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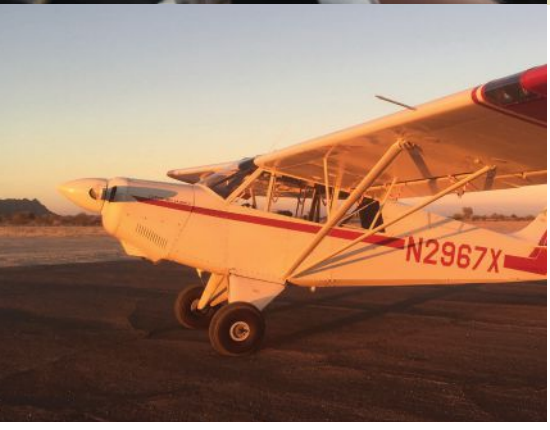

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Soaring

and MOTORGLIDING MAGAZINE
The Journal of The Soaring Society of America, Inc.
Published Continuously Since 1937

OCTOBER 2018
VOLUME 82 • NUMBER 10

Features

Departments

Front Cover: *Billy Kerns helping Erik Nelson getting his beautiful V-3 into position at the 18 Meter Nationals as described in this issue. (Photo by Ben Mayes.)*

Centerfold: *From our feature article on the Mach 0.1 usage at the Dutch ZCNOP soaring club, their DG-1000 on a beautiful soaring day. Not all instructing is done on the simulator. (Photo by Rich Clerkin.)*

Soaring
and MOTORGLIDING MAGAZINE

Soaring magazine is the official journal of the Soaring Society of America. The Soaring Society of America (SSA) is a nonprofit organization. The purpose of the Society is to foster and promote all phases of soaring. The SSA is a division of the National Aeronautic Association (NAA), the U.S. National Aero Club, which represents the U.S. in the Federation Aeronautique Internationale (FAI), the world sport aviation body comprised of all national aero clubs. NAA has delegated to the SSA the supervision of FAI related soaring activities, as follows: Record attempts, competitions, FAI Badges, and selection of the United States Team for the World Gliding Championships.

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FLIGHT LINES

BY ERIC BICK
EDITOR

Thanks to all the members who sent in photos for the 2019 SSA Calendar. The last deluge made my job easier in getting these together and to the printer. It will be available later this month. For those whose photos were not used, they will be candidates for the 2020 SSA Calendar, or for cover and centerfold placement.

In "Why I Fly," we have Part 1 of 2 of an article from Lee Tabor on his perspective as a student about what it is to fly. Due to its length, it will be published in two parts. In writing this from a student perspective, I think he conveys, in newbie terms, the basic concepts that lead to a solid grounding for safe, fun, future soaring.

Continuing with contest articles, this month we have the 18 meter Nationals. More to come in succeeding issues. In other Features, I share my experiences with my ASH 26E flying at Parowan, UT, and Ely, NV. Good time. I'm also pleased that we have an article re Civil Air Patrol activities and how the CAP can contribute to younger soaring pilot recruitment. Similarly, we have an article on how the Dutch Gliding Association is using glider flight simulators for enhancing new pilot training, and also contributing to club cohesiveness.

I want to thank those submitting Milestones who have heeded my words to think a bit about the photo as to resolution and shadows. We still occasionally get photos of too low a resolution to show well, or with faces in shadow. We can do a bit of photo touchup, but we need something good to start with. Remember – all you need to know about submitting these is in the magazine each month. Keep them coming. Also, while a pilot's logbook will mark the occasion of a Milestone, the *Soaring* magazine item is what they can show to peers, relatives, friends, and others regarding their accomplishments – so think about the words you're sending in.

Speaking of "Milestones," I note that we are hitting the high point of the year for solos, early student badges, and newly minted glider pilots. Congratulations to all the soaring sites, FBOs, and clubs that are so active in getting new pilots initiated into our sport. Now the challenge is helping them to keep progressing and keep soaring. We've all noted how many newbies get to solo stage or get their private certificate and then eventually drop out. There are many options to help the new pilots seek new challenges, through cross-county (mentoring, leader-follower, dual flights, ground crewing), club contests, regional and national contests, plus crewing for more experienced pilots in their endeavors. Read "Chairman's Thoughts" for more on this important topic.

I encourage those submitting Milestones to take on the challenge – set up mentors, become a mentor – take the fledging soarer under your wing and help them move another step forward in our world of soaring – *it's not all up to instructors*.

At the start, there is the wonder and awe of flight. As we progress, there is the challenge to seek new levels of competence, to continue improving our skills, to fly where eagles and condors fly. Help the new pilots gain an appreciation of the beauty of our sport, and encourage them to move beyond the home field.

Whatever your approach, and wherever you soar, hope to see you up there.

CHAIRMAN'S THOUGHTS

BY KEN SORENSON
CHAIRMAN, SSA

Vision

Having good vision is critical to safe flying and good soaring performance. Being able to see other aircraft at a safe distance is a must. Being able to spot a soaring bird nearby will almost always show you the best lift within range.

Having good "vision" in your development as a pilot is also critical. Can you see where you want your skills and involvement in the sport to be next year? In 5 years? In 10 years? Do you have a plan to get there? If you've just started flying sailplanes, have you set a deadline to complete your training? Often when training at a club, new pilots have trouble bringing their instruction program to completion. Have a plan to push that process along. Perhaps have an alternate plan to visit one of the many excellent commercial soaring operations (check out your *Soaring* magazine or the "Where to Fly" map on the SSA website) to complete your certificate. One of our greatest challenges as stewards of our sport is to ensure that new pilots don't get "stuck" in their flight training and drop out before they really engage with the sport.

If you're already licensed, do you have clear view of where you're headed next? How will you begin your cross-country training? Who of your soaring friends could serve as a mentor to get you started? Perhaps it's time to buy a sailplane or buy into a partnership. Perhaps it's time to become a CFI-G.

If you've been flying cross-country for a while, what will you do to keep it challenging? Post those flights to OLC and develop a healthy competition with other pilots at your soaring site, or with pilots you met at the last SSA convention. Plan to enter a nearby fun-meet or an SSA Regional contest. If you've already flown a Regionals, maybe it's time to fly a Nationals.

Clubs need clear vision as well. I enjoyed a recent visit to SOSA, a terrific Canadian club which will host the 2019 FAI Pan American Championships near Toronto. SOSA is a large club with 100+ members, established some 50 years ago. They have their own airfield, a nice clubhouse, two hangars, four towplanes, and a very nice all-fiberglass fleet of single-place and two-place club sailplanes. When I asked the club leaders how they had managed to accomplish this, I expected to learn that the club had wealthy benefactors. Instead, what they had was *vision*. They put in place a strategic plan and then gradually worked toward fulfilling that plan. Roughly 15 years ago they had a vision of what they wanted their glider fleet to look like and initiated a fee structure and financial program that allowed them to eventually reach their goal. It was an impressive display of effective club leadership.

So whether you're focused on your personal soaring adventures or the development of your club, the first step in getting somewhere is to know where you want to go. It all starts with Vision.

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SOARING MAIL

LETTERS FROM THE SOARING SOCIETY

Transitioning to a motorglider

I have enjoyed reading the articles about Mr. Bick's experiences transitioning to self-launch (*Soaring*, June & July 2018 issues). I too have recently done that in a DG-400. I thought I would add one other aspect not mentioned. When launching behind a towplane, I would usually release as low as I thought possible to remain aloft in order to keep tow fees down. Every hundred feet higher cost more dollars. Now, a taxi out and climb to 4,000 feet only uses 3/4 of one gallon of gas so stopping the motor low makes no sense at all. It works out to 10 feet of altitude for a penny of gas! Climb plenty high, stow the engine at your leisure, and begin your soaring from a comfortable height. I realize I have paid for a large number of tows buying the motor, but I may be able to recoup much of that when the motorglider sells one day in the distant future.

— *Peter van Schoonhoven*

Gliderpalooza

I have been flying gliders cross-country for 50 years and still fly 100-150 hours per year cross-country. The article by Ben Hirashima in the August edition is an outstanding article illustrating what, IMHO, motivates young new glider pilots. Keep seeking out such articles; they encapsulate what keeps glider pilots moving ahead and staying committed to our sport.

— *Ron Clarke*

Agreed. I encourage our members to continue sending in such articles. We've had a few this past year, thank you, but more will be welcome. — Editor

South Carolina 1000K

Really impressed with a 1000Km flight at 90+ mph in South Carolina recorded in the August issue! Actually really impressive even for a 100Km flight.

— *Woody Cannon*

Hypoxia

Dan Johnson's article on hypoxia, hyperventilation, and supplemental oxygen systems was excellent and much needed. Considerable research shows that assuming the FAA's regulations on supplemental oxygen use are all we need to know and follow

can get pilots into trouble. Please keep providing this kind of highly informative article. — *Key Dismukes*

More Hypoxia

Congratulations on the August hypoxia issue. I thought I knew something about the subject, but Dan Johnson's article taught me just how much I don't know. And congratulations on pulling Dr. Dan back from retirement – he's an invaluable resource, and I miss his articles.

Hopefully, you'll be able to create more issues devoted to a single important subject like hypoxia, but as someone who's spent a good part of his life shooting and writing for major magazines, I can appreciate just how difficult it must be as the editor of a narrowly focused publication to build quality issues around the volunteer contributions from all manner of authors. But you're pulling it off – not an easy feat. I think *Soaring* right now might be at its peak of editorial excellence.

— *Matt Herron*

We felt this was an important topic. Jean-Marie Clément's presentation at the Reno SSA Convention on low altitude hypoxia planted the seed. We're very appreciative of the collaboration between Dr. Johnson, who wrote the article, and our three contributors, Patrick McLaughlin, Jean-Marie Clément, and Dr. Heini Schaffner. — Editor

SOARING NEWS

INFORMATION, ANNOUNCEMENTS, and EVENTS

Kolstad Award

At a daily pilots' meeting during the Standard Class Nationals, Ralph Kolstad gave a short talk on the Kolstad Scholarship. Four of the pilots flying in the contest have received the award and used it for college, leading them to careers in aviation.

This year's Standard Class Nationals, hosted by TSA, Midlothian, TX, had 4 Kolstad Scholarship awardees attending. There have been 62 winners since 1968. Many of these have followed up in many domestic and international competitions. You may know many of the famous racers and record holders as former winners: Dave Mockler, Garret Willat, Gordon Boettger, etc.

The scholarship was named after Paul Kolstad, who died in the family glider on August 25, 1966 at age 15. He already had over 200 hours and still owns the straight-out distance record for Juniors in CO. His parents always wanted their children to go to college, so the fund was set up in his name to encourage the awardees to go to college. The funds are sent directly to the college of their choice.

The first award went to Michael Opitz in 1968 for $500. The current amount is $5,000. Go to http://www.ssa.org/Youth?show=blog&id=2390 to see the full amount of information and some testimonials from previous winners.

The scholarship fund is currently at $153k, and Ralph has set a goal of getting it to $200k, which would make it self-sustaining at a $10,000 annual scholarship.

If you would like to donate, contact Ralph at:

Kolstad Youth College Scholarship
Soaring Society of America
PO Box 2100
Hobbs, NM 88241-2100

Or:
rkolstad2@tx.rr.com

Or donate directly via the SSA Store:
http://store.ssa.org/cgi/display.cgi?item_num=106&title=Kolstad-Award-College-Scholarship

The SSA's Group Insurance Program and Senior Pilots

By Costello Insurance Associates
SSA's Aviation Insurance Administrator

A recent article published by the Aircraft Owners and Pilots Association (AOPA) relating to a tightening in underwriting for older power pilots in aviation insurance has prompted discussion within the SSA membership about the aging of glider and tow pilots. It was suggested an article be provided on how the SSA group insurance program works with respects to such pilots.

The SSA group insurance program remains consistent in the handling of policyholders as they age.

Evidently, it works as we've had no complaints in 30 years. The program has no age maximum and no rating provision to surcharge premium cost due to age of pilot. There are pilots insured under the group program who are in their 80s. With respect to starting a new insurance policy under the SSA group program, if you are already a senior pilot, the account would be underwritten just as it would be for a young pilot. How complex and how high valued is the aircraft? How experienced and how current is the pilot? Any prior accident or incident history? Any FAA violations or DUIs?

In the event of a flight related claim under the SSA group program where a senior pilot was at the controls, the pilot may occasionally be asked to have their family doctor complete a health statement. If the doctor were to respond that the pilot shouldn't be flying, the insurance company would act accordingly. This rarely comes up as pilots in poor health typically wisely make their own decision to stop flying without prompting by an insurance company. Acceptance of aging pilots can vary greatly in the general aviation insurance marketplace with each insurance company having their own hard deck about how old is too old. A willingness to continue to extend insurance coverage to glider and tow pilots as they gracefully age is just one of the benefits of the SSA's group insurance plan, which in turn is one of the many benefits of being a member of the Soaring Society of America.

PROTE Training 2019

The FAA has received over 25 requests for the PROTE (hypoxia training) for 2019. They have only six Aviation Physiology instructor on staff and are only able to support 7 PROTE trips per year! This schedule is current as of August 8, 2018. **To check on updates to the schedule, call 405-954-4837.**

<u>2019 PROTE Schedule</u>

7-14 Jan	Las Vegas, NV
14-16 Mar	Long Beach, CA (Women in Aviation)
30- 8 Apr	Sun N Fun (Lakeland, FL)
13-20 May	Philadelphia, PA
21-28 Jul	Oshkosh, WI
23-30 Sep	Panama City, FL
18-25 Nov	San Diego, CA

Proposed changes to FAI Sporting Code will be effective October 1st, 2018

The final wording on these changes has not been released, and we will update you via e-newsletter as soon as we know. Please review the current sporting codes in October before making your flights on either the FAI or SSA websites:

https://www.fai.org/igc-documents
http://www.ssa.org/BadgesAndRecords?show=blog&id=938

Silver Distance will still be 50km from release to a finish point, *but that finish point must* ***also*** *be at least 50km from the point recorded at the beginning of the takeoff roll.* (This prevents cases where [1] a pilot tows 25 km from home, over-flies it, and proceeds another 25 km to a Finish Fix, and then flies home; and [2] with takeoff at home, self-launch, and cruise or aerotow 50 km out and land back at home.)

No change to declaration alternatives and procedures for Gold Distance, but *written declarations will no longer be permitted for Diamond Goal, Diamond Distance, or Diploma claims; these will require an FR-generated declaration.*

For Diamond Goal, Diamond Distance, Diplomas, and World Records: *When multiple "controlled" FRs are carried*, coordinates at each Way Point must be identical within +/- .001 minute. The important takeaway: the "last declaration before takeoff" is no longer the operative phrase.*

* already in the current SC3: a "controlled" FR is one that an OO inspected before takeoff, noting its installation, make, model, & serial number; data files from all "controlled" FRs must be submitted with the claim.

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2018 SAFETY PROGRAM

BY STEPHEN DEE,
SSF TRUSTEE

Landing – The Last 100 Feet

In recent articles from SSF, you learned the skills of flying a good, hopefully Goal Oriented Approach to the landing site. In this article, I would like to address the final moments airborne through touchdown and rollout.

Well, you made it! You have flown a good approach, are stabilized, and ready to make a great landing. To back up just a bit, what exactly does it mean to be stabilized? First, consider configuration: landing gear down, flaps to landing position, and spoilers extended as required. Second, being on-speed: the SSF recommends a speed of 1.5 V_{SO}, or whatever is recommended by your glider's POH, plus a wind additive. Third: on glide path, which means for a nominal 3:1 approach, you ought to be about 300 ft out from your aim point at 100 ft AGL. These latter parameters are NOT something I look to achieve, but are going to be about right for a framework describing a normal short final.

Now it's time for a good landing – but what constitutes that? For our tactical Navy brethren, that would mean catching a 3-wire (the third arresting cable in from the stern of an aircraft carrier) and slamming the mains onto steel. For us more sane USAF Fighter types, that would mean touching down with minimum float or sink rate in the center of the runway, 500-1,500 down from the threshold. For heavy drivers, the "grease job" is highly desired, so as to minimize the disgruntlement of passengers or cargo – the smoother the better. In all cases, it's often been said that "any landing you can walk away from is a good one," or, "a good landing is one where the aircraft is reusable without major maintenance."

All kidding aside, I would say that for glider pilots, a good landing is one in which all aspects of speed and rate of descent are controlled to within desired parameters, so that a smooth touchdown is made just beyond the aim point, and the glider is under complete control, avoiding all obstacles, until brought to a safe stop. So, how do you do that?

The last 100 ft should be spent concentrating on maintaining runway alignment, correcting for drift and tracking the centerline, modulating spoilers to maintain the desired glide path, and adjusting pitch to maintain airspeed. This close to the ground, all of these corrections should be small and timely, to avoid overcorrecting.

At some point before touchdown, the glider's pitch attitude must be increased to reduce sink rate prior to landing, and, when done perfectly, will result in a zero rate of descent at the moment of ground contact. (Rarely happens for me, but I try!) This part of the approach is sometimes referred to as the "flare," but I prefer the term "round-out." The term flare comes from powered aircraft landings that involve increasing the angle of attack to at or near stall at touchdown, a condition I want to avoid in gliders. The term "round-out" is more appropriate for our glider landings because we don't want to be near stall at touchdown, but a bit above it to better control our last few feet before ground contact.

One technique I use to round-out consistently is to have my spoilers extended about halfway during those last 50 or so feet on approach, and keep them that way until touchdown. That way, I have eliminated the drag variable, and can concentrate on aim point and airspeed. If at that point I realize I need the spoilers closed to make it to the runway, I do so. (Either I didn't really have a stabilized approach, or I encountered sink on final – which is why the spoilers are only half extended, ready to be closed.) If I have to close the spoilers to make it to the runway, I will have a hard time getting down through ground effect, descending those last few feet, and although having approached the ground at a shallow angle, will likely float and land long. If I find myself in this situation,

there are 2 mistakes I might make trying to "hurry up" the final few feet of descent. The first of these is to nose over, in an attempt to force the main wheel onto the ground. This will likely result in bouncing back into the air, and doing so at an uncomfortably low airspeed. The second is to extend the spoilers, which will likely result in a very hard landing, possibly damaging the glider.

So, what if I do all the above and discover at 50 ft or so that I am steep in my approach, and further down the runway than desired? There are safe solutions for this: either increase spoilers a bit to correct down to the glide path while adjusting pitch to maintain airspeed, or choose to accept a long landing. In either case, the goal is to have a minimal rate of descent at touchdown.

Touchdown at last – time to relax! Well, not quite, because the landing is not over until the glider is at rest. One of the key ingredients to a successful landing rollout is keeping the wings where they should be: level, if there is no crosswind, or slightly wing low into a crosswind if present. This really helps the glider track down the runway in a straight line. Knowing that gliders love to weathervane into a crosswind, be ready for corrective rudder inputs as the ground speed dwindles. If directional control is in question, stop the glider as soon as possible using wheel braking or the landing skid, as applicable.

One last issue for consideration is how close to the stall speed we want to be after performing the round-out. There are different schools of thought on this issue. The European method is to complete the round-out with a high angle of attack, even approaching stall, so that the glider is in a nose high attitude that usually results in the main and tail wheels touching down simultaneously. The motivation for such a round-out is that it will result in the lowest possible energy state, which could be good for landing off-field.

My preferred method is to round-out such that the landing attitude is very similar to the takeoff attitude – almost a level flight sight picture. That way, touchdown forces are relegated to the main gear, which is designed to accommodate landing loads, versus the tail wheel, which by comparison is quite fragile. To insure staying on the ground after touchdown and to help dissipate energy quickly, I like to extend the spoilers toward full, just like an airliner does, which also makes wheel braking more effective. With regard to energy state and landing off-field, my preference is to touch down with some maneuvering energy remaining, to avoid obstacles not seen until the last minute. The ability to maneuver at the last minute has saved my glider more than once!

After considering all the above, go out and practice. If you have questions, bring them up with your favorite CFI-G, perhaps during your next Flight Review. In any regard, by digesting and practicing the above, all your landings can be happy ones!

WHY I SOAR

BY LEE TABOR

A Student's Perspective – What Is It to Fly a Glider?

Part 1 – Getting Up

We are publishing Lee's article in two parts: Part 1 – "Getting Up," and Part 2 – "Getting Down." It's a great reminder for all of us, seasoned pilots and beginners, as to what it means to be a student glider pilot. — Editor

I'll tell you, now –

You arrive at the field early. No one has arrived yet, so you unlock the gate, noticing the breeze out of the west. Probably 10 miles per hour from the west, and it's only noon. About 62°, so don't expect lot of lift since it's cool today, unusual for late May. Any lift will likely be blown away before you get any altitude. Still, it's worth a try after the investment of a long drive and a longer distance from the one you love.

You drive through the gate, unlocking shed and clubhouse as you pass in. Relieve the morning coffee; then when you look up there's friend Allen Hamlin driving up with Tonka, his shaggy pal and his best friend in the front seat of his truck. Greetings are exchanged, then we form a plan to go get the golf cart, so as to lay out the towrope then tow the Schweizer 2-33 trainer into ready position. Before anything else, Allen cleans and inspects the 2-33 to get it ready to fly.

Help Les Hurdle (the towplane pilot) to pull out and fuel the towplane. Take the golf cart to get the 2-33 hooked up so as to tow it the staging area. The towplane is then staged in the pocket as well, and Allen settles into the 2-33. Cindy Brickner (our teacher, instructor, and mentor) gives the signal to pull out slack from the towrope; and on her cue Allen is launched into the 15-mph breeze following Les in the towplane. The 2-33 kind of staggers into the air after Les in the towplane, since it's blustery and the wind forces it up and down in five foot brackets in the first 500 feet of movement down the runway. Allen makes it off the end of the runway, following Les and becoming more stable and steadier with every moment and forward movement. I know how he feels. He knows all eyes are on him, measuring his every move, and thinking "… what would I do?" He forces himself to focus on the task at hand, then leaves us groundlings to our earthbound thoughts. He's up, and is waning away from us in his own world, one which can only be known by an aeronaut. We know how that feels also. It cannot be described with mere words.

Now it's my turn. Cindy and Mike Folks help me to haul the single-seat Schweizer 1-26 to the starting point in the pocket (the staging area), quickly now, since Les is coming back, and getting ready to drop the rope and land. We work as a well-oiled team, setting the trim glider into its little parking spot behind where the towplane will set up for the next tow. Now I drop my radio into its place, and jump into my sports car of a glider. It weighs less than 500 pounds, and Cindy has nicknamed it a "Potato Chip" since it's so light. I strap in, do my last preflight check, close the canopy, check the wind, and with a wide smile give her my thumbs up. The anticipation always is the same, every sense is keen, and I look at the wind sock once more. I barely notice Cindy making circles with her arm, giving Les the signal to GO! The wind is strong enough that she doesn't even need to hold the wing up, and even though I haven't moved, I can balance the glider with the con-

trols. The towplane revs up, the 1-26 pulls forward smoothly, and I start bumping along the dirt runway before the paving. It seems within 50 feet I have enough airspeed to nudge the stick back and my steed leaps up into the air, and immediately the bumps are gone. I'm free of the ground, even though I'm just inches off the planet.

Now I call out loud my emergency plan for a rope break: "Straight ahead, straight ahead, straight ahead …." This means that if the towrope breaks while I'm over the runway, I'll just land straight ahead. I suppose this seems obvious, but you can believe me when I tell you that if you have no plan for failure in a glider, when the failure does come to you, you will leave it with crumpled aluminum and blood. It's much better to assume there will be a failure of one kind or another, and have a plan ready if it greets you.

As Les and I climb off and down the runway, there is no longer room to land on the runway. Now my mantra changes: "In the weeds to the left, in the weeds to the left, in the weeds to the left …." Even though less than thirty seconds of flight have elapsed, the runway behind me is briefly not a safe haven. I am too low for a safe return. There is a fence at the end of the runway, and there lies a mangled mess for the pilot who lands into it at sixty miles an hour. Instead, I pick a spot off to the left beyond the runway where I could put down the 1-26. The glider would be beat up if I landed there, but it could be rebuilt, and I would survive with perhaps just bruises to body and ego. I cannot know that the rope will break, but it has before; just not at this crucial place for me.

When my altimeter tells me I'm three hundred feet off the ground, I know I can make a 180° turn and return to the runway. This is another critical moment, and to turn around would be tricky to do at this altitude, but I have done it in training. It's blowing pretty good by now, so I plan to fly about half the runway length, then turn again and land into the wind, which is much safer than a downwind landing. Every second beyond this moment gives me more insurance against these maneuvers.

Now Les begins a left turn towards the mountains. I don't even see them, because I'm focused on the back of the towplane, and in keeping myself centered in the turn behind it. As we go up, we pass through turbulence and minor thermals (rising columns of air) that bounce both of us up and down. In the turn, the towrope goes slack for a moment, and I quickly act to remove the slack. I press the right rudder pedal, so as to yaw the glider to the right, and the rope tightens once more. When the slack is gone, the glider gently is pulled facing the towplane once more. (The hazard is that if the slack is not removed in a controlled fashion, there will be a jerk, which could break the towrope. Since I'm close to the ground, this would be a difficult, but not impossible situation to deal with. I would land, and we would lose a half hour getting another rope ready to go. It's better to have a method to remove slack without breaking the towrope.)

Now we are done with the turn, and are heading east, and downwind. The ground is rushing underneath us, since we are making 70 miles per hour airspeed, plus another 20 miles per hour or better of wind. The glider has settled down, and it's much easier to stay directly behind the towplane. I glance down at the runway for reference; now I can easily return to the runway. Before we get too far downwind from the gliderport, Les turns left again, and we march back upwind. Now however, we are only going 45 or 50 miles per hour over the earth, since the wind is subtracting from our airspeed.

Without any warning, Les banks hard left. He has apparently found some lift, and two seconds after I see the towplane bank, I pull the stick hard left also. If I bank too early, I'll be inside the towplane's turn and would get a lot of slack rope. Following that, the rope would go taut in an instant, then would probably break. If not, the glider would instead be thrown outside of the turn the towplane is making. Even if the rope does not break, I would pick up a lot of airspeed, causing the glider to quickly climb. It is likely the glider would then very quickly become uncontrollable. Nevertheless, I've grown accustomed to these sudden turns by Les, and have even gotten to the point of enjoying the challenge to control my part of the dance we are in: Towplane and pilot, glider and pilot, all are in concert dancing up through the atmosphere. When Les turns quickly and steeply, I always get a big grin on my face again.

Before long, Les and I leave the thermal, and head upwind again. I'm watching my altimeter for the 5,000 ft mark to come. That's a 2,000 ft climb, equating to $50.00 out of my pocket. Just one more of the many variables considered while in a flight: "How much am I spending?" If I go over my allotted altitude, there is a further subtraction from my Club account, so I carefully watch the altimeter for the 5,000 mark.

Hand on the release knob now, and checking for traffic. When I get to 4,950 ft, I pull the lever and bank right, away from the towrope and towplane. Keeping one eye on the rope,

and one eye looking for traffic, I pull back on the stick to gain a bit more altitude whilst I have high airspeed.

Now comes the fun part. I happen to be in a weak thermal, so I circle right, checking for traffic, then for coordination of my turn (more on that in a moment), checking airspeed and pitch angle, checking the variometer to see if I have lift. The mantra now is A, B, C, T! (Airspeed, Bank angle, Coordination, Traffic!). My airspeed should be about 40 miles per hour in a thermal; I want a 30° or better bank (more if I have strong lift, less if it's weak); the strand of yarn on the pitot tube in front of my windshield should be straight back, indicating if my turn is coordinated; and finally I want to watch for other airplanes at my altitude so as to avoid a collision. I work this thermal for a couple of minutes, until the lift is played out, then start looking for another.

I'm keeping track of where I am over the ground, since there is a lot of wind pushing me to the east. If I lose track of how fast I'm going that way, I might not be able to get back to the runway and will have to "land out." This is where you find a spot to land that is not at your home field, and is highly embarrassing and makes everyone burn several hours taking the glider apart, loading it onto a trailer, and trucking it back to the airfield. Once back, more hours are spent re-assembling the glider. A pilot quickly loses popularity when he does this, but it happens to everyone eventually (so I'm told.)

I find a good thermal, and bank hard to stay inside it. Most of the time I'll pass outside of the thermal on the first turn, and have to find it again. With practice, I have learned to find it again about 75% of the time, and start working my way up the air column. I'll spend five or ten minutes in this thermal, while I'm being blown downwind away from the gliderport. I mark a spot on the ground beyond which I will not go, and when I reach that point, I make a beeline upwind towards the gliderport once more.

About the author: *Lee is a 61-year-old student pilot. He wanted to fly his whole life, now he's finally learning how, and it is just thrilling for him. He's had many vocations: carpenter, window washer, public school teacher, general contractor and builder, and lately, a real estate broker. Le has been married 30 years, with 3 adult daughters.*

Per Lee: "I wrote the article for a couple of reasons. I enjoy writing, and wanted to describe the feeling I enjoy when I fly to the best of my ability. Also, I find some of the articles published in Soaring magazine are so technical and filled with acronyms a reader would likely need to have a PhD in the field so as to be able to understand what is written. Therefore, I have endeavored to write for a reader who hasn't flown, but would like to know how. If soaring is to grow, then it is necessary to communicate in a way which encourages prospective pilots."

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BUSINESS SSA MEMBER

CAP
Is Your Club Missing the Best Recruiting Opportunity?

Above: Cadet 2nd Lt. Keenan Boudon supervises glider static display at Hillsboro, OR airshow.

Ian McFall
(All photos by author.)

Like many glider pilots, my family was my faithful ground crew for many years. At a typical glider event – wave camp, cross-country school, regional and national contests – the pilot's kids ran the launch line. They pushed the gliders into position on the launch grid. They ran up behind the landing towplanes and grabbed the towline. They hooked up the gliders. They ran the wings and stacked up tail and wing dollies. We were never short of help.

Prior to 9-11, you could always find a handful of teens who bummed around the airport. They were often the children of the people who owned airplanes kept at the field and had aviation in their blood. Or, they were neighborhood kids who rode their bikes to the field after school. They were fascinated by aircraft and would wash your plane, sweep out your hangar, or run wing all day in the heat just for a chance to get an airplane or glider ride.

Some of those kids got involved in our sport. My own son, Andrew, became a CFI-G at Vacaville, California and later enjoyed a career flying corporate jets. Flying gliders was a great stepping stone to a career in aviation.

But you rarely see those neighborhood kids today. The FAA denies casual access to most airports today and most of the current glider pilots I see around are far too old to have teenage kids helping out at the airfield. As a result, we don't have enough young people getting involved in our sport. We are in danger of becoming a "Geriatric Sport," and the need to bring more youngsters into the fold is a constant topic of conversation at soaring club annual dinners across the country. And yet the decline in participation is still blamed primarily on the high cost of glider ownership and operation. That's a myth. Few clubs and glider operations are selling our sport to young people who are passionate about flying.

Meanwhile ….

The U.S. Air Force Auxiliary, commonly known as the Civil Air

Patrol, runs a glider operation with over 40 gliders (Schweizer 2-33s, Blanik L-23s, and a few ASK 21s). Twenty-seven states participate in the program, which involves 22,000 cadets nationwide. The U.S. Air Force funds 5 glider orientation flights for ALL cadets and many participating states offer an annual ten-day Flight Academy, which provides glider and power instruction for about 15 glider and 10 power students over a 10-day period. In order to take an orientation ride, glider students must pass an online "Wing Runner" and an "Aircraft Ground Handling" examination, which tests their knowledge of launch procedures and general knowledge of aircraft ground operations. These Flight Academies are often oversubscribed.

> **"They know what they are doing."**

In Washington State, we use both aerotow and auto tow launch techniques. A couple of states operate winches. The basic students get about 30 instructional flights, starting with aerotows followed by auto tows designed to hone landing skills. Most of the basic students reach solo proficiency. Advanced students solo and receive instruction aimed at reaching check ride proficiency. At the Washington wing encampment, we typically solo about 10-15 students per year. I estimate that one third of the 700 cadets in the Washington wing have made orientation rides in gliders, and around 10-15% have soloed.

Instructor Angus McKinnon getting checked out to fly from the back seat by author Ian McFall.

By the time the average cadet graduates from a Flight Academy, they have made over 30 flights and participated in over 250 launches. THEY KNOW WHAT THEY ARE DOING. In the Washington wing alone, we have about 60 cadets who have soloed over the last five years. We have had a few cadets take check rides, but most have moved on to military and civilian aviation careers. Nationwide, I would

guess that there are over 1,500 solo cadets who would LOVE to get involved in soaring at the next level but can't afford to do so.

Some soaring clubs take advantage of the relationship between the CAP and SSA, but many don't. The excuses I hear most often are that private owners "don't want the cadets around their aircraft because they don't know what they are doing and might damage their expensive gliders." Nothing could be further from the truth. Solo cadets are trained well in ground operations, INCLUDING rigging and derigging a variety of gliders.

Often private owners and club organizers worry about the cadets being responsible at 14-18 years of age. I can assure you that they are. Most of the incidents we have in our own operations are caused by senior members, not cadets.

So, how can YOUR club bring new young blood into soaring? The answer is simple. Find a CAP composite squadron near you at https://www.gocivilairpatrol.com/cap-unit-locator.

Click on a Squadron near you to find contact information. Call the Squadron Commander and ask if they have any cadets that have graduated from a CAP flight academy. Go to one of the weekly squadron meetings and talk to the graduate cadets. Invite them to come out and help at your club or glider operation. You will be amazed at the results. You may find yourself wanting to get involved in training these young people yourself!

Above: Cadet readies for instruction at Chehalis, WA. Below: Cadet 2nd Lt. Keenan Boudon in Blanik L23 with instructor Capt. McFall.

About the Author: *Ian is a retired entrepreneur. He learned to fly gliders in 1957 as a member of the British Air Training Corps at his local high school, but couldn't afford to fly after leaving high school. He came to the U.S. in 1967 to work for Boeing, and started flying gliders again in 1974. He's owned Pilatus B4, LS3, LS6, and DG-400 gliders, and subscribed to a DG-1000 syndicate. He flew competitively up to 1999 and was seeded 39 in nation at that time. Ian holds both distance Diamonds and numerous high altitude wave flights. In 2013, he joined CAP as an orientation ride pilot. His accomplishments include:*

- *Appointed director of the WA Wing glider program in 2013,*
- *2015 SSA instructor of the year in region 8,*
- *Hold SEL and until 2018, CFI-G,*
- *Has flown 39 different types of gliders in the U.S.A., U.K, S. Africa, and France,*
- *Built a Van's RV10 kit plane with 5 CAP cadets in two years. Got it certified in U.S.A., and shipped to his nephew in S. Africa, where it was also certified.*

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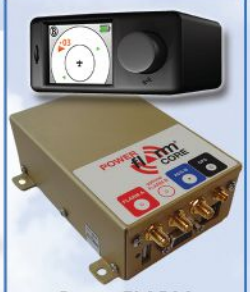

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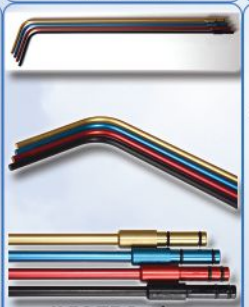

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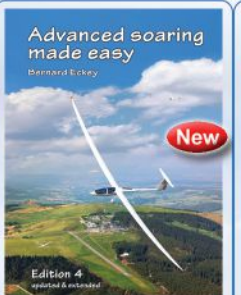

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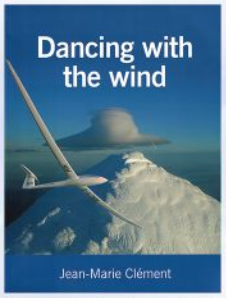

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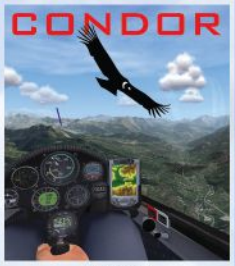

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BUSINESS SSA MEMBER

What I Learned from My Open Canopy Incident

R. A. Livingston

This article is about an incident I had with an open canopy during launch in a Grob 103 on Memorial Day 2018. I did not handle this very well, but came out shaken and determined to learn as much from this as I could.

I know photos of the damaged canopy would make this more appealing as a magazine article. Unfortunately, it seems nobody took any before the glider was packed in a trailer. The photo shown is of myself with the same glider about a year ago, right after my first glider lesson.

— R. A. Livingston

On Memorial Day last, I was taking off for a solo flight in our club Grob 103. At about 50 ft, the rear canopy opened with a crash. What followed was a series of bad decisions on my part that turned a minor incident into a complicated situation that very easily could have ended in disaster.

My "A" plan to learn to fly safely has always been to learn from the mistakes of others. Having failed to do that, I now want to make sure I learned as much as I could from my mistakes. Over the ensuing days I've thought a lot about what happened, trying to remember exactly what I did and didn't do, and what I was thinking that led me to do what I did. I'm writing this short article in the hope that this story will help someone else do better than I did in this sort of situation.

It might help the reader to know my flying experience. I have a private pilot certificate, single engine land, from 1990. I haven't really flown at all since 1994 due to going back to graduate school, raising two daughters, and getting my career restarted again. I had a total time of less than 90 hours, so I was never a very experienced pilot. Last spring, I joined the Saint Louis Soaring Association and started glider lessons. I received my glider rating in September. I have a total time of 36 hours in gliders.

It was obvious what the cause of this incident was: I failed to lock the rear canopy. But why? I had flown this airplane three times in the last two days without incident. I did my preflight checks. I wasn't rushed. I distinctly remember opening the rear canopy. I connected the rear seatbelts together so they wouldn't flap around and cause trouble. I checked that the controls were free and correct from the rear seat. I opened and closed the air brakes, and locked them closed. I checked the wing attach locks through the two little windows in the rear seat.

One minor deviation from normal was that I saw two cushions. I didn't want these floating around so I picked them up and carried them to the end of the wing and put them on the ground. Because I was leaving the canopy, I closed it. I don't recall (clearly) locking it, although I thought I did. I then went back to the canopy and noticed the window was open. This causes some wind noise, so I fiddled with it for a minute to get it closed. The rest of my preflight was entirely normal.

I don't know if I completely forgot to lock the canopy, or if I didn't latch it correctly. I did not test it by pulling up on the frame at the window. I'm a bit alarmed that this minor variation in routine may have caused me to skip an important preflight check. This is my first lesson learned: Back up a few steps or start all over again if there is any deviation or interruption in the preflight.

The takeoff was normal until the canopy opened. I was taking off on runway 36 at the Saint Louis Soaring Association's airfield in Highland, Illinois (H07). This is a wide grass field, over 2,000 feet long and several hundred feet wide. In addition to the airport itself the club also owns fields north and east of the airport. These were recently planted with corn, which was now about 6 inches tall. Lots of options to land in the event of a problem.

The canopy opened behind me with a crash. I knew immediately what it was, but glanced over my right shoulder to verify it. I was embarrassed. I had clearly screwed up and damaged a club glider. I was angry with myself. I wanted to be back on the ground. I was concerned about flying the glider with the canopy flapping around back there. I was 2/3rds down the field and thought I might still be able to land on the grass. The thought occurred to me that the canopy could break off and damage the tail of the glider, and then I'd be in big trouble. With no more than about 2 seconds of thought, I pulled the yellow knob and released.

This was my first serious mistake. In retrospect, I was having no problem controlling the glider. If I had stayed on tow, I could have thought through a plan. I could have talked it over with more experienced and calmer minds. I could have had the towplane take me to the IP and from there flown a normal approach and landing. That would have been very safe. This is my second lesson learned: Don't rush a decision, take the time to think about the options.

Having released, I was now committed to landing. Very soon! When I released, I started a turn to the right. My initial thought was that that is the proper thing to do on release, even on launch. Of course there was no way I was going to catch up to a towplane at full power. I looked at the remaining runway and realized there was no way I was going to get down and stopped before the grass transitions to cornfield (and there is a dirt road along the field). Actually, now that I can think about it clearly, I would have had no difficulty in gliding over that road and

doing a nice landing in the field beyond. That would have been the smart thing to do at this point.

I think I was overly concerned about that dirt road. I was turning into the wind (there was a 5 to 10 kt crosswind from the east). I actually had the thought that I might be able to turn 180° and land on the east side of the field, on the strip that is used by power planes. Starting from 50 ft altitude ….

What was I thinking! Actually, I wasn't thinking, I was reacting. Because I had released at such a low altitude, I was rushed to make decisions quickly. I was unprepared for this emergency and was trying to figure it out on the fly.

At this point I had turned about 45° and became concerned that my right wing tip might be getting close to the ground. For the next few seconds I split my attention between looking forward, checking the right tip, and getting the wings leveled. The wings were almost level when I landed in the cornfield just east of the airport. The landing was a bit "firm" with very short roll, but there was no further damage to the airplane and I wasn't injured.

After cursing a bit, I got out of the glider. I looked at the canopy and noticed that the locking lever was in the open (rear) position. I can't be sure that didn't happen when it crashed open, but it does suggest that I never locked it at all.

Several fellows came out in a golf cart and we rolled the glider back to the hangar. Everybody was supportive, nobody chewed me out. Some even seemed to think I did a good job dealing with the incident. But I knew better. I already realized that I had not handled the situation well. The glider will be out of service for the next few months, maybe the rest of the season. I didn't feel good about this.

I was trained to make no turns before 200 ft. I had done a couple of simulated rope breaks at 200 ft and easily got back to the airport. I had read in several places (e.g. the Glider Flying Handbook, and a book on transitioning to gliders) that below 200 feet you should land forward, not try to turn back. Why did I even think about turning back? I had no business turning at all; I had a perfectly good field in front of me that I could easily make with no obstacles for a thousand feet.

About a year ago I read FAA AC No: 60-22 – Aeronautical Decision Making. This document discusses decision-making processes, and what goes into a good decision. Having time to consider alternatives and plan the reaction is essential. In a case like this there was no time. To properly deal with a situation like this I'd need to have a pre-considered plan ready to go.

I've been using the CB-SWIFT-CBE mental checklist during preflight. The last "E" is for emergency plan. I realized I was not doing adequate emergency planning. In the future I need to mentally run through the 3 or 4 sudden emergencies on launch that I might have to respond to: Rope break under 200 ft, ground loop, towplane engine failure on launch. In each case I need to mentally choose what I would do and where I would land. Any other event (e.g., an open canopy), I would continue flying the airplane and think about what to do before taking action.

At first I didn't think I had shown any of the hazardous attitudes in the ADM, but the more I thought about it, the clearer it became that I felt I had to react quickly (Impulsivity) when the canopy first opened, and that I rushed that first decision. I let my fear and other emotional reactions motivate me to release quickly. The lesson learned here (I hope) is to not respond immediately to any emergency without prior planning. Take some time to think of alternatives, consult with others if possible. Just fly the airplane and think for a minute.

Of course not all emergencies allow you the time to think about it for a minute or two. A ground loop on launch, for example, or a rope break early on a winch launch. For those cases, you need to have the response queued up in your mind before the launch starts so you can react immediately. In the future, I must do the thinking and planning in advance for these launch emergencies. That is what the final "E" in the checklist is for.

I discussed this with some of our ex-military members. They told me how in their training they were put in simulators where the instructors threw all sorts of emergencies at them. The instructors even yelled at them during the emergency to create as much stress as possible. As a result, when they had an emergency happen for real, it wasn't the first time; they had already dealt with that situation several times already. As civilian pilots we don't have the advantage of that sort of training. When our emergency hits for real, it is for the first time.

This incident was frightening and got my attention. It showed me that I need to do more planning before each flight. I need to be slower to make a quick decision when something unusual happens in flight: just fly the airplane and think for a minute. I hope these lessons will make me a safer pilot.

18 Meter National Championship

Rich Owen
(Contest photos by Ben Mayes, and Awards photos by Maria Szemplinski.)

The 18 Meter Nationals contest, hosted by the Seminole Lake Gliderport in sunny Clermont, Florida, is in the record books. This was the third contest held on our site this year and we were just hitting our stride. The weather during the contest allowed us to fly 10 out of 12 days in very good conditions. Most days there were nice cu that provided 4-6 knot lift upward to 5,000-6,000 feet. Speaking about weather, Richard Kellerman did an outstanding job providing spot-on forecasts via an internet video link called Zoom. On practice day one, his face appeared on the big screen right on schedule during the pilots' meeting. Remote weather can be a challenge, but Richard more than met the call of duty.

On the first practice day, Jim Lee smoked the fleet with an 81-mph overall speed; returning 3 minutes earlier than minimum time. He is one of two pilots that must forget about the adage that winning a practice day spells disaster for the rest of the contest. Rich Owen won the second practice day due to the fact only half the fleet went airborne. Flying with Dave Springford, they covered the 230 miles at nearly 77 mph. Separated by only .03 mph, they started together and performed a formation fly-by over the center of the gliderport.

> **"The evenings are very friendly here at Seminole Lake."**

The evenings are very friendly here at Seminole Lake; this is the south, by the way! Snacks by the pool and the DG hangar highlighted the practice days after flying entertainment. Gary Ittner was the big hit providing his famous Miss Turnpoint Ale and Bug Hit Lager both nights. With the pilots anxious, ships finely turned, and the facility looking great, we were ready for an outstanding contest and the flying did not disappoint.

Above: Jerzy Szemplinski, Sean Fidler, and Sergei Morozov sharing a lighter moment before the launch.

Our business has been in operation for 50 years, and we strive to improve on what we do every year. After 28 years of hosting the Senior Soaring Championship, we have a unique view of what works and doesn't work when hosting an event. The advent of quality trackers and the ability of displaying the data in a meaningful way still may be a short time away. With the help of our CD, John Godfrey, we contracted with Event Tracking to provide hardware to all our competitors who wanted to fly with it. We also worked with Airtribune, who provided the website that displayed the tracking informa-

tion on a 15-minute delay to anyone who could access the internet. This information was also displayed on the DG hangar wall via a video projector courtesy of Sean Fidler. Our test had mixed results, but we did find some areas that could be improved upon easily. Hopefully, we can use this data to provide a system to contest managers that is fiscally sound, easy to do, and gives those who want to see the contest a pilot's view into the race.

The first day of the contest was a great day to fly. Richard Kellerman's forecast told of 5-6,000 feet cloud bases and good lift throughout the day. John Godfrey selected a racing task of 218 miles in the western section of our racing area. The grid was launched at 12:30 pm and the gate was soon open. Sergei Morozov of Canada started very early, and that was the key to success for the day. He covered the task in 2 hours 58 minutes for a speed of nearly 76 mph, 3 mph faster than the competition. Jerzy Szemplinski and Dave Springford rounded out the top three, making it a clean sweep of the podium by Canada for Day 1. Fear not my fellow Americans, there was a lot of racing left to go! The big risk takers who started last and tried to catch the pack were disappointed today. As the day closed out, it turned into survival for the last few racers on the course. There were several engine starts and a landout. After everyone was safe and accounted for, we enjoyed a nice Italian dinner and some more of Gary Ittner's famous craft brews.

Well, ladies and gentlemen, the weather for the second day of competition was a carbon copy of the first. Pilots were seeing climbs of 4-6 knots up to almost 6,000 feet. For those of you out west that may not seem very high, but here in Florida that's about right for May. Our four towplanes, managed by Chief Tow Pilot Ray Smith, got the fleet off the ground in about 30 minutes. Everyone climbed to cloud base right away, and the task was opened. John Godfrey sent us on a Turn Area Task of 214 miles nomi-

Above: Team ZO members Rich Owen and Catherine Eaglin talking with Robbin Clark (RF) on the day's strategy.

Above: All systems are go as Ken Sorenson prepares his Ventus 2 for flight. Below: No, it wasn't raining during the grid meeting. Typical Florida weather requires you to be prepared to be bombarded by the sun. Umbrellas, sunscreen, and canopy covers were a must during this contest.

nal and a max of 286 miles. Cu was present throughout the task area and good runs were put together by most. Everyone also suffered at some point during the task. Sergei Morozov showed us the form he exhibited in this year's Sailplane Grand Prix by stealing the day at a speed of 79 mph. Jerzey Szemplinski and Dave Springford again finished second and third, marking another sweep of the podium by the Canadians. Dennis Linnekin volunteered to sing "Oh Canada" if this continued. A host of Americans were still making a charge. Robin Clark turned in a great performance with Bob Fletcher, Sean Fidler, Ken Sorenson, and Gary Ittner right behind the Canadians. The weather for Day 3 was forecasted to be good again, and the CD moved up the pilots' meeting and launch, expecting a much longer task.

What a great soaring day in Florida! With the pilots' meeting and launch moved up, the CD sent us on a 4-hour Modified Assigned Task (MAT) for Day 3. It challenged every pilot in the contest to do their very best. Richard Kellerman delivered the forecast with great style and promised we *might* have cu. Everyone doubted his forecast but while we were gridding, the first cu appeared. The day would be a mix of blue, haze domes/wispy cu, and big clouds with flat bottoms. Cloud bases were in the 4,500 to 6,000 feet range and lift varied greatly. Some climbs were a meager 2-3 knots, but 7 knots was not unheard of. It appeared we had two gaggles that contained most of the competitors. There were a lot of thermals that reminded me of my younger days as a kid in the kitchen. Remember the old mixers that your mom told you not to turn on with just liquid in the bowl? Everything went everywhere! That's what some of the gaggle thermals looked like. Shifting gears at the right time and moderating risk was key. I'm happy to report that a great friend, fellow Floridian, and U.S. Team member, Robin Clark, won the day! He completed all turnpoints for a total of 297 miles at 71 mph. Bill Gawthrop and Sergei Morozov rounded out the top three places. These pilots were the only ones that completed all the turnpoints in the time allotted. Overall the Canadians still controlled the podium with Sergei in first, Dave Springford in second, and Jerzy Szemplinski in third. The top five Americans were Robin Clark, Sean Fidler, Gary Ittner, Ken Sorenson, and Eric Nelson. The gaps were closing, and today's result emboldened the Americans. During the evening, we had a great prime rib dinner provided by the Red Wing restaurant, accompanied by a fresh batch of beer from the Papa 7 Brewery courtesy of Gary Ittner. It was a fun filled day with great racing and good food, and our ground crew was treated to the movie "Justice League" thanks to Sean Fidler.

As Meat Loaf said in "Paradise by the Dashboard Light," "We have a real pressure cooker of a game here." On day 4, John Godfrey called a Turn Area Task with a nominal distance of 297 miles. The weather had some curves that cost some pilots a lot of time down low. On the way to the first turnpoint, it was predominantly blue with an inversion at about 4,300 feet. Once we headed south, the weather got good with strong climbs to 6-7,000 feet. If you could run en-

Pete Alexander getting some preflight coaching from the P-7 crew (Gina) and friends.

A picture is worth a thousand words. Pete Alexander enjoyed this contest for the flying, camaraderie, good food, and more importantly, the weather!

ergy lines and not lose much time in the northern half of the task, you were in good shape. Does that sound like anyone we know? More about the winners later.

Our Chief Tow Pilot reported for work today riding a miniature 4-wheeled ATV. It looked like something you would give to your 5-year-old for Christmas. The morning tow pilot meeting attendees all broke out laughing. Not to be outdone, I decided to ride the same vehicle down to my ship before grid time. The ground crew gave me a brief on the operation of the "toy ATV." What they didn't tell me is when you push on the accelerator and let it go, well, it just keeps speeding up until you hit the brake. Luckily, I was able to stop before I ran into anything. To keep you from seeing the episode on YouTube, I bribed the ground crew with a dinner at Texas Roadhouse that night.

> **"The weak conditions in the beginning spread the ships out a lot more."**

Back to Day 4. There were still packs of gliders, but their numbers were greatly reduced from yesterday. The weak conditions in the beginning spread the ships out a lot more. Once everyone got south of "The Villages" (Google the retirement community, you'll get a kick out of it), the clouds filled in and the lift got strong. You could string groups of clouds together and get large increases in your task speed. You may have guessed who the winner would be in these types of conditions – Jerzy Szemplinski, the master of getting the best out of the sky. He flew 315 miles at a speed of 73 mph, 3 mph faster than Sergei, who finished in second. Eric Nelson flew a great race and finished in third, claiming a podium spot for the Americans. Way to go, Eric!! It was still a close race among the Americans, but we will not raise the Canadian flag in the hangar just yet. Sergei was flying a superb contest and accumulated 3,941 out of 3,993 points available. I was thinking about placing some very nice Russian vodka in Sergei's cockpit that night.

On the previous day's weather forecast, a competitor joked about the glare from the forehead of Richard Kellerman on the video screen. This was caused by a bright light that shined harshly on the laptop's camera. Taking the opportunity to bring some levity into this National contest, Richard showed up on today's brief wearing a bandana around his head. Everyone had a great laugh until the weather brief told of a more challenging forecast. Lower cloud bases, weaker lift, and some chance of rain would really put the pilots to a test. Day 5 was a 2:30 hour TAT that kept us mainly to the west and northwest where the better conditions prevail. Some pilots were seen watering the grass on the grid before the launch, not a good sign of things to come. The launch commenced, and it looked like the day was already in jeopardy. The first three pilots all reported rain in various quadrants, moving into the gliderport area. Cloud bases were only 3,500 feet but lift was still consistent. When the rain invaded the start circle before the launch was complete, John Godfrey made a wise decision to cancel the day. Everyone returned to earth and most got their ships put away dry before the rains came. Richard Kellerman, when questioned about the following day's weather, quoted Exodus 20:10 that basically states, "Sunday is the sabbath and you should do no work." And so, it was written – we cancelled the next day because it was Sunday, but also due to a front pushing through Florida from the southeast.

Since the day was cancelled, we moved our "Cinco de Mayo Party" to earlier. This traditional party was held at "The Glider House" of Connie and Shawn, who live across the runway from the clubhouse. Everyone showed up in colorful garb with an enthusiasm brought on by the next day being a rest day. Mihai Tanjala, the owner of Seminole Lake Gliderport, provided the honey baked ham and smoked turkey. Soon everyone was reliving the events of the past week. Susan Owen brought in a large container of margaritas that could have taken out half of the field if the next day were a flying day. Everyone had a great time, and no one fell in the pool (this time)!

After all the rain, we thought we may have a problem with the runway turf being too soft and not able to withstand the weight of John Murray's big RV. No problem at all. This is Florida, and the soil is very sandy. The weather for Day 5 was expected to be great. The sun was shining, with just a little fog to bring out Maria and her camera to take some more great pictures. With four days to go, there would be lots of excitement left in the contest.

The American flag was flying high at Seminole Lake on Day 5, since 2 out of the 3 podium spots were won by Americans. Richard Kellerman's weather brief was very encouraging, but we did get a lot of rain yesterday. The CD originally set an Assigned Task of 269 miles, which seemed very doable until the sniffers launched. After 20 minutes, the first sniffer was on the ground and the other had started his engine. After an hour everyone was on the ground and John Godfrey wisely changed the task to a 3-hour TAT. The sniffers were sent airborne again into predominantly blue skies. It took about another 20 minutes to get good enough lift to start the general launch. Soon pilots were reporting climbs of over 5 knots to 5,000 feet. The task was opened, and it was a blazing start over the first 2 legs. Cloud bases were climbing to 7,000 feet and 8 knot thermals were reported. Then we headed back to the gliderport, where the lift was significantly weaker. The next leg gave more pilots trouble and speeds were starting

to slip. A good thermal appeared on this leg, which allowed late starters to catch up. The leg to Norton and the final glide home saw speeds climb again. Ken Sorenson flew a superb flight of over 80 mph to take the day win. Dave Springford and Gary Ittner also flew great flights, finishing in second and third. The Canadians did have a good lead in the overall competition with only 70 points separating the top three of Sergei, Jerzy, and Dave. The top 7 American pilots were separated by less than 100 points, so it was still anyone's race. Gary Ittner was in a familiar spot leading the American contingent just 200 points behind Sergei.

Well, after all the ships were put to bed, everyone returned to the DG hangar to enjoy another great rib dinner from the Oakwood Grill. Jane Rosenbohm provided live music. Jane is a local Seminole Lake glider pilot who is also a phenomenal guitar player. You could tell that we have been flying a lot when the hangar cleared out very soon after the dinner was done.

It was a beautiful morning around the gliderport on Day 6 when I made the trek to the office to post the active runway for the day. Just before the pilots' meeting, I went back to the office to check on the delivery of our trophies and I took a peak at John Godfrey's string board. Everyone knows that Charlie Spratt used a board that had a map of the task area. On each of the turnpoints there was a screw, and a string was attached to the home airport. The CD loops the string around all the screws to determine the mileage of the task and to ensure it is safe. Well, the one in our office looked like he used an entire ball of yarn. When the assigned task came out, it was planned to cover 359 miles. That was a very good task for this time of year, but everyone was pretty tired!

The grid time came and the sniffers were launched. Just like the previous day, the day started a little slower. It was quickly evident the big task was not going to be possible, so John dropped it back to his task B plan, which was another assigned task of 291 miles. It wasn't too long until everyone was on course. The first leg up to Williston was a little slow going. Climbs were in the 4 knots range and the cloud bases were only 5,000 feet. For the first hour it did not look like we were going to have 80 mph speeds like Day 5. Soon the lift started getting better but great climbs were sometimes hard to come by. Once we got on the last half of the flight, that's when the fun really began. Cruising at 6,000 feet under nice cu without losing much altitude is a wonderful feeling. Soon the miles sped by, and the last leg was upon us. We were going to Burntwood, which is in a low-lying area to the southwest of Seminole Lake. With all the rain we had, it was very weak, and several pilots got into a little trouble on final glide.

Missing from the podium for a couple of days, Sergei Morozov made a great comeback by posting a flight of nearly 76 mph, just 0.62 mph faster than second place finisher, Gary Ittner. Dave Springford continued his consistent flying by finishing third, only 0.16 mph slower than Gary. These were close finishes! Looking at the score sheet for this day, you will see another close bunch of Americans all wanting that nice trophy of an eagle sitting on the CD's table. The top 4 are all within 100 points of Gary. I have a feeling he was not worried about the next two days of flying. He has been in this position many times before and has closed the deal. However, these pilots are not conceding the contest to him just yet. That will occur at the banquet when the final scores are released.

Day 7 saw the sun shining and the dogs taking their masters for a morning walk. What's with these Canadians! That has been one of the topics of conversion during the U.S. 18 Meter Nationals. It seems like the boys from across the border have found some holy water sprouting from the Great Lakes! The pilots' meeting started like usual, right on time. Thanks, Virginia!! After Richard gave the weather brief, it looked like another fast day in central Florida. Gridding was delayed to 11:30 due to the weak conditions immediately surrounding Seminole Lake. The sniffers got another workout again today as Jim Lee and Bill Gawthrop took their JS-1s airborne to sample the air. We finally started the launch around 12:20 pm and the conditions were just starting to pop. Right around opening time for the 251-mile MAT, cloud bases were already around 6,000 feet and the lift was steady at 6 knots and getting better the higher you got. Within 20 minutes, everyone was on task and speeds were high on the first few legs. I thought I needed to find a climb around turnpoint three, but I was already at 5,000 feet! When the course went by Seminole Lake for the second time, smoke had filled the task area, choking off lift. You had a decision to make at Grass Roots to the north. Do you return early (like some folks did) and accept a time penalty, or risk flying in the smoke and weak lift to the next turnpoint, adding over 20 miles to your task? You couldn't see down track very far due to poor visibility, so several people took weak climbs to stay high. Fortunately, there was a great climb at Green Swamp that got everyone home who made it that far. Eric Nelson flew a flawless flight and traveled 243 miles at 76.63 mph. Gary Ittner finished second, less than 1 mph slower than Eric. Jerzy cruised home 1 mph slower than Gary, in third place. The top 3 at the contest had not changed for a while. Sergei, Jerzy, and Dave had the overall podium right now, demonstrating a combination of very good flying with sound racing strategy. The next time SOSA does a racing camp, I am definitely going to go! The Americans (**this is the U.S. Nationals!**) were closely spaced at the top going into the last day. Gary Ittner was in first, but Eric Nelson had come on strong in the later part of the contest. Only 36 points separated them, and Robin Clark was right on their heels.

Here we are, contest day number 8. After two great practice days and 7 contest days, there are only 50 points

separating the top 2 Canadians, and only 36 points separating the top 2 U.S. contenders. Richard Kellerman gave us his last weather brief for this contest. I am supposed to make a funny remark about his presentation but I never take advantage of volunteers. It is a real honor to have Richard do this job for the competitors, and both Virginia and I could not have been happier for the experience and quality of weather brief he provided. Thank you, kind sir!

The last flight of the contest was going to be a real test of flying in weaker conditions. At launch, there was a high cirrus deck arriving from the south. Our task area took us pretty much to the northwest. Everyone in the start circle was low when the task was opened. Weak climbs and large gaggles prevailed. As the time was approaching 2:00 pm, everyone knew they had to start out on the 3-hour TAT or risk not getting back home. A slow glide, from a lower start height than we have had so far, highlighted the beginning of the flight. Weaker climbs only lasted 30 miles, when our normal strong climbs to 6-7,000 feet returned. Most pilots went to the back of the first cylinder and flew back on the same path. There was a convergence line along the west side of the state that gave some of the guys a good ride. The day was getting better the later it got. The last turn area had lines of clouds going in the right direction. Final glide was easy for most folks. Ken Sorenson was accused of trying to get more OLC points when he stayed out an extra 13 minutes in the last turn area increasing his task speed. Jae Walker flew a great flight at 71.13 mph to finish in third place for the day. Gary Ittner took second place with a speed of 71.57 mph. When the day looked like the winner would only average 55 mph, in the end, Jerzy Szemplinski flew 72.20 mph.

The Awards

After the ships were all put to bed, we adjourned to the Mission Inn and Golf Resort for the awards banquet. Virginia began the presentation of awards with what we call the "Uff Da" award. During the contest, the CM usually receives a few funny stories of pilots or crews that had a misstep during the contest. Virginia tells the stories at the banquet and the winner is chosen by the amount of applause from the audience. For the 18 Meter Nationals, Bob Fletcher (90) won the award by landing out just south of I-4. When he called the retrieve desk, he reported his landing spot as Gore Airport. Actually, he was at the Toyota dealership that was located across the highway from Gore Airport. Good thing he didn't call for an aero retrieve!

The top ten pilots for the contest were:

1. Jerzy Szemplinski
2. Sergei Morozov
3. Dave Springford
4. Gary Ittner
5. Eric Nelson
6. Ken Sorenson
7. Robin Clark
8. Sean Fidler
9. Jae Walker
10. Jim Lee

> **"Yes, the Canadians held all the podium spots for the contest."**

Pictures were taken by Maria Szemplinski and trophies were handed out. The joke of the day was when a pilot called out (when they were just about to announce the third-place pilot)

Right: Jerzy receiving a bottle of wine from Rich Owen for finishing first on Day 8, which earned him the 18 Meter National Championship win. Below: The U.S. 18 Meter National Champion Gary Ittner (C) with Erik Nelson (L), second place, and Ken Sorenson (R), third place.

"and now the Canadian Nationals." Yes, the Canadians held all the podium spots for the contest. However, they all flew faster, more consistently, and with better strategy than our boys. Every one of the pilots on this Canadian Team is a champion and has participated in many world gliding events. It makes the U.S. pilots work harder and it improves our skills by competing against these fine aviators. This does not detract from Gary Ittner's superb performance during this contest. Gary was the winner last year in Uvalde and again this year at Seminole Lake. Two completely different sites, a good number of contest days, and long contest tasks. In the end, he was only 138 points behind Jerzy, out of a total of 7,757 points. Great flying, Gary!! And, oh, by the way, thanks for all the beer from the Papa 7 Brewery.

Above: L to R: Sergei Morozov, second place; John Godfrey, CD; Dave Springford, third place; and Jerzy Szemplinski, the 2018, 18 Meter U.S. National Championship winner! Below: Sergei Morozov receiving the second-place trophy from Rich Owen. Sergei flew an outstanding contest, leading every contest day except the last.

Virginia and I would like to thank all our staff and volunteers who supported this contest during the past 2 weeks. John Godfrey (CD), Sandra Danoff (Scoring), Catherine Eaglin (OPS), Richard Kellerman (Weather), Mihaela Luculescu (Office Manager), Ted Haller (Retrieve Desk), Frank Spital (Recording), Michelle Sorenson, Judy Lineberry and Laura Betzoldt (Registration), Ray Smith (Chief Tow Pilot), and our tow pilots Franklin Burbank, Tom McLinskey, and Jake Burkett, with special thanks to Tampa Bay Soaring for the tow support. Our local pilots who volunteered to help during the contests: Billy Kerns, Frank Spital, Glen Betzoldt, Ken Goshorn, Connie Miazga, Shawn Knickerbocker, John Farrington, and Ky McKateer. We would not have been able to put on these quality events without your support. Karen Geisinger is responsible for making the gliderport shine yearround. What you see when you visit is the way Karen keeps the place every day! Thanks to Ken Sorenson and the entire SSA staff for their support. They paid for half of the cost of the trackers with Seminole Lake Gliderport picking up the rest of the tab. Thanks also to Leigh Zimmerman for putting our social media posts on the SSA Facebook page. The old folks may not use this platform, but the kids sure like it.

I would personally like to thank my co-Contest Manager Virginia Thompson and her better half, Dave Springford, for being outstanding friends, keeping me in line, and working so hard to make these contests the best in the country. For the next 4 months, we will not spend multiple hours on Skype calls that usually result in missing the dinner bell. Dave and I fly a lot together and I am a better pilot for it. So, thanks for the flying lessons, Dave, and the loan of your partner and former crew person.

The 18 Meter Nationals are in the box along with all the gliders. It seems quiet today at the gliderport with most of the competitors having left this morning. However, the next day we have a 50 plane fly-in and barbecue lunch, so the staff will not get a break in the action. We hope you had fun and enjoyed your experience at Seminole Lake. See you at the Seniors Soaring Championship or the Sailplane Grand Prix next March. Stay high, go fast, and come home soon!

The Mach 0.1 Simulated Glider Cockpit Goes to Holland

Rhonda Clerkin

On a recent trip to Amsterdam, I had the pleasure of visiting the ZCNOP glider club in Marknesse, Netherlands. They had recently purchased a Mach 0.1 simulator from us and I was interested to check in and see how it was working for them.

It was a picturesque soaring day when several members of the club and three board members from the Dutch Gliding Association met us at the clubhouse to talk about how they are using the simulator and the potential for its use in other clubs. The Mach 0.1 is set up in a corner of their clubhouse on its very own "flying carpet." When we walked in, there were several people crowded around watching as someone flew the simulator. The club members see that as a great strength of using the simulator – the ability to learn as a group from instructors, more experienced pilots, and each other.

While they have only been using the Mach 0.1 for a few months and do not have any hard data yet, from what they have seen so far, they are expecting a 20% decrease in training time with using the simulator.

The standard practice at this club is to have morning briefing at 10:00. They have designated 9:00-10:00 as simulator training time where an instructor works with 4 students for an hour, each getting 15 minutes of "flying" time. Club members have been showing up earlier and earlier to get time on the sim before their time in the air. On bad weather days, the sim may get flown all day long.

Besides the training benefits, one of the greatest unexpected benefits they have seen is the increased comradery between new club members as they get to know each other through showing up early and using the sim.

They have also been able to take the Mach 0.1 into the community to introduce others to the sport, even using it as a fundraiser by raffling off "flight time" on the sim.

Dutch Gliding Association board members Lonneke Halsema, Noah Verhoef, and Ed Westerhof were interested in ZCNOP's experience with using the sim, and wanted to share that experience with the other 40 Dutch clubs in hopes of encouraging, and possibly helping to finance, the adoption of simulator training in all of the clubs.

Above: ZCNOP group picture, February 10, 2018.

I appreciate the warm welcome we were given and encourage anyone visiting the area to go visit them. We look forward to working with them to help increase the efficiency of training and bring more people to the sport of soaring in the U.S. and abroad.

Flight Simulator Bridges Oceans

Originally submitted to thermiek *magazine, the quarterly magazine of the Dutch Gliding Association, and translated by Remco van den Berg.*

The Dutch gliding club ZCNOP is like any ordinary Dutch gliding club. ☛

Within the instructors' board, there was a lot of discussion about the potential use of a simulator in the basic training. "Where do we get a wrecked glider cockpit? Who will build it? Who will maintain the hardware and how do we embed it in our flight training course?" to name a few.

There were a lot of questions and roadblocks that delayed, if not stopped, the implementation, despite positive signals from Baer Selen (standard class world champion 1978) of early adopter club VEZC, the club in Venlo, Netherlands.

Gradually the discussions came to a halt, because of the where to find and how to maintain the hardware issue. But anybody that followed the Dutch "zwevers" Facebook page knows that that was going to change rapidly in 2018.

In December 2017, Jos Minnema had found an off-the-shelf simulator at http://www.gliderbooks.com/ and that changed the discussion to who's going to order it, and when can we have it? Getting the Mach 0.1 of Russell Holtz to Europe was sort of a hurdle since shipping to the EU wasn't too attractive, and so we shipped it to Canada. There, 5 feet of snow would make it a challenge had it not been a ZCNOP member picking it up. If you can stay up with our lift conditions, everything else is a piece of cake.

On January 7th, the simulator arrived at the ZCNOP and one WhatsApp message to our members resulted, not surprisingly, in a high showup of our youngsters. We had timed it such that this coincided with the "iFly!" Event we had organised for kids, aged 14-19, who wanted to participate in this scholarship, could come and visit us. As a result, these kids were put in the simulator in no time and their enthusiasm grew by the second.

The feedback of the VEZC regarding the implementation of a simulator presented an unexpected barrier; it was a challenge to "get the instructor in a dark room while there was a cumulus outside." At the ZCNOP we had moved the briefing from 09:00 to 10:00 a couple of years ago because we are ready to fly at the start of the lift and want give our members the flexibility to have a private life before they start flying. So we have made a simulator training schedule from 09:00-10:00 where students come in groups of a maximum of 4 so they all have minimum 15 minutes of actual simulator time before the real thing kicks in.

Above: Glider club ZCNOP, Dutch home of a Mach 0.1 Simulated Glider Cockpit. (Photo by Rich Clerkin.) Below: L to R: Remco van den Berg, Ed Westerhof, Rhonda Clerkin, Lonneke Alsema, Rich Clerkin. Pilot in Command Noah Verhoef. (Photo copyright Wim Dasselaar.)

Nick Venema is in the middle of his instructor course and, together with club instructor Remco van den Berg, ran the lessons with the students. Big advantage of the pre-briefing lessons is that it creates a safe learning environment. And this was an effect that we had not foreseen either. Students start at a club where they know only a few people that all are experienced pilots in comparison to them. So they

all start at more or less the same level and learn from other students' learning point, since we do not make mistakes, but learn.

This laid the basis for friendships within the group, and it stimulates them to come frequently because their logbooks are compared and their group evaluation of flights is just as important as the one from the instructor, since it boosts their enthusiasm.

Initially we had spent some time on how to match the Dutch training system with the U.S. system that Russell had prepared, but we have soon found out that the lessons in Condor 1 are very well set up and within a couple of lessons, we had figured out that there is a huge overlap in systems. Lessons like coordinated turns, circuit planning, and holding off are very well designed and easy to execute. Students can view it, practice and repeat it for extra exercise, and pause it when they need more explanations. And some "fresh" solo pilots use the simulator to sharpen their skills for their solo check of that day.

There is an easy answer to the question whether the simulator is popular. People show up at 08:00, in marginal weather conditions, and use it at the end of the day – so it is a popular "thing" at our club that's paying off well.

We do not have hard figures yet on the efficiency of the simulator because at this moment nobody has soloed yet. We estimate that we can achieve an approximate 20% reduction in the training duration and therefore have increased our training capacity by 20%. This is an exceptional achievement, since nowadays the student pilots have more hobbies in parallel; 30 years ago they had time but no money, whereas today they have money and lack time.

We had some questions on how to integrate the simulator into the advanced training, and that was also the moment that the Dutch Gliding Association contacted us on our experience with the Mach 0.1 simulator. About an hour later, Rhonda Clerkin of Gliderbooks sent me an email that she was enjoying her holiday in Amsterdam and would like to visit our club. So we scrambled, and within 48 hours we had the Dutch Gliding Association board members Lonneke Halsema, Noah Verhoef, and Ed Westerhof, and Rhonda Clerkin at our club for a highly interesting session.

Bas Munniksma (88), founder of the ZCNOP, takes the maiden flight of the ZCNOP flight simulator February 10, 2018.

Advantages of a simulator in the soaring training that the ZCNOP sees:

1. Off-the-shelf kit, perfect service.
2. Ready to use courses and checklists for easy implementation in the course.
3. Estimated 20% higher course efficiency/training capacity.
4. Social team building so new members are easily embedded in the club, increasing thechance that they will stay.
5. Great PR tool since it's easy to transport and demonstrate.
6. High fun factor because people show up early and at marginal conditions.

Do we see drawbacks?

Initially we were afraid of a sort of game console effect, but in reality we see that the line between reality and virtual is very well noticed by the users.

In case you want to learn more about the ZCNOP experience with the Mach 0.1, come visit us at our club. See www.zcnop.nl for our address or contact us at Remco4401@gmail.com.

Soaring

A beautiful day at ZCNOP.
(Photo by Rich Clerkin.)


www.zenop.nl

US Hall of Fame Biographies

Collected, Compiled, Adapted, or Written by Bertha Ryan

This month we continue the biographical articles, thanks to the efforts of Bertha Ryan. She has compiled, adapted, and written brief biographies of the Soaring Hall of Fame inductees up through 2013. Since there are many, it will take several issues to present them all, so we will be looking at groupings by year – this issue presents the 2004 inductees. The full set will be on the National Soaring Museum website. — Editor

21st Century – 2004

JOHN M. BYRD (2004) (- 2016)

(Reprinted from the United States Soaring Hall of Fame Induction Ceremony program.)

Winner of Region 5 World Class Contest. (Soaring, January 2005, p 32.)

John Byrd flew his first contest in 1969 at the U.S. Nationals and Pre-Worlds in Marfa, Texas. He flew the BG-12B, which he built, against the likes of George Moffat in his modified Open Cirrus and Wally Scott in his ASW 12. He never crossed the finish line. From that humble beginning, the "Birdman" went on to earn a reputation as a tough competitor who could always be counted on to make it home if there was any possibility at all of doing so – usually faster than almost everyone else. Over the next 30 years, he was the Standard Class National Champion twice and won thirteen Regional Championships. Flying his familiar "30" contest number, he became a regular top-ten finisher at the Regional and National contests nearly every year. He flew mostly Standard Class gliders and often embarrassed the 15-Meter pilots by finishing in the top ten of the 15-Meter Nationals.

Byrd was a part of the U.S. Team at four World Championships, finishing as high as 11th and came in third at the 1998 Pre-Worlds in Bayreuth. In six Championships, he served as crew, starting with Norwegian team member Tor Johannessen at Marfa in 1970. As both competitor and crew at the Worlds, he represented his country with distinction and served as a world-class ambassador for the U.S. soaring community.

Byrd started his professional life as a high school teacher and his love of teaching spilled over into his soaring activities – flying models with Charlie Spratt's "kids" or sharing his soaring experience with newcomers and old hands alike. He served as an instructor at a number of cross-country soaring camps and provided training at his home in Marfa, TX. Always ready to lend a hand, give advice, or share a secret about how to fly more efficiently, John epitomizes the spirit and camaraderie of American soaring.

John Byrd was awarded the Exceptional Achievement Award in 1998 and won the Standard Class Trophy in 1983 and 1995. He holds Silver #1398 (1968) and Gold #473 (1969).

The John Byrds in 1975. (Soaring magazine, June 1975, p 11.)

Josh Neumann listens attentively as John Byrd explains basic principles of flight. This passage of knowledge from our seasoned pilots to younger enthusiasts will nurture their interest in soaring, and possibly develop future competition pilots in this sport. (Photo by Scott Newmann.)

GÜNTER VOLTZ (2004) (-2011)

(Reprinted from the United States Soaring Hall of Fame Induction Ceremony program.)

At 88 years of age, Günter Voltz spent 75 years instructing and inspiring a remarkable number of glider pilots both young and old. During his career, he soloed well over 400 students and issued more than 700 A, B, and C badges, as well as numerous Bronze badges. Voltz was an SSA Instructor and was an FAA Aviation Safety Counselor for the 25 years preceding his Hall of Fame Induction.

A life member of the SSA, he spent many years as SSA State Governor for Wisconsin, served as an SSA Director, and achieved top sales of SSA memberships in the U.S. Voltz also volunteered his time to the SSA booth at the EAA AirVenture and tirelessly

promoted soaring at civic and aviation groups. In 1969, he received an SSA Certificate of Appreciation for his dedication to youth in soaring.

Voltz owned three towplanes and at least ten sailplanes over the years. He logged well over 6,000 soaring hours, held several Wisconsin state records, and organized and managed numerous regional and local soaring contests as well as junior nationals. In addition, he founded and was president of five soaring clubs.

During his career as the head of the SSA Youth Committee, a position to which Voltz was appointed in 1962, the percentage of youth members reached an all-time high. In the 1960s and well into the 1970s, Voltz and his partners ran an Air Explorer post that produced an incredible number of young glider pilots. He encouraged these youth members to fly cross-country, resulting in numerous badges and records.

At the time of his induction into the Hall of Fame, Günter Voltz continued to teach soaring, fulfilling what he believes to be the highest calling – spreading the gift of soaring to youth.

Günter Voltz holds Silver #1038 (1965) and the Symons One Lennie Pin #367.

SSA President Carl Herold (L) presents the Kolstad Award to David Mockler as Günter Voltz, Youth Chairman, looks on. (Soaring, May 1982, p 15.)

Günther Voltz and family at the Hall of Fame Induction Ceremony. (Soaring, May 2005, p 16.)

LEONARD A. NIEMI (2004) (1917-1995)

(Reprinted from the United States Soaring Hall of Fame Induction Ceremony program.)

Leonard Niemi's entire life from high school on was devoted to flight in one form or another. For the soaring community, his life efforts culminated in the most successful high-performance American sailplane ever produced, the *Sisu*. The name reflects Niemi's Finnish heritage and, broadly translated, means "guts."

The *Sisu*, first flown in 1958, was immediately recognized as an outstanding performer. It was the national championship mount of John Ryan in 1962, Dean Svec in 1965, and A.J. Smith in 1967. It set three world records with Al Parker out of Odessa, TX. Niemi's 11 production *Sisu* sailplanes dominated soaring competitions until the arrival of European glass ships. It is ironic that laminar-flow airfoils like the ones Niemi used on his *Sisu* had to migrate across the Atlantic Ocean to reach their ultimate potential in the hands of European designers.

Niemi learned the fundamentals of aircraft mechanics in his teens. He gained experience in every phase of aircraft construction at Bell and Curtiss-Wright in Buffalo, New York. He spent a year as an aircraft mechanics instructor and then was designated as a plant layout engineer the year before his 1943 induction into the U.S. Army Air Force.

Post-World War II, he attended the University of Michigan and received his B.S. in Aero Engineering in 1951. After graduation, Niemi worked at Bell, Frye, and Convair aircraft companies. Then in 1960, he and Jack Baugh organized Arlington Aircraft to manufacture the *Sisu*. It became the world's highest performing production sailplane.

Leonard Niemi holds Silver #456, earned in 1960.

Len Niemi at the controls for the test flight of the Sisu 1.

Sisu on display at the 2005 SSA Convention. (Soaring, April 2005, p 22.)

Arlington Sisu 1A on display at the Smithsonian Air and Space Museum, Udvar Hazy Center.

Leonard Niemi's *Sisu* is the most successful American competition sailplane ever flown. John Ryan in 1962, Dean Svec in 1985, and A.J. Smith in 1967 all won the United States National Soaring Championships flying a *Sisu*. In 1967, Bill Ivans set a national 100 km speed record of 84 mph flying from El Mirage, California. The *Sisu* on display at the Smithsonian was flown by Alvin H. Parker – the first pilot to exceed the symbolic barrier of 1,000 km (1,042 km; 647 miles) on July 31, 1964, from his hometown of Odessa, TX.

BY CHRISTINA LARSON

Let's Get This Party Started

Above: Midflight on 5th lesson flight.

Awed by stunts pulled by aerobatic pilots in air shows, I imagined flying was something akin to dancing or swimming. It must be intuitive, therefore anyone could do it (even if clumsily), while lots of practice and work would make you a smooth professional. My only basis for comparison was learning to drive, and flying looked more or less like driving in three dimensions. So I figured flight training would be fast. After all, I'd officially gotten the gist of driving in a single formal lesson (the absolute minimum required to drive with a parent on a learner's permit) and promptly helped drive the family minivan on a multiday trip to visit relatives. Absently overlooked in this thumbnail analysis was the fact that as a farm kid, I had lots and lots of prior experience driving lawnmowers, tractors, and vehicles everywhere except on roads … yet exactly zero experience flying a plane. Ah, the arrogance of innocence.

The minute I got out of my first-ever glider ride in September of 2015, my mind was whirring with hope for flight lessons. My long-ignored desire to become a pilot had turned into flame at last. The time lag between receiving my gift certificate and actually taking the flight had given me time to do a little advance digging into local options for glider training (just in case the glider flight turned out to be fun). There were two choices, both an hour away: the commercial operator and a local soaring club. The rest of the commercial calendar was booked solid for the remainder of Minnesota's soaring season; in the absence of last-minute cancellations, it would be spring before there was an opening. Certainly that would give me some time to really consider whether I

wanted to take lessons at the commercial operation or at the local soaring club.

Years of competition as a successful college athlete taught me that if I couldn't get to practice three times a week, I could not maintain the sharpest edge. It was clear to me that flying at least that often would be required to keep physical skills from backsliding, and four times a week would be better. Additionally, I was not thrilled about having multiple instructors. Instead, I wanted clear, consistent expectations. From the commercial operator's website, I could see that he had thousands of hours, had set multiple state records, and had taught many students to fly. *Good*, I thought, *here's an instructor who has flown extensively with plenty of teaching experience*. The soaring club, which offered flight training on weekend mornings with a rotation of duty instructors, was a distinct second choice.

With all of that in mind, I sat down with the commercial operator after my introductory ride and asked about flight training with him. The introductory scenic flight had shown me he possessed a light-hearted sense of humor and lots of joy in flying. Some part of me knew that his enthusiasm would draw me back to the cockpit in the face of the unexpected nerves I'd encountered on the scenic flight. Even better for my logical mind, he had a syllabus. All I had to do was wait for spring to come … and winter hadn't even started yet!

It felt like the longest winter ever. When spring finally rolled around, it never occurred to me that the bookings would open in advance of the season. As a result, I was late getting to the operator's calendar and the first weeks were fully booked. Argh! After months of patiently waiting, too. In the face of the high demand for the time slots, it was obvious I'd need to plan ahead to get the frequency of flights I wanted. I had no idea how much time it would take to learn, but it's always easier to cancel an appointment than to squeeze in at the last minute. Booking 4-5 weeks' worth of lessons all at once just made sense.

Little did I know what I was in for. I promptly found out that there was a lot of learning that simply fell into the camp of "try it and screw it up." Much like learning to ride a bike. On aerotow, for instance, my instructor

Above: Readying for 6th lesson flight.

made the formation flight look easy; I made the glider flail about on the end of crack-the-whip. He could execute a precise turn to an exact heading without varying so much as a knot; I made us flounder through the sky. *I'm a dancer and an athlete*, I thought to myself; I drive all the time even on treacherous Minnesota winter roads, I can more-or-less play the piano, and I can juggle well enough to pass as many as 7 clubs with a partner. So why is this so hard? And that graceless stumbling through the air started *before* he gave me the rudder pedals to worry about.

Oh, the rudder pedals. I knew intuitively how a rudder works; after all, I race sailboats and water is an easy medium to see. Helming the boat, even to back it out of the slip, came easily to me. Tillers made sense. But pedals? I spent an entire lesson trying to decipher which rudder pedal moved the rudder in which direction and went home muttering to myself about it. Knowing the aerodynamics and understanding yaw at an intellectual level wasn't helping my poor naive feet. To get past the "which way" hurdle, I knew I had to come up with a mental crutch. Sleeping on it, I woke with an idea: Think of it like bending a horse. Was that right, or backwards? Talk about spending a couple of days in suspense. I got in the cockpit at the next lesson and discovered for myself that it was indeed correct: The pedal you pushed "bent" the glider (literally, at the hinge point between vertical stabilizer and rudder) away from your active foot, just like kicking that side of a horse's ribs will nudge him to bend his body away from your leg. This is important in dressage, where simply riding in the direction you want to go is insufficient – you not only have to ask the horse to travel straight, on the diagonal, or around a curve, but you also must be able to ask the horse to put a shoulder in (like slipping a glider through a turn) or a shoulder out (executing a nice coordinated turn). If you have a well-trained horse, this leads to some of the fancy moves like being able to canter in a single place in a pirouette, or switching leads every single stride on a canter, or being able to sidle your horse broadside up to a cattle gate and close it while your horse is stepping sideways. So I decided a glider is a horse, check. That freed me to work on the problem of how much rudder and when to use it during the next series of lessons.

Most of you are probably scratching your heads and trying to remember if you've ever seen a horse travel sideways in a "slip." This oddball analogy wouldn't make intuitive sense to anyone who isn't well-versed in aerodynamics *and* a rider of some experience. It is never going to take its place in the annals of history as a teaching

technique to relocate the act of choosing a rudder pedal from the conscious mind to the subconscious mind. Given the paucity of people today who learned to ride before the age of ten or eleven, it's unlikely that there are many people anymore whose first reaction to a machinery-movement puzzle will be, "If this were a horse, what would it be responding to?" But it worked for me as a silly quick-and-dirty kinetic mnemonic until I no longer had to think about which foot to activate for the desired result. Only much later did I get a chance to look under the seat pan to see the actions of the pedals front and back, as well as the cable runs – and it immediately made sense which pedal caused the rudder to move in which direction. Oh, to have known that earlier; it just never occurred to me to ask to see the mechanism. Live and learn, right?

Glider flight training is one of the few educational settings in this country that is carried out exclusively one-on-one. But flight training had barely begun, and the illusion that I'd be learning in isolation was about to be dashed to bits.

About the author: *Dr. Christina Larson has always looked up to the sky in wonder of those who fling themselves through its trackless depths. She cracked open her first logbook in 2016 and became certificated as a commercial glider pilot in 2017. She is a recipient of two WSPA scholarships: The Flying Montagues and the Maria Faber. Her poetry has been published by the SSA and EAA. Primarily a Minnesota soaring pilot, she has also enjoyed flying over the glaciers of British Columbia, upside down and sideways above the Arizona desert, and among the rolling hills of Tennessee. You can contact Christina at soaring.cloud.dancer@gmail.com.*

Above: Short final, 7th lesson flight.

SOARING STORIES

BY DALE MASTERS

Beginner's Look

Great is the art of beginning, but greater the art of ending.

— Longfellow

My first time soaring the Sierras, being a twenty-year instructor from down east meant nothing. I had a ton to learn. This was a few years before Google Earth, and for weeks I'd been memorizing a 3D relief map of the run between Tehachapi and Lone Pine with a specific mission in mind: fly straight as possible to Cottonwood Lakes, a high, wide bowl in the Golden Trout Wilderness beyond which lies a sea of fourteen thousand feet tall peaks. The plan was to snap a careful 360° panorama before rushing back, a modest first assault.

If completed, the round trip would total 300 km, but I of course had no barograph or data logger. The glider was a thirty-something, all metal, single-seat Lark with no oxygen system, clamping definite limits on higher ambition.

It was forecast to be an especially fine day, with several pilots chasing each other north from three neighboring gliderports – Tehachapi, Cal City, and Crystal. I was first to launch from Tehachapi, so that put me in the lead, but all the others were in hotter ships, plus having oxygen would avail access to higher altitudes and ground speed. And they'd been there before! I felt like that mechanical rabbit they use to make the hounds run, wondering if I could reach my turnpoint before all of them did.

Blame it on beginner's luck, but the outbound leg went smoother than expected, only difficulty the intimidating visuals. Maybe there'd be time to gawk on the way home, but for now it was petal to the medal (*sic*).

A line of cumuli marking even better lift sat miles west of the crest over deep wilderness but led well above fifteen thousand, so I stayed off to the east in quick reach of lower ground if necessary, pushing hard to stay down around twelve or thirteen. As Horseshoe Meadows slid below, a voice came on the air-to-air frequency hailing, "Glider at …" my position (I had no call sign). He was leading the charge along that line of superior lift, and warned that my path would crunch up against solid rock dead ahead.

"That's my turn point," I answered, "and thanks for the counsel."

By the time we finished our exchange, I was there and the first of those megaliths filled the screen. Everything felt right though, and lift was boiling up in gobs, so … I dug habitually in and started scaling the nearest slope just like any forested hill back home. Only so very different.

Life is painting a picture, not doing a sum.

— Oliver Wendell Holmes

Until then I'd managed to avoid spending much time above fourteen, and at least *thought* I'd handled the mild hypoxia fairly well. Also, one

could imagine that proximity to naked granite should heighten one's alertness, whatever physiological state you're in.

Yeah, so ….

Behind every barren promontory lurked another, and soon I recognized from pictures the legendary stone shelter atop Mt. Whitney. I had gained another thousand feet quite unawares, and after loitering too long was by definition further impaired, whether it seemed so or not. Time to head home.

And still that panorama to shoot!

Anxious to be lower, I dove near the yellow arc back to Cottonwood Lakes, arriving at just the right level for intimate pics. One slow round led to another for good measure – before noticing it was all done in sink. Over a huge, wide bowl no more; suddenly I was down in it.

With more than half the horizon now above eye level, three options remained. I could try to crawl back onto higher ground again, but that wouldn't help with the hypoxia thing, and if it failed I might end up "landing" in one of these lakes whose ripples sparkle so brightly at 11,000 ft. Smart choice would be to sneak through one narrow little notch and down into the valley, but leaving the mountains could take hours longer to get home, and with this dull headache, no thanks. Third option, head south with the slimmest margin above descending high ground, straight toward home. If that didn't work, worst case should be a desert lakebed I had seen once before, from two miles up an hour earlier. And yes, no crew.

By now even *I'd* begun to doubt my judgement. Gaps in cognition felt like thorn bushes in the dark, but I had to do something right away. And that's when I started to hyperventilate. Mm hmm, really.

This was another first for me, might it be the last? Thankfully I knew what to do and retained nominal control. And? By then those first two options looked unworkable anyway, so with some degree of dread I turned south.

The trip back was a hypoxic blur I honestly don't remember. Landing midafternoon, I had that sick feeling you get late on a second day with no sleep. Celebrate a victorious first try? No, I just wanted to lie down. Trying to appear normal, I numbly secured my glider in the wrong spot, then nearly wept at having to untie it, move it again, and tie it down again. I was toast.

Three miles home on a bicycle felt like another hundred, after which I promptly fell asleep.

southern california SOARING ACADEMY glider flight school

"Soaring Stories" is excerpted from the Southern California Soaring Academy weekly e-letter written by Dale Masters. Dale is a retired CFI-G who's spent years soaring in the SoCal area out of Crystalaire, as well as Sunriver, Oregon and northern Vermont. Dale is author of "Soaring: Beyond the Basics."

TEACHING SOARING

BY SCOTT MANLEY, CFI-G

Lesson Planning

Introduction

Not to belabor an analogy used last month, but if curriculum development is like figuring out how to eat an entire elephant, lesson planning is like figuring out exactly how to take each bite. Here is my definition of lesson planning: *The process of developing a unit of instruction comprising learning objectives, instructional materials, lesson description, lesson procedure, and assessment/evaluation instruments.*

Based on the definition above, let's take a look at each of the component parts of a lesson plan.

Learning Objectives

A good place to start any lesson plan is to clearly specify what it is the student should learn during a given unit of instruction. This turns out to be more difficult than one might expect, but categorizing the learning objectives can help.

The Practical Test Standards for Glider currently specifies the things rating-applicants need to **know**, and the things they need to be able to **do**, including **how well** they need to do them. So, in my lesson plans, I categorize objectives under the headings of either "Knowledge" or "Skill." For example, the learning objectives below are from my lesson plan/study guide on *Airspeed Control*.

Objectives:

- Knowledge
  - An understanding of the aerodynamics related to airspeed control.
- Skill
  - The ability to establish and maintain a specified airspeed.
  - The ability to transition between airspeeds, slowly and quickly.
  - The ability to control airspeed primarily by visual reference to the horizon.

On the topic of learning objective *categories*, if you want to get ahead of the FAA, you may also want to include objectives under the heading of "Risk Management." The FAA is gradually replacing Practical Test Standards (PTS) documents with the new "Airmen Certification Standards" (ACS). One of the major areas of emphasis in the ACS documents is "Risk Management," i.e., judgment training.

Instructional Materials

Instructional materials are the teacher's tools. The toolbox contains items such as textbooks, online articles, audio/video clips, links (URLs) to online resources, charts, graphs, images, databases, simulations, instructional software, etc.

Below is the list of instructional materials listed in the *Airspeed Control* lesson plan/study guide available at my website, *gliderCFI.com*.

Materials / Equipment

Publications

- *Glider Handbook of Aeronautical Knowledge* (Holtz)
  - Lesson 1.1 – The Glider
- *Flight Training Manual for Gliders* (Holtz)
  - Lesson 1.1 – Primary Flight Controls
  - Lesson 1.2 – Secondary Flight Controls
  - Lesson 1.3 – Using the Flight Instruments
  - Lesson 4.3 – Pitch/Speed Control

Simulation Files

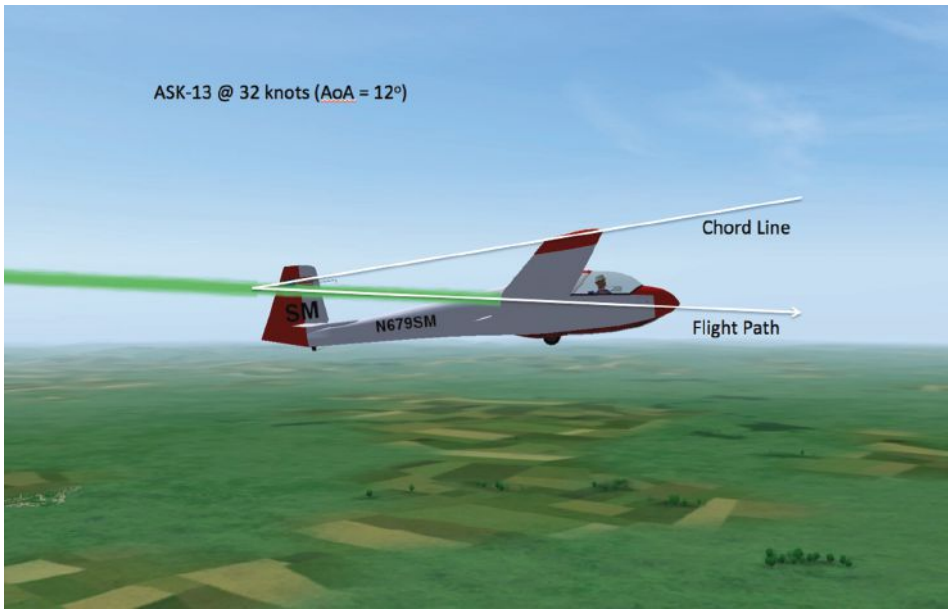
Flight Plan

- Airspeed_Control.fpl

Replay

- AoA_vs_Airspeed.rpy
- Changing_Airspeed_Slowly.rpy
- Changing_Airspeed_Quickly.rpy

The instructional resources needed may already exist (e.g., Holtz *GliderBooks*), but if not, it may be necessary for an instructor to create them. For example, I created the image below by capturing a screen image while in simulation and augmenting it with other graphics using Microsoft Excel drawing and text tools. The image



students relate the concepts of *Angle of Attack*, *Pitch Attitude,* and *Airspeed*, and serves as a good example of the adage "A picture is worth a thousand words."

I also created the "Simulation Files" listed above, specifically to help students visualize (understand) the concepts, and develop the skills, related to airspeed control in a glider.

In my experience, the need for specific instructional resources becomes apparent during the "Lesson Procedure" development process described later in this article.

Lesson Description

A *lesson description* lays out the general focus of a unit of instruction. On each of my website "lesson" pages, the *lesson description* is laid out in an "Overview" section.

Below is an example taken from my lesson on "Turning Flight."

Overview

My CFI-G colleague Nyal Williams claims, back in 1962, to have made a perfect turn in a glider, and someday hopes to do it again to prove it wasn't an accident.

In addition to providing the control inputs required to initiate, stabilize, and complete a turn in a glider, the pilot must manage the "four un-commanded behaviors" exhibited by the aircraft in a turn.

Making a streamlined, constant-speed, constant bank angle turn in a glider is a complex task, and takes a lot of practice to be able to do it well. Understanding what makes the glider turn, and why it exhibits these un-commanded behaviors, will go a long way toward helping you manage the complexity of this seemingly simple yet fundamentally important maneuver.

Lesson Procedure

The *lesson procedure* is a detailed sequence of events designed to help students meet a lesson's learning objectives. It is the instructor's plan of action.

It is one thing to know how to do something; it is quite another to help another person learn to do that same thing. For example, I know how to control the airspeed in a glider, but the question is: "How do I go about teaching someone else to control the airspeed in a glider?"

I equate lesson procedure development with writing a story. The lesson objectives compose the story's ending, but how and where to begin the story and how to develop the plot are not nearly as clear.

What works for me is to repeatedly ask myself questions like "What am I doing to control the glider's airspeed?" and more importantly, "Why am I doing what I am doing?" It is the "why" questions that often make clear my fundamental lack of understanding and cause me to begin researching a subject. It is often said, "one never learns something better than when having to teach it to someone else." This has certainly been my experience.

Below is the thought process I went through to develop the *lesson procedure* for my *Airspeed Control* lesson plan/study guide.

Q. How do I control the airspeed in a glider?

A. I move the control stick forward to go faster and aft to slow down.

Q. What effect does moving the stick forward/aft have on the glider?

A. It pitches the glider down/up.

Q. How does pitching the glider result in a change in airspeed?

A. With the wing attached to the glider fuselage, pitching the glider fuselage changes the wing's relationship to the airflow.

Q. So what?

A. The wing's relationship to the airflow (relative wind/flight path) is defined as *Angle of Attack (AoA)*. ☛

Q. And why do I care about *AoA*?

A. *AoA* is one of the factors that determine the magnitude and direction of the aerodynamic forces acting on the wing. These forces in turn determine the wing's velocity, i.e., **speed** and direction of movement through the air. In fact, *AoA* is the only force-producing factor over which the glider pilot has any direct control.

Q. What are the forces acting on the wing and what generates them?

A. To see how I answered this question, download the study guide for the *Airspeed Control* lesson plan/study guide from my website:

https://tinyurl.com/ydxnvawu

By working my way backward through the set of answers above, I was able to develop the narrative (story line) for my *Airspeed Control* lesson. The outline of that narrative is as follows:

- Define Aerodynamics
- Identify the driving force behind Gliding, i.e. Gravity
- Develop the concept of Lift
- Establish the Lift vector as the determinant of Airspeed
- Establish the relationship of Angle of Attack to Lift, and therefore to Airspeed
- Establish the relationship of Pitch changes to changes in Angle of Attack and therefore to changes in Airspeed
- Establish the relationship between *Control Inputs* and *Pitch* changes

With the narrative outline in place, the next steps in *lesson procedure* development are fleshing out the narrative and developing instructional aids to stimulate the primary learning senses. These include the images embedded in the lesson plan/study guide document and the simulation-based animations (Condor Replay files).

Assessment/Evaluation

An important part of lesson development is to plan activities that will determine the extent to which:

- the student has met the lesson's learning objectives
- the instructor's methods and procedures have contributed to (or inhibited) the student's learning.

As an example, each section of Russell Holtz's *Flight Training Manual for Gliders* and *Glider Pilot's Handbook of Aeronautical Knowledge* concludes with a set of questions designed to measure student learning. This is an example of the *Summative Assessment* concept described in the September 2018 edition of this article.

Another example is paying attention to the "well done" and "room for improvement" items in the post-flight critique. Things that went well on the flight were likely well taught; things needing improvement may not have been.

Instructors should also plan to include *Formative Assessment* in the lesson procedure. *Formative Assessment* is the gathering of information during the instructional session that provides feedback on whether the instructional methods are having the desired result. For example, asking students in advance of their performance to describe how they will go about executing the previously demonstrated flight maneuver.

In Closing

Detailed lesson planning is a lot of work. In my experience, the first time I sit down I:

- figure out specifically what the student needs to know, and be able to do, at lesson's end,
- design, build, and practice the learning procedure that ensures that level of learning,
- research and/or build the required instructional materials, and
- build in effective assessment activities.

I will likely have invested 10-20 hours of lesson development for each hour required to deliver it.

The good news is I now have a largely reusable and highly-effective training resource, one that only gets better as I refine it over time.

In the Next Issue

The elegant significance of **Monkey see, monkey do**.

About the author: *Scott Manley owns and flies an Alisport Silent 2 Electro. The back of his pilot's license reads: Commercial pilot: airplane single-engine land & sea; instrument airplane; glider. He provides year-round simulation-based glider flight instruction at-a-distance to glider rating candidates nationwide. He also flies summers as a commercial pilot and glider flight instructor for Sylvania Soaring Adventures in Beloit, Wisconsin.*

Feel free to contact him at: smanley@wisc.edu or via his website gliderCFI.com.

XC TIPS

BY GARRET WILLAT

Turn While You Are in Lift

I spent the day with a student from Minnesota, and he got to experience some wave. It was small and we only climbed about 700 ft above release, but it was better than landing so it was a win – it was mid-January, and we are flying .... Most of our day was climb 50 ft, lose 30 ... it was a slow climb. The average climb rate would be better if we could climb the entire time, so let's avoid losing 30 ft each time. To do this requires less exploring and turning back around while we are still going up, not waiting for the vario to drop off to zero. If you wait to zero to turn around, you will probably start losing as you turn; however, if you are too far upwind or downwind, you do not know because it is sink everywhere at this point.

If you turn around once out of the lift, how do you know you didn't drift upwind or downwind? As you turn around, you won't find it. You might be upwind or downwind or just beyond the lift, slowly returning to the area because you went too far. It is a guess when trying to re-intercept the lift.

We can use this same theory when on the ridge, too. No reason to run the entire length if the strongest part is on the north quarter of the mountain. Work smaller figure-8s in that area of strongest lift to continue to climb the entire time.

It is very difficult to gain altitude, but very easy to lose it.

Now let's think of a task, OLC (Onlinecontest.org), TAT (Turn Area Task), even U.S. AST (Assigned Speed Task, because the area is large enough). Turn while you are still in the lift. If you are nearing where you are planning on turning and you find good air, whether it's blue or under the clouds, it makes the most sense to turn around while you are still in lift. The extra little distance probably will not be a gain based on the extra altitude lost by going through the same sink twice. You would do that deviation towards lift if you are halfway down the course line.

If you turn while still in the lift, you can slow down, do your pull up, turn your heading, and accelerate on your new course all while going up. If you wait a few more seconds, you then are doing all of that in sink. You want to do the initial acceleration in lift, not sink.

Mentally you are starting that new leg in lift!!! You're awesome!! Changing a leg, the sky will look different; you have been looking at the clouds with a particular sun angle and wind angle. Normally it takes a little bit to readjust and become comfortable to this new sight picture. Starting it off at cruising speed and climbing is a great way to start. Starting it in sink and having just lost a lot of altitude, not so much.

Plus, you're higher, so clearly your cross-country speed is better. You might get a little less mileage, but you have a faster speed. However, there are times when this doesn't work. There might not be lift as you near the turn, or you are just turning based on distance on the GPS. Also, if you are going to be under time on a TAT, which is really a distance day and not a speed day, you might need every last foot of distance.

XC Tips is excerpted from the Wings & Wheels e-newsletter, published weekly. Subscribe at wingsandwheels.com/newsletter.

BADGES & RECORDS

SSA & FAI AWARDS

Approved or Recorded through August 15, 2018 • Rollin Hasness

For badge and record information, contact Rollin Hasness at: badgeandrecords@ssa.org

Questions?

A, B, C and Bronze Badges – Melinda Hughes (mhughes@ssa.org) 575-392-1177

All other Badges and Records – Rollin Hasness (badgeandrecords@ssa.org)

See Documentation on www.ssa.org – Soaring Achievement > Forms

- Badge and Record information and applications
- FAI Forms Record Flights

Download your own current copy of the Sporting code – at http://www.fai.org/igc-documents > Sporting Code

HOW TO SUBMIT AN APPLICATION FOR BADGES:

Email applications are allowed ***if*** documents are scanned as PDF files.

- Include the .igc Flight Reorder file with the email – do not send separately.
- We cannot accept documents scanned as .jpg – PDF only.
- We cannot accept ZIP files – PDF only.

OR

Mail the application and File (on stick or Disk) to:
SSA
PO Box 2100
Hobbs, NM 88241-2100

HOW TO SUBMIT AN APPLICATION FOR RECORDS:

STATE RECORD FLIGHTS – Must notify the State Record Keeper and SSA Badge and Record Administrator (badgeandrecords@ssa.org) within 10 days of the flight. Documentation must be postmarked within 45 days of the flight and sent to your State Record Keeper/Governor or, if not available, send to SSA.

US NATIONAL, CONTINENTAL, INTERNATIONAL RECORDS – Notification required to SSA, Badgeandrecords@ssa.org within 7 days of the flight to include the following information:
Type of Claim
Class, Subclass, Pilot category
Record Task
Estimated Performance
Takeoff Location
Date of Finish (UTC)
Name of Pilot, and Co-pilot if applicable
Glider make and model

- Mail Original Documentation and Flight Record File to SSA
- Documentation should be mailed within 30 days of the flight
- For those making US NATIONAL, CONTINENTAL or INTERNATIONAL record applications, do not forget your Required Sporting License:
- https://naa.aero/membership/fai-sporting-license
- An FAI Sporting License is required for all record attempts and all FAI sanctioned events and competitions. Sporting License applicants must be a member of NAA and/or a current member of the appropriate NAA Air Sport Organization. NAA members participating in competitions and/or record setting activities can receive a one-year FAI Sporting License at no cost, but must complete and application for the sporting license.
- *Due to FAI policy changes, you must apply for a Sporting License at least 14 days prior to your record attempt or competition. Applications submitted less than 14 days prior to the event may not be processed in time to allow you to participate.*

PENDING WORLD RECORDS

James M. Payne; 9/3/2017
Crew: Morgan Sandercock
Open Class; General
Absolute Altitude; 52,221 ft
Perlan 2

James M. Payne; 9/3/2017
Crew: Morgan Sandercock
Open Class; General
Gain of Height; 41,770 ft

& Oceana and World Records
Keith Essex; 2/16/2018
Open Class/15M
300/500km Out and Return Speed; 255.13
ASG29E

GOLD BADGE

2756; Lee Murray
2760; Scott Westfall
2761; Ronald Rose
2762; Dave Watrous

SILVER BADGE

7089; Sonja Flesberg
7090; Benjamin Drive
7091; Jeffrey Hart
7092; Paul Roberts
7093; William Palmer
7094; John Sumner
7095; Clemens Ceipek
7096: Joel Moriarty

DIAMOND GOAL

Michael Vaughn; Ventus 2B; Cordele, GA; 311.5 km
Ronald Rose; ASH 26E; FLF Gliderport, TX; 303.7 km
Dave Watrous; Ventus B; Alvord Desert, OR
Eric Foertsch; LS4a; Sterling, MA
John Mittel; ASW27; Moontown, AL
Clemens Ceipek; Discus CS; Boulder, CO

DIAMOND DISTANCE

Scott Westfall; ASH 31 Mi-18; Parowan, UT; 514.7 km

DIAMOND ALTITUDE

James Neff; 1-26e; Minden, NV

GOLD DISTANCE

Dave Watrous; Ventus B; Alvord Desert, OR
Lee Murray; HPH 304c; Estrella, AZ
Clemens Ceipek; Discus CS; Boulder, CO

GOLD ALTITUDE

Ronald Rose; ASH 26E; FLF Nephi, UT
Scott Westfall; ASH 31 Mi-18; Parowan, UT
Philip Lee; SZD 48-2; Air Sailing, NV
Clemens Ceipek; Discus CS; Boulder, CO

SILVER/GOLD DURATION

Benjamin Jakeman; Discus-2b; Nephi, UT
Sonja Flesberg; Libelle 201b; Gardner, KS
Daniel Carpenter; Littlefield Taylor Brown, TX
Jefferey Hart; Discus-2b; Truckee-Tahoe, NV
Mason Dean; Discus-2b; Nephi, UT
Paul Roberts; Discus-2b; Nephi, UT
John Sumner; ASW 24; Hampton County, SC
Paul Sodamann; 1-25c; Sunflower, KS
Joel Moriarty; Cirrus; Richmond Field, MI
Clemens Ceipek; Discus CS; Boulder, CO

SILVER ALTITUDE

Benjamin Jakeman; Discus 2b; Nephi, UT
Charlie Kaiser; Discus-2b; Yoakum, TX
Kyle Smith; Discus-2b; Clovis, NM
Jeremy Lushnat; Discus-2b; Richfield, UT
Michael Marsh; Discus-2b; Nephi, UT
Robert Dierker; 1-26b; Massey, MD
Jefferey Hart; Discus-2b; USAFA, CO
Paul Roberts; Discus-2b; Nephi, UT
John Sumner; ASW 24; Hampton County, SC
Peter Kelley; 2-33a; Post Mills, VT
Joel Moriarty; Cirrus; Richmond Field, MI
Clemens Ceipek; Discus CS; Boulder, CO

SILVER DISTANCE

Benjamin Jakeman; Discus-2b; Nephi, UT
Sonja Flesberg; Libelle 201b; Gardner, KS
Dave Watrous; Ventus B; Alvord Desert, OR
Joseph McKeever; G102; Philadelphia Gliderport, PA

Charlie Kaiser; Discus-2b; Yoakum, TX
Kyle Smith; Discus-2b; Clovis, NM
Jeremy Lushnat; Discus-2b; Richfield, UT
Michael Marsh; Discus-2b; Nephi, UT
Jeffrey Hart; Discus-2b; Truckee-Tahoe, NV
Mason Dean; Discus-2b; Nephi, UT
Paul Roberts; Discus-2b; Nephi, UT
John Sumner; ASW 24; Hampton County, SC
Joel Moriarty; Cirrus; Richmond Field, MI
Clemens Ceipek; Discus CS; Boulder, CO

CALIFORNIA STATE RECORDS

7/7/2018
Danny Sorenson; Discus 2aW; Inyokern
GENERAL 15M/ OPEN SINGLE PLACE
Distance up to Three Turn points; 626.77 sm

GEORGIA STATE RECORDS

5/4/2018
Steve Vihlen; 1-26b; Mallard Landing
GENERAL 13.5m
Distance up to Three Turn points; 67.11 sm
Free Distance; 67.11 sm
Free Out and Return Distance; 45.47 sm
Free Triangle Distance; 65.70 sm
Out and Return Distance; 45.47 sm
100 km Speed Triangle; 30.61 mph

A BADGES

David Bearden; Austin, TX
Sheldon J. H. Becker; Bridge City, TX
Jeremiah D. Canty; Burke, VA
Patrick Carlin; Winter Haven, FL
Jeffrey T. Carneal; Franklin, TN
Michael L. Cooper-White; Orrtanna, PA
Thomas F. Fleming; Huntsville, AL
Randall E. Frost; Boerne, TX
Donald Jones; Mount Juliet, TN
Asad Khan; Austin, TX
Jefferson Koonce; Georgetown, TX
Armando Montes; Decherd, TN
Kevin Mossey; Austin, TX
Kristopher J. Nastro; Peyton, CO
Mateo Norbut; Boulder, CO
Jerry O'Connor; Bethel Park, PA
James Pedersen; Colorado Springs, CO
David Rasmussen; Carbondale, CO
Brady Reisch; Yorktown, VA
Tobias L. Rice; Dickson, TN
John Ulvestad; California, MD
Joshua Wingstrom; Franklin, TN
Doug A. Witkowski; Dripping Springs, TX

B BADGES

David Bearden; Austin, TX
Charles Bittner; Wichita, KS
Jeffrey T. Carneal; Franklin, TN
Michael L. Cooper-White; Orrtanna, PA
Thomas F. Fleming; Huntsville, AL
Randall E. Frost; Boerne, TX
Adam Harrington; Las Vegas, NV
Asad Khan; Austin, TX
Lucas Landau; Aliquippa, PA
Ethan Maxwell; Cincinnati, OH
Larry D. Morgan; Blair, NE
Brady Reisch; Yorktown, VA
Tobias L. Rice; Dickson, TN
Leilani Schroeder; Blairsville, GA
Chloe L. Williams; Cincinnati, OH
Doug A. Witkowski; Dripping Springs, TX

C BADGES

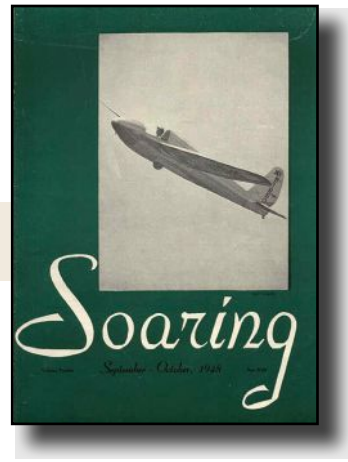
19410. Osvaldo B. Ely; Cedar Park, TX
19414. Adam Harrington; Las Vegas, NV
19409. Ron Houle; Apple Valley, MN
19412. Asad Khan; Austin, TX
19413. D. Justin Lundberg-Neff; Fort Collins, CO
19411. Doug A. Witkowski; Dripping Springs, TX

BRONZE BADGES

2384. Osvaldo B. Ely; Cedar Park, TX
2383. Paul Novacek; Arlington, TX
2386. Norman W. Robinson, Jr.; Victorville, CA
2385. Doug A. Witkowski; Dripping Springs, TX

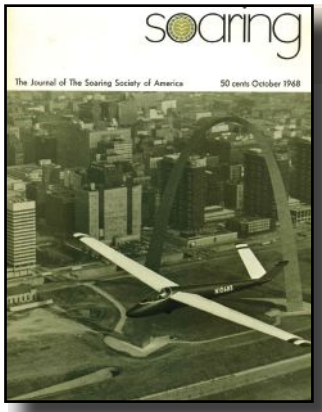
SOARING MEMORIES

REMEMBERING THE PAST BY JACK WYMAN



Seventy years ago: September / October 1948

Harland Ross (1959 **H**all **o**f **F**ame) moved to Bishop, California because "it is mandatory to have … proper atmospheric conditions if one wishes to better existing [soaring] records." Ross explored the nearby Sierra wave in airplanes, frequently with the engine off. But, as any serious glider pilot knows, "good [soaring conditions] happen when you are not prepared." On one such day in an L-K glider without O_2 or heavy clothes, "I was soon carried up to 20,400 feet… and was as cold as a cake of ice … the snow on the mountains 10,000 feet below did not make me feel any warmer." Paul MacCready (1954 **HoF**) was *almost* totally prepared (O_2, heavy clothes, insulation, heating pads) and had quickly reached 21,000 ft when his canopy began cracking. With no spare canopy on board, down he came. Despite defective turbo-superchargers in his Lockheed F-5G, Bob Symons (1958 **HoF**) flew to 35,000 ft, thanks largely to the wave. Ross predicted, "with a pressurized [sailplane], it will undoubtedly be possible to attain altitudes of over 40,000 feet." Yup … and counting!



Fifty years ago: October 1968

Sylvia Colton reported on the 11th World Gliding Championships from Leszno, Poland: 102 gliders, 25 towplanes, and crappy weather, "provoking that comment made so frequently by contest directors, 'This isn't normal weather for this time of year'." Nevertheless, "44-year-old A.J. Smith (1968 **HoF**) [came] to win – and that's precisely what he [did]." But barely. Days Three through Six, AJ was first overall, with Belgian Henri Stouffs close behind. Day Seven was "a near disaster" for AJ, who finished 18th, allowing Stouffs to take first overall, with rain forecast for the next, *and final*, day. But Day Eight was good enough for a straight-out speed task; AJ's tie for 6th was good, but he'd needed spectacular. So close/so far from victory! AJ abruptly departed the scene before learning Stouffs had "spiraled out of first" with a terrible showing. Final scores came after midnight and until then nobody, especially not AJ, knew he'd won the Worlds. Luckily, somebody found AJ and got him back to the contest in time to stand atop the winner's platform at closing ceremonies. www.youtube.com/watch?v=WFWihII9Jfc at 5:01 and 13:22.

Twenty-five years ago: October 1993

Even on blue days, soaring birds seem to know where their next thermal is. How do they do it? Tom Phillips suggested birds can hear the motion of thermals via infrasound, i.e. <20 Hz., the lower limit of human hearing. He suggested "someone" put a directional microphone on each wing tip, transform the signals into human audible range, and feed this into stereo earphones. *Voila!* The audiophilic sailplane pilot "can hear [and locate] the bubble and plop of the thermal he can't see." Fly directly to your next thermal. Guaranteed! Sounds uplifting! *Someone??? Anyone???*

Schleicher's new ASH-26 received fulsome praise from an awestruck connoisseur. "Distinctly agreeable, engaging liveliness, sensitive response, docile stall, well-harmonized, excellent high speed performance, unique extended laminar length, easily controlled final approaches. The right choice of airfoil has been proven." Wow! Lavish plaudits indeed! But hold on, doesn't Schleicher include the designer's last initial in the glider's designation? AS*H*, as in *Heide*? Surely the reviewer, one M. Heide, was not Schleicher's head designer, Diplomingenieur Martin *H*eide?

Exploring the Archives

- Vic Saudek (1980 HoF) related how Bill Albright received his "H_2O C" at El Mirage at 9:27 pm on June 19, 1948. "Extry! Extry! Read all about it!" P 15 of Sept-Oct 1948.
- Besides time, the FAVRE-LEUBA-BIVOUAC wristwatch displayed altitude and barometric pressure. "Desirability to the airman is unmatched." Only $155, i.e., $1,106 in curren(t)cy. Photo on p 7 of Oct 1968.
- Get the appalling truth on competition pilots straight from their crews at the 15-Meter Nationals in Pennsylvania's Amish country. "The retrieve is easy, dealing with the pilot is not." Oct 1993, p 26.

The SSA greatly appreciates the support of its members through both major gifts and our annual Eagle Fund Drive

SOCIETY OF EAGLES

Recognizing those who have made or declared intent to make major gifts

BALD EAGLES have made lifetime aggregate donations over $50,000

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Anonymous
Rudy Kunda
Ben Green Estate
Lawrence Wood
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Burke Family Trust
Mozer Family Trust
Page Family Trust

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David Robertson
Phil Umphres
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Pat Costello

GOLDEN EAGLES have declared their (non-binding) intent to make a gift from their estate of over $50,000

Carol Ann Garratt
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TAWNY EAGLES have declared their (non-binding) intent to make a gift from their estate of over $10,000

Phil Umphres

2018 EAGLE FUND DRIVE

This month's donors:

GOLD – $500-$1,999

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BRONZE – $10-$99

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James Parks
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In Memory of Richard "Dick" Carter.
Noah Stange
Daniel Stephenson
Roger Willis

If you would like more information on the Society of Eagles, or giving to the Eagle Fund drive, please e-mail us at mylegacy@ssa.org.

SOARING CALENDAR

CONTESTS and SPECIAL EVENTS

Event sponsors are requested to submit details of their events for the calendar. The submission deadline is the 15th of the month, at least two months prior to the cover date (e.g. February 15 for the April issue). Email calendar listings to: feedback@ssa.org

October 7-13, 2018, Region 4 North Contest, – Fairfield, PA – Hosted by the Mid-Atlantic Soaring Association. Practice day October 6, 2018. Come fly the beautiful autumn colors of Central PA and experience the possibility of thermal, wave, and ridge flying. Hotels and restaurants nearby. Contact: Contest Manager Catherine Williams at region4n@gmail.com. Details: http://www.midatlanticsoaring.org/?page_id=40. Please register online at http://www.ssa.org/Contests?cid=2423.

October 12-28, 2018, Vintage & Classic Sailplane Camp – Marfa Gliders Soaring Center, at Marfa Municipal Airport, Marfa, TX. Burt Compton invites you to bring your colorful vintage or classic sailplanes to historic Marfa. Marfa was the site of the 1969 soaring film *The Sun Ship Game* and is the 15th National Landmark of Soaring. Located in southwest TX near the scenic Davis Mountains and Big Bend National Park, Marfa is a destination for artists, writers, musicians, and soaring enthusiasts. Excellent hotels, restaurants, and BBQs in "Burt's Backyard." Take a flight with me in my convertible ASK-13 "Cabriolet" with the open canopies. Leather helmets provided! Make the drive to Marfa or fly airlines to El Paso, TX. RSVP! Contact: Burt Compton at marfagliders@aol.com.

October 13-14, 2018, Hood River Glider Weekend – Western Antique Automobile and Aeroplane Museum (WAAAM), Hood River, OR, on the grounds of the Ken Jernstedt Airport (4S2). Setup and derig on October 12 and 15. Tows available. Camping on request. Attractive off-season hotel rates. Beautiful fall colors. Information: Judy Newman at 541-308-1600 or info@waaamuseum.org.

April 22-27, 2019, Region 5 North Contest – Perry, SC – Hosted by Rhonda and Allison Tyler, Jr. Practice days April 20 and 21, 2019. Contact: Rhonda Tyler at 803-564-5226 or rtylersc@yahoocom.

May 12-18, 2019, 20m Multi-Seat Nationals – Albert Lea, MN – Hosted by Leon Zeug. Practice day May 11, 2019. Contact: Leon Zeug at 612-590-7157 or region7sc@gmail.com.

May 13-18, 2019, Region 7 Contest – Albert Lea, MN – Hosted by Leon Zeug. Practice day May 12, 2019. Contact: Leon Zeug at 612-590-7157 or region7sc@gmail.com.

May 20-25, 2019, Region 2 Contest – Reedsville, PA – Hosted by Mifflin Soaring Association. Practice day May 19, 2019. Contact: Janine Acee at 814-234-0236 or j9mifflin@gmail.com.

May 30-June 6, 2019, 1-26 Championship – Moriarty, NM – Practice day May 30, 2019. Special sponsorships for pilots 30 years of age and younger who qualify. Information: www.126association.org.

June 4-13, 2019, 2019 Club Class Nationals – Yoder, KS – Hosted by Kansas Soaring Association. Practice days June 2 and 3, 2019. Contact: Tony Condon at 515-291-0089 or abcondon@gmail.com.

June 18-June 27, 2019, Open Class 15-Meter Class, 18-Meter Class Nationals – Hobbs, NM – Hosted by Llano Estacado Soaring Society. Practice days June 16 and 17, 2019. Contact: Edre Maier at edre@fiberpipe.net.

June 22-July 1, 2019, Standard and Sports Class Nationals – Waynesville, OH – Hosted by Caesar Creek Soaring Club. Practice days June 20 and 21, 2019. Contact: Chuck Lohre at 513-260-9025 or chuck@lohre.com.

July 15-July 20, 2019, Region 11 FAI Class – Truckee, CA – Hosted by Truckee Tahoe Soaring Association. Practice days July 13 and 14, 2019. Contact: Tony Gaechter at 408-621-3140 or tgaechter@gmail.com.

July 15-28, 2019, Mackay Regatta 2019 – Mackay, ID – Look at OLC for the success of the 2018 event; yes, it was cut short by fires and smoke but fantastic while it lasted. Limited space for those using tows. Motorgliders welcome. Mountain flying experience needed, FLARM required and PBL highly recommended. On non-flying days there is hiking, fishing, biking, historical museums, and other activities. Nightly dinner gatherings and more. Places to stay are limited so make reservations early. Contact: Tom Dixon at dixon.18m@gmail.com or 208-867-6953.

SOARING MILESTONES

GLIDING ACHIEVEMENTS and FINAL GLIDE

HOLLISTER, CA – Congratulations to Jerry Klajbor for completing his first solo glider flight on August 12, 2018 at the Hollister Soaring Center. Jerry trained with CFI-Gs Jonathan Hughes and Travis Smith. Well done, Jerry!

HOLLISTER, CA – Congratulations to Matti Oikarinen (C) for passing his Private Pilot – Glider add-on on July 16, 2018 at the Hollister Soaring Center with DPE Joe Scarcella (R). Matti received his glider training from CFI-G Travis Smith (L).

HOLLISTER, CA – Congratulations to Daniel Shi for completing his first solo glider flight on July 15, 2018 at the Hollister Soaring Center. Daniel already has his Private Pilot Single Engine Land rating and is now training with CFI-G Travis Smith for his Glider add-on. Congratulations, Daniel!

HOLLISTER, CA – Congratulations to Michael MacDonald for completing his first solo glider flight on August 1, 2018 at the Hollister Soaring Center. Michael trained with CFI-Gs Jonathan Hughes and Travis Smith. Congratulations, Michael!

HOLLISTER, CA – Congratulations to James Cobey (L) for passing his Initial CFI-G practical test on July 14, 2018 at the Hollister Soaring Center with DPE Dan Gudgel (R). James trained with CFI-G Jonathan Hughes and got his Commercial Glider add-on a few years ago, and now has his CFI-G and Advanced Ground Instructor ratings.

LAKE ELSINORE, CA – Congratulations to Mike Shear (C) from Indio, CA. He earned his Commercial – Glider rating on July 21, 2018 at LESC (Lake Elsinore Gliderport). Shown with his instructor Gregg Caldwell (L) and DPE Mike Havener (R).

LLANO, CA – Travis Michaels flew his first glider solo on July 22, 2018 at the Southern California Soaring Academy, Inc.

LLANO, CA – Joe Curtiss passed his Commercial check ride on July 15, 2018 at the Southern California Soar-

ing Academy, Inc. Joe (L) is shown with DPE Dan Gudgel just after passing the exam.

LLANO, CA – Katie Hetland flew her first solo ever on July 16, 2018 at the Southern California Soaring Academy, Inc.

LLANO, CA – Casey Scholz (R) passed his Commercial Glider check ride on July 20, 2018 at the Southern California Soaring Academy, Inc. DPE Joe Scarcella (L) is congratulating Casey just after completing the exam.

TWENTYNINE PALMS, CA – Congratulations to Artur Tarkowski (in cockpit) from Landers, CA. He completed his first glider solo on July 15, 2018 in 29 Soaring Club's Schweizer 2-33a, N2044T. It was a beautiful pattern with a perfect landing! Pictured here with the club's CFI-G, Gregg Aldwell. Way to go, Artur!

WILLIAMS, CA – Congratulations to David Witthaus (R) on his first solo glider flight on August 5, 2018. David is pictured here with his Instructor, Ben Mayes.

WILLIAMS, CA – Congratulations to Jonah Glasser (R) for earning his Private – Glider rating on his 16th birthday at Williams Soaring Center on July 31, 2018. Congratulating Jonah is Examiner Rex Mayes.

WILLIAMS, CA – Congratulations to Martin Fowler for passing his check ride to obtain his Private Pilot – Glider rating on July 23, 2018. Martin (R) is being congratulated by his Examiner, Rex Mayes.

WILLIAMS, CA – Congratulations to Thomas Galloway for passing the check ride for his Private Pilot – Glider rating on July 29, 2018. Thomas (R) is being congratulated by his flight Examiner, Rex Mayes.

WELLINGTON, CO – Justin Lundberg-Neff (on the left after be-

ing soaked with a bucket of water) is congratulated by his Examiner Bob Ehlinger (C) and his Instructor, Howie Stetser, on passing his Private Pilot check ride with the Colorado Soaring Association at Owl Canyon airport on July 14, 2018.

CLERMONT, FL – Angelica Mihaela Luculescu (L) took her first solo flight on August 10, 2018 in a Blanik L-23, at Seminole Lake Gliderport. On the right is her instructor Steven Gibb.

CLERMONT, FL – Angelica Mihaela Luculescu (C) earned her Private – Glider rating on August 12, 2018 at Seminole Lake Gliderport. DPE Franklin R. Burbank is on the left. Steven Gibb, her instructor, is on the right. Mihaela is from Romania and is working at Seminole Lake Gliderport as on office manager. We wish to congratulate her for passing her first check ride!

CLERMONT, FL – Landis Hoven (L) accomplished his first solo in a Blanik L-23 on August 4, 2018 at Seminole Lake Gliderport. Congratulating him is his Instructor, Steven Gibb (R).

CLERMONT, FL – Alan Cowart (C) from King Wood, TX completed his Commercial Glider rating on August 2, 2018 at Seminole Lake Gliderport. Congratulating him are Instructor Steven Gibb (R) and Examiner Franklin Burbank (L).

CLERMONT, FL – Brad Haynes (L) from Atlanta, GA, completed his Commercial Glider rating on July 29, 2018 at Seminole Lake Gliderport. Congratulating him is DPE Franklin Burbank (R).

CLERMONT, FL – Morgan Bennett (L) from Auburn, AL completed her Commercial Glider rating on July 28, 2018 at Seminole Lake Gliderport. Congratulating her is Instructor Steven Gibb (R) and Examiner Franklin Burbank (C).

CLERMONT, FL – Frank Hippler (C) from Orlando, FL completed his Private Pilot – Glider rating on July 27, 2018 at Seminole Lake Gliderport. Congratulating him are Examiner Franklin Burbank (L) and Instructor Steven Gibb (R).

JACKSONVILLE, FL – Congratulations to Amadeus Zhukauskas,

who earned his Private Pilot – Glider add-on rating on July 21, 2018, at the Herlong Recreational Airport. Amadeus is a member of the North Florida Soaring Society, which is based at Herlong. Amadeus (L) is shown here with DPE Franklin Burbank (C) and CFI-G Phyllis Thorpe (R).

DILLINGHAM AIRFIELD, HI – Jonah Pascual passed his Private – Glider check ride with Hawaii Glider and Sailplane Academy on June 18, 2018. In the photo are Brian Neff, CFI-G (L), Jonah (C), and Yuko Matsumoto, DPE (R).

YODER, KS – Matt Reese passed his Commercial check ride on July 17, 2018. DPE was Charles Pate. Recommending Instructor and check ride tow pilot was Tony Condon. Matt trained at Sunflower Gliderport with the Kansas and Wichita Soaring Associations.

ADRIAN, MI – Congratulations to father and son Nathan and Cameron

Kemppainen on their first solo flights on July 29, 2018 at Adrian Soaring Club. Nathan and Cam were able to accomplish their solos and be in the air at the same time during their flights. Nathan soloed the club's trusty K-13, and Cam soloed in a classic K-7. Cam is currently 14 years old and should have no problem licensing at 16. L to R: Instructor Matt Schultz, Nathan, Cam, and tow pilot Brandon Schultz. Matt and Brandon are also father and son. Brandon is 19 years old and in his second year towing gliders at Adrian Soaring Club.

STANTON, MN – On July 22, 2018, 14-year-old Ilya Connolly is doused following his first solo flight in the Minnesota Soaring Club's ASK-21. L to R: Ilya's supportive grandfather, Ben Connolly (who made Ilya's dream of flight possible), Ilya, and Stephen Nesser, Flight Instructor. Water bucket bearer and Field Operations Officer Chris Kimble is in the background.

EAST LYNNE, MO – Courtney Landis did his first solo flight July 22, 2018 in the Midwestern Soaring As-

sociation's 2-22 near Kansas City! Instructor Ron Leonard signed him off for this first solo.

OMAHA, NE – Congratulations to Omaha Soaring Club member Larry Morgan for achieving his B badge on the last flight of the day on July 21, 2018. Enthusiastic is perhaps an understatement for Larry's joy of soaring. As a student pilot, he now has his A and B badges, has passed his Private Pilot – Glider FAA knowledge test, and serves as Club Treasurer. Larry is shown standing beside the club L-23 after his flight. The B badge was awarded by Jaime Alexander, CFI-G.

BLAIRSTOWN, NJ – Luke du Plessis (R), aged 16, completed his Private Pilot – Glider check ride at Blairstown Airport on June 16, 2018. He would like to thank his Instructor, Mr. Rick Healy, Aero Club Albatross,

and Jersey Ridge Soaring for all their encouragement and support. Also, thank you Mr. Randy Rickert (L), FAA Flight Examiner.

RENO, NV – Fred Morris (C) passed his Private Pilot – Glider check ride at Air Sailing Gliderport on August 5, 2018 in conditions made challenging by reduced visibility from the California wildfires and a TFR boundary 2 miles from the airport. At his left in the picture is his instructor, Ed Winchester. On his right is the DPE Mark Montague. Happiness and smiles all around.

WAYNESVILLE, OH – Fifteen-year-old Booker Atkins completed his first solo flight on August 4, 2018 at Caesar Creek Soaring Club. Tom McDonald provided the primary endorsement and Rich Carraway did the second sign-off. Booker was on track to solo on the last day of youth camp in July but some severe weather intervened. Despite this missed opportunity, Booker fully engaged and worked very diligently during camp to complete his pre-solo requirements and soloed two weeks later. Booker was awarded the Dennis Purduski Flight Training Scholarship earlier this year and is very grateful to have been entrusted with this gift.

HINTON, OK – On July 14, 2018, Ian Jones (L) made his first solo flight in a Schweizer 2-33A at the Oklahoma Soaring Association. Ian is shown here with his proud instructor, Shane Preston (R). Ian has been a member of the Oklahoma Soaring Association for about 1 year. He is also an accomplished sailor and participates in various sailing competitions in Oklahoma and other locations in the U.S. Ian says he finds many similarities between the sport of gliding and sailboat racing and enjoys the challenges that each offers.

HINTON, OK – On July 14, 2018, Jeffrey Walraven (L) made his first solo flight in a Schweizer 2-33A at the Oklahoma Soaring Association. 15-year old Jeffrey is shown here with his proud instructor, Shane Preston (R). Jeffrey and his father Jeff have been members of the Oklahoma Soaring Association for about 3 years, and have discovered that fitting flight instruction into a busy teenager's life has been a challenge.

JEFFERSON, SC – Matthew Haupt (R), age 17 and only days away

from starting his first day of college, proudly displays what is left of his shirttail after successfully making his FIRST SOLO in an SGS 2-33 on August 4, 2018 at Bermuda High Soaring. His cousin James Buttion (L) worked the line for Matthew and is only 8 flights behind in his training to also become a glider pilot! Matthew's T-shirt collar may look funny because he chose to wear one with writing and graphics on the back. CFI-G Michael R. Simmons (C) made Matthew wear his shirt backwards so after soloing he could cut his shirttail and have a plain background on which to "Sharpie" his congratulations! Matthew leaves this week for the University of Missouri to study Mechanical Engineering, but he has his sights set on being a professional pilot … so will see if his major changes! Congratulations, Matthew!

EAGLEVILLE, TN – Most people on their first solo flight are ready to get back down to earth, but here Toby Rice is smiling after releasing at 2,000 ft MSL, taking a thermal to 5,500 ft MSL, and having to fight to get back down as conditions were so good!! But after giving up, he set the ASK-21 up for a nice solo landing. Congratulations to Toby on his first solo flight on a good day, July Friday the 13th, 2018 with no problems and earning him his SSA A and B badges. Jami Guin was his Instructor, and Chris Hollins the tow pilot.

BRIGGS, TX – Kevin Mossey (L) soloed in an SGS 2-33 on July 21, 2018 with the Fault Line Flyers Soaring Club under the guidance of Instructor Bill Brinkman (R). Both pilots were born in Schenectady, NY, and it was 106 degrees F!

BRIGGS, TX – Jeff Koonce soloed in an SGS 2-33 on July 28, 2018 at the Fault Line Flyers Soaring Club. Instructor Greg Aaron is on the left and Instructor Bill Brinkman is on the right. Jeff first started his flying career in 1958!

MIDLOTHIAN, TX – Congratulations to Isaac Beiler (L) for performing his first glider solo flight in an ASK-21 on July 19, 2018. James Bristol provided the tow. Isaac is a youth member of the Texas Soaring Association and will be a junior at Coram Deo Academy of Flower Mound, TX. Isaac's sister, Isabella, and mother, Cybill, witnessed his first solo flight. Isaac is congratulated by his instructor/father, Donald Beiler.

WALLER, TX –Troy Millican (C, in black shirt) is soaking wet after being expertly drenched by John Riddick (L) after completing his first solo flight in a glider on July 21, 2018. Jim Jackson (R) is the Flight Instructor who endorsed Troy for this solo flight. Troy is a transition pilot taking instruction at the Soaring Club of Houston, along with his daughter Amanda, whom we hope to see in this column in the future. Congratulations, Troy.

WALLIS, TX – After a lot of hard work under the hot southeast Texas sun, David Buttram (L) took his first aviation solo in a Blanik L-23 under the supervision of Instructor Uwe Prigge (R) on August 11, 2018. Greater Houston Soaring Association President Todd Hahn is wielding the bucket of water. Congratulations, David!

NEWCASTLE, VA – Anna Haas, 16, is a rising junior in high school in southwestern Virginia. She just successfully passed her Private Pilot – Glider check ride on July 15, 2018 with Examiner John T. Molumphy, III, at Blue Ridge Soaring Society. Later in the day Anna got to take her dad up as her first passenger! She's involved in

several other activities, including the Civil Air Patrol where she recently soloed in a Cessna 172. Blue Ridge has enjoyed watching her grow and pass milestone after milestone. She hopes to attend the United States Air Force Academy after graduation. She got her driver's license a couple days later, so she can make the 1 ½ hour commute to the gliderport herself. Congratulations, Anna! Anna (C) is pictured with John Molumphy, III, DPE (L), and her Instructor, Chris Zaboji, CFI-G.

POST MILLS, VT – Congratulations to David Lysy (R) on his first solo flight, August 5, 2018, at Post Mills Soaring Club (PMSC). David joined PMSC in the fall of 2017 and looks forward to completing his PP – Glider and flying cross-country in beautiful northern New England. Also pictured is CFI Evan Ludeman (L).

ARLINGTON, WA – Nicolas Alegria completed his first solo flight in an L-23 with Evergreen Soaring Club on August 4, 2018. Nicolas is pictured (L) with his Instructor Eric Haupt.

ARLINGTON, WA – Devon Fitzpatrick completed his first solo flight in an L-23 with Evergreen Soaring Club on August 11, 2018. Devon is pictured (L) with his Instructor Eric Haupt.

ARLINGTON, WA – Congratulations to Kentaro McCann (L) for completing his first solo flight in an L-23 on July 29, 2018 at Arlington Municipal Airport under the supervision of Eric Haupt, CFI-G (R). Kentaro is a member of Evergreen Soaring and wants to become a professional pilot after completing high school. Judging by his textbook landing, he is well on the way!

PETERSBURG, WV – J. Dan Canty (C), a member of Shenandoah Valley Soaring in VA, received his SSA A badge for his first solo in a glider on June 30, 2018. Dan holds a commercial pilot certificate with over four thousand hours in airplanes and helicopters, including instrument ratings. He is shown with two of his Instructors, Walter Grooms (L) and Graham Pitsenberger (R). Dan is now enjoying making solo flights in the club's ASK-21.

Final Glide

Lt. Col. James "Wally" Leland; San Antonio, TX

Owen Banks; Charlotte, NC

Lee Bradshaw; Columbus, MN

Soaring Magazine Milestones Guidelines

Please send all Milestones to editor@ssa.org.

Milestone entries are welcomed for soaring pilots who have soloed, received their private pilot rating, added-on the glider rating to a current power rating, and any additional ratings added to a current glider certificate. Due to the increasing number of Milestone submissions being generated by the membership, the *Soaring* staff asks that the following guidelines be followed:

Text: Individual entries are limited to a minimum of 50 words and a maximum of 100 words per pilot. Entries with multiple persons being mentioned are allowed the same minimum and maximum per person mentioned. Identify everyone shown in photos. Insure that you the text includes; *Who*, *What*, *When*, and *Where*. Text must be written in the body of the email, no attached text files. Please include a headline.

Photos: Must be digital, high-resolution .JPG image files, submitted in the same email as the text file (as a separate .JPG file, *not* embedded in a page of text). The smallest image file size that we are generally able to reproduce in print is about 150 kb, at 300 dpi. Entries with image files smaller than 100 dpi will be returned for correction and re-submission. Generally, the photo files directly from the camera works best. Do not send links to online services such as Shutterfly, send the image file.

Date Format: September 10, 2016 – not 9/10/15, not Sept. 9, 2016.

Changes or Re-Submissions: Re-submission or changes to an entry for any reason require a new text file and a new photo file to be submitted via email.

The *Soaring* staff makes every effort to run all Milestones entries in as timely a manner as possible. The very soonest to expect a Milestones entry to appear is 90 days after submission. Much longer delays can be expected after the end of the soaring season.

If you have any questions, please contact the editor via email: editor@ssa.org

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1982 LS-4A $25,000. SN10B and Volkslogger. Microair PTT. Contact Dewayne 940-627-4595.

SCHWEIZER SGS 1-26E

1974 Schweizer 1-26E. Great plane but needs painting. blue@iglou.com or 859-299-5160.

TWO-PLACE FOR SALE

BLANIK L-23

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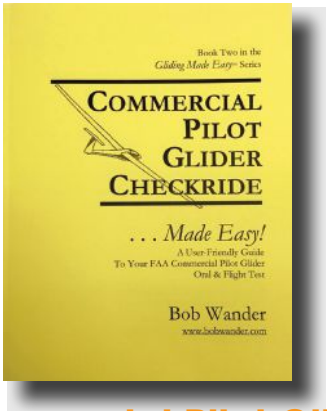

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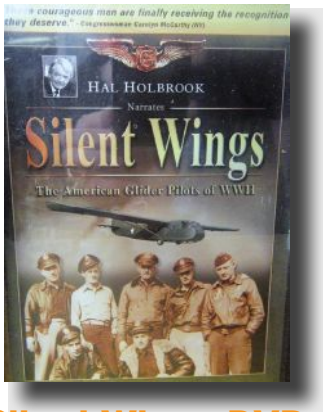

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