarded because of showers to the south. We launched the fleet and headed straight to the backside of Jacks mountain. All of the gliders at the contest loaded up water from a local fire tank truck, so that everybody could go as fast as possible with the smoothest ride possible.

Once the start gate was opened, everybody got down low onto the ridge and screamed along at about 100 to 110 knots. The performance difference between the Duo Discus and Arcus became more apparent. QQ got passed several times by the Arcuses (Arcii?) that were at the contest. About an hour later, JP and I turned toward the finish. After landing, we decided to give it another shot. We filled the wings with water again, and tried the course again.

We immediately noticed that the winds got stronger, and favored the mountains with a better angle this time around. By the time we passed our first turnpoint, we knew this was going to be a much better time on course. Unfortunately, the winds got weaker, and we were not screaming along the ridgetops like we had seen at the beginning of this flight. We landed and calculated our time to be about a minute longer than the first flight. This was a day for us not to "wad it all up." We understood that even with the handicap, the heavier gliders had a better advantage than us. Our mission was not to get so much further behind than everybody, and still remain striking distance to the leader. We came in second to last on day 2.

* * *

Day 3

Saturday was canceled due to terrible weather. Everybody was waiting for Sunday, anyway. This was a classic ridge day at Mifflin. A cold front finally passed, and cleared out all that ugly rainy weather. We woke that morning to cloudy overcast skies, but knew it was going to get better. The fleet launched, right before the cold front passed. There were no thermals, the winds were marginal, and the ridge was barely working. We scraped along at our absolute minimum speed on the ridge (about 65 knots), and had a hard time maintaining altitude above the ridges. We spent 40 minutes on Jack's Mountain waiting for the start gate to open. We climbed to below cloud base, nicked the start cylinder and headed out on course with 3 other gliders nearby.

The first turnpoint was at Dickie's Mountain, which is near the Pennsylvania Maryland border. There were a few tricky transitions to get there, but by this time, the thermals were working, and the ridge was really working. There was a glider traffic jam at the southern end of the first mountain. Some of the more experienced pilots just cruised through the transitions, but JP and I were aware that there was no place to land if the transition didn't go as well as hoped. We stuck it out and climbed a little bit more to safely get to the next ridge. After getting to

Dickie's Mountain, we turned north, and went all the way up the Tuscarora mountain, and turned around. The whole part of that mission was at ridge-top height, screaming along at 110 knots or so.

We had to get back upwind to get home, so we started thinking about how we would jump back upwind. We tried several thermals that didn't work well. We headed north, found a strong thermal, and headed back upwind. We crossed Shade Mountain, and crossed over Lewistown to get back to Jack's mountain. Once we made it to Jack's mountain, we were done with slow thermal flight, and back to high-speed ridge flying. It was here that I took a short video of QQ on Jack's Mountain, focusing on our shadow. The turbulence along the ridge was impressive. As I recorded the video, the camera was bouncing all around, and fell out of my hand with one gust.

We landed safely and checked our scores. Lima India landed out, but the rest of the fleet made it home. We didn't rank that well, but we were not completely out of the running. Again, the high-performance Arcus gliders did really well in the strong conditions. Even with our favorable handicap, they weren't that much better.

* * *

Day 4

We were running out of days to have a viable contest, and the weather wasn't looking that good. It was Monday, and the final day of the contest was Tuesday. The conditions were weak, and JP and I proved that we can hang with the best when the conditions are weak. The task called for a 2 turnpoint TAT. The first turnpoint was to the south, a big circle called Orbisionia. The second turnpoint was near Williamsport, PA and Lockhaven PA. The forecast was for weak thermals marked by clouds, with the day turning more blue as the day went on.

We launched the fleet, nobody had water ballast. Karl Striedieck pushed his glider off of the launch grid so that he could put water in his glider. Everybody stayed in the start cylinder long after the gate was opened. JP and I went to the other side of Lewistown to see if the clouds on the other side of the valley were working out or not. They weren't that great, so we headed back to the street of clouds along Jack's Mountain.

JP and I bopped along with a relatively low speed along the way. Southward, we spent as much time streeting along cloudbase as we could. We found the thermals to get progressively worse the further south we headed. We turned around and headed north. The forecast was proving right, most of the clouds were drying up. We hoped for the best, thinking that blue didn't mean bad, it just meant no clouds. We gambled on a more westerly ridge as we headed north. We followed the Nittany mountains until conditions were really poor. There were very few thermals to work with.

To complicate matters, I had neglected to charge both of the glider's batteries the night before. Both batteries were depleted by that morning, and only battery 1 had gotten a full charge that morning. The flight computer was complaining about low voltages, and the whole system powered off when battery 1 had nothing left to give. We powered everything off, including the flight computer, and stuck it out with battery 2. I had nothing on in the back seat, and the only electronics that were using the battery were the LX S7 vario, and the PowerFlarm.

To make matters worse, my Nano III has been acting up, and was locked up for the whole flight. Our only viable means of logging the flight was the PowerFlarm. If we lost all power, we would have no legal log for the flight and would score zero points for the day!

I spent time looking for fields to land in, if those weak thermals turned into smooth air. I had a nice airport

picked out south of Jersey Shore, PA. We finally found a decent thermal, and climbed to get enough altitude to return to the airport, with a MacCready setting of 4, and contest finish. Lima India, Papa-Papa followed us to Mifflin. Three gliders made contest finishes within 1 minute of each other.

When we landed, I was sure that we did terribly, but JP was more confident. Usually JP drops the USB thumb drive off at the office, where the score-keeper compares all of the flights. We got our procedures mixed up, because JP was offered a fun-flight in an Arcus immediately after we landed. I spent time tearing down QQ by myself, and remembered to submit the USB drive much later than I should have.

By the time I had submitted the log, everybody else had claimed their scores. The scorekeeper noted that we didn't do as badly as I had thought. The heavy Arcus gliders had to activate their motors in the weak conditions, and despite our slow time around the course, we actually came in fourth for the day. Amazingly enough, the other gliders all had one bad day here or there, but we did have any terrible days. The only day we landed out was the day that was canceled. The scorekeeper told me that QQ was in third place for the contest!

* * *

Final Day

The final day of the contest was a complete wash-out. We had the awards ceremony at 10:15 am. First place was the Team in Kilo Sierra; Karl Striedieck and Sarah Arnold. Second place was Noah Reitter, based out of Elmira, NY. Noah is a junior, and was using Elmira's Duo Discus for the contest. JP Stewart and I came in with a respectable third place. I had to go back to my truck to put on shoes for the first time since I left them out in the rain on the first night.

I drove home that night. Every piece of clothing I owned was damp and probably moldy. I drove home in thunderstorms and torrential rainfall. The new pickup truck tows that glider beautifully. What a great vacation! And I didn't even get sunburned!

Full recap from the SSA is available here: http://www.ssa.org/Contests?cid=2396&display=results

An album of all the photos that I made is available here: https://photos.app.goo.gl/0TvhYLor89sGH3Ik2



1971 1-26 for Sale Martin Gomez

Glider for sale! I'm selling my 1-26E, s/n 505. It's a 1971 model with about 650 hours. Includes an oxygen system (not installed), VHF radio with gooseneck microphone, Borgelt vario, and a shoulder harness. It is light on the controls, flights straight, climbs in the tiniest thermal, and lands on a dime. This one was rebuilt and painted by Bill Vickland, and it looks gorgeous. Anything you want to do in a glider you can do in a 1-26...you just have to work harder at it.

No trailer included. More photos here:

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



Curmudgeon's Corner

Soaring Gold and Silver Where You Might Not Expect It Jim Kellett

Did you know our newsletter editor was the recipient of a Women's Soaring Pilot Association scholarship to help support her training? And that former Skyliner (and now chairman of the SSA Youth Committee) James Patrick Stewart and current Skyliner Chris Zaboji were recipients of Kolstad scholarships that helped them with their college education?

Yes, there is actually money out there for pilots - mostly young pilots - to help with their pilot training and general education.



Most of us, I think, are familiar with the Skyline Soaring Educational Foundation scholarships for pre-solo high school students - see http://ssefva.org/Home.html or talk to Joe Lingevitch.



YOUTH/JUNIOR COMMITTEE

Photo ssa.org

Others you might not know so much about - like the Cadet, Costello, Purduski, Bultman, and Kolstad awards - are listed on the Soaring Society of America website - see http://www.ssa.org/Youth. Also listed there are links to the several programs available to women pilots at all experience levels provided by the Women's Soaring Pilot Association - see http://www. womensoaring.org/?p=info. Some of these are to help pre-solo students, students working on private, commercial, or CFI ratings, or with general college work.



Women Soaring Pilots Association

Photo soaringcafe.com



PIOs Bob Sallada

Pilot Induced Oscillations (PIO's) and things like low altitude departures from controlled flight aren't maneuvers one sets out to intentionally practice. However, knowing and practicing the conditions which lead to them is sorta vital. Way 'back in the day' I had interesting Test & Evaluation (T&E) opportunities to delve into both types of undesirable qualities in something that was then known as the F4H Phantom II, rather notorious in both regards at the time. Several relevant 'sea stories' are etched into my memory.

But, back to 'the point' – Gliderworld. A few weekends ago, in the course of some jaw-flapping after ops had been weathered out, the topic of landing-related PIO's arose with a couple of students who had experienced them on solo flights (can't 'buy' that kind of experience!). In our Club when we're talking about PIO's, it's usually understood to be the landing type. There's a wide variety of other types in various aircraft classes, which I'm not thinking about here.

Because of my relevant T&E background and the fact that I've been in the back seat of numerous 'sloppy' (for lack of a better word) glider approaches/landings that resulted in PIO's, it's a sensitive topic to me; one that I try to make a point of discussing early in a new student's flying. Of our two-seaters, the Grob seems to consistently get the 'bad rap' in regard to PIO susceptibility, yet from my experience the "K" deserves equal credit. I usually start the teaching process by prescribing as homework the relevant SPR Grid item (which happens to be '6e'). It then goes something like: "Did you do your homework"? – "yep"; "Did it include viewing the two videos?" – "yep"; "The least spectacular of the two was my personal fault as an instructor" - "thanks for fessing up". "PIO's in a glider are really hard to achieve unless you do something pretty radical in-close" "So noted". And, the finale in my little process is a '4' in the Grid.

Amongst my many one-liners, are "high and fast' is very good under gusty and sheary landing conditions", and "a smooth, well-controlled approach will never result in a PIO". I've got a million of em! But, let's get into some of the readily-available 'details'. The Glider Flying Handbook (GFH) in Chapter 8 introduces the synonym "Porpoising" and presents several pages of discussion about landing-related and other types of glider PIO's – excellent reading. The SPR referenced article by Dean Carswell – same deal; excellent reading. Clearly, there are two aspects to glider landing-related PIO's: 1) How to avoid them, and 2) How to recover from one if you screwed it up in the first place. Like in all matters of any sort, there are no unique Sallada magic maxims. You've already seen my one-liner's regarding item 1). I've got two more pertinent to Item 2), PIO-recovery: A) Make damn sure that who is flying the airplane is immediately established (I had a case several years ago at SSC of a young student literally refusing to relinquish control after I emphatically yelled 'I got it!!' – turned into sorta an Indian-wrestling match as we were bouncing down the runway. That was pretty exciting and resulted in a very smashed-up tail wheel. B) Start fresh after the initial 'surprise' and be positive yet not over-reactive, but patient!

One thing I see quite a bit on early-stage landings is fast touch-downs (main wheel first) with vertical 'skipping' of maybe a foot or so. Seldom do students over-react and transform these into full-blown PIO's but with some effort it's possible. Of course, the right response to a 'skip' is to 'hold what ya got' and do a little gentle 'ooching' with the spoilers which are likely barely extended, the result of a flat and fast approach (As we all know, a 'nominal' approach in our two-seaters ought to include a steady middle-third spoiler setting).

A PIO is usually initiated by either a late hold-off and premature touch-down nose wheel first, or a bounce after landing on the main wheel. The 'skip' described above is in the latter category and pretty simple to fix with virtually neutral pitch control and the previously described 'ooching' of the spoilers.

The nose-wheel first, REALLY big-bounce PIO is a tad trickier and can lead to a rather dramatic out-of-phase pilot reaction (like in the SPR video). Just be relatively gentle with the spoilers. Putting them fully out will make

you come down VERY quickly and hard, but may be used as a last resort, realizing that some damage may result. The undignified and possibly expensive method of arrival can be avoided by:

- Establish the landing approach at the correct airspeed for the conditions. 1.
- 2. Establish the landing approach with spoilers set at about half and don't overwork them
- Flare (round-out), not too abruptly, at the right height. Don't fly the glider into or force it onto the run-3.

way. Shoot for simultaneous main-tail wheel touch down (or slight tail-wheel first).

In sum: No 'hamfisting' and use the entire runway if you need it!



Pictures from Sunday, May 27th

Photos courtesy of Kaye Ebelt



66 Although the away day was cancelled we still were able to get some flights in. I felt spoiled getting the K all to myself all morning...









Teaching Kids the Sport at Frederick Douglass Elementary School Erik van Weezendonk

FUTURA is a Loudoun County Public School's magnet program that combines STEM curriculum with critical thinking skills. This year the focus was on systems. They covered the judicial system (trip to Loudoun County courthouse) electrical systems (wires, plugs, batteries, etc) and political systems, etc.

Evan Dosik and I covered aviation. We talked about mechanical systems within the glider (flight controls, hookups, etc) and ATC system (switched on radio and listened to traffic into Dulles and KJYO) and in the class I talked about weather systems with help from our trusty internet. Overall a great three hour block of instruction, capped with kids helping to disassemble the glider and get it stowed in the trailer. Maybe we sparked the interest for 1-2 kids, down the road. They're all Fifth graders, so we've got time!



A fifth grade class with their teacher trapped in the cockpit? Photo Evan Dosik

NOTICE:

Members: There is a new back gate key setup at Front Royal.



Courtesy of Dan Ernst.

Gen

SAFETY ALERT

As the weather gets better we expect to see more visitors or members bringing guests to the airport to watch our glider operations. 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.

Gen

Have something to say? A picture or story to share? Email your input to: xiaomaryam@gmail.com Maryam Ali-*Skylines* Editor



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

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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 (with their permission of course) 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 winner was Hugh McElrath.



"I've worked in the aerospace industry, government and academe.
I once held the position of "emperor." I've driven a steam locomotive.
I was on a German submarine during WW-II I have flight time in a T-33 and a DC-3
I did a dance show with Fred Astair; I served on a committee with Neil Armstrong
I knew Buzz Aldrin, Rusty Schweickart, Sally Ride, and other astronauts
The Minimum Navigation Performance Specification (MNPS) for the North Atlantic Track System was written in my office."

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

