



Masthead photo: Dick Otis

From the President

John Noss

The last two months of weather have been a bit disappointing, we lost a few more scheduled days of flying completely, and the soaring has generally been less inspiring than typical for this time of year. Back in September we had just nicked above our all-time record pace in terms of total glider flights for the year, but we are now back below that pace again. Still, this should be our second-best year ever. As we close in on the last day of scheduled operations (14 Dec), this would be a good time for everybody to grab a few last currency flights before the winter 'vacation'. And, remember that if the weather is nice and there is sufficient interest and manpower, we can always put an ad-hoc day on the schedule any time.

Congratulations to Keith Overstreet and Ken Ring, on 23 Nov they both passed their commercial glider pilot checkrides with visiting DPE John Molumphy. I suspect that a commercial double-header must be a club first! There are also several more checkride candidates in the pipeline and ready to go, we are making good progress in moving members through the rating process.

I need to make another pitch to everybody about taking care of the equipment. Our new Gator ground tow vehicle has already taken some hits from people just not being careful. When you put tail dollies and other equipment in the back cargo bin, please be very careful not to beat up the Gator or the equipment. Also,

please just leave the key in the ignition, and if it doesn't want to rotate when starting the engine, make sure it is all the way in before twisting it to the failure point. I just bought a new replacement key for the Gator because somebody was careless and impatient.

We are now officially on the calendar at the Samuels Library in Front Royal for our annual membership meeting on 24 Jan. The doors open at 1000L, the meeting will begin promptly at 1030L. This is an important meeting for the general membership, we will review our operations, finances, and membership situation, discuss future planning options, and elect two new board members. Please plan to be there if at all possible. If you are at all interested in running for one of the two board seats that will become vacant, please talk to any board member. The mandatory annual safety meeting is scheduled for 21 Feb, but the reservation window has not yet opened for the library, so we cannot confirm a location yet for that.

If you haven't already gotten your check in the mail to Bruce Zivic for the holiday party on 6 Dec, you are now late, but can still get added on at the higher rate, please contact Bruce directly. I'm certainly looking forward to another great event at Aspen Dale Winery. Hope to see you all there!

Fly Safe, Fly Often, Have Fun!



Photo: Kaye Ebelt



Photos: provided by Kaye Ebel

Top: Ertan Tete, Robert Gray, Kaye Ebel and instructor Curtis Wheeler.
Above: Curtis in a normal attitude.

Graceful Flying

Kaye Ebel

Curtis Wheeler is Past-President of Skyline Soaring Club, a CFI-G and towpilot. Curtis is a commercial airline pilot, former Naval Flight Officer and SSC's resident one and only-aerobatic flight instructor.

Life Changing Event—It's clear Curtis Wheeler's has a passion for flight, specifically aerobatic flight, and he is passing his passion on to his students. As the only aerobatic instructor for the Skyline Soaring Club, Wheeler provides his expertise to those who want to learn about aerobatic flight or just improve their soaring skills. Wheeler earned his private pilot certificate while attending college in Oklahoma. During this time he was given the opportunity to fly a Citabria, a two place acrobatic trainer aircraft. This was one of the most exhilarating moments in his aviation career. He said, "The first time I flew upside down with my instructor, New Cole, was a significant life event. Exploring a completely different way of using and flying an airplane opened a whole other world to me."

Aerobatic Flight Training Continues—After college, Wheeler continued his flight training in the Navy where his training included aerobatics. He progressed through the power world and gliding become an add on rating. Although there are many advanced maneuvers, Wheeler's favorite maneuvers are the classics. "I appreciate the classic maneuvers like loops and Cuban Eights because they are nice and graceful," said Wheeler about what makes aerobatics so special. He recognizes the need for constant practice. "Aerobatic pilots must practice at least once a month to stay safe. However, the more practice the better you become as you would in any sport," he said. "The Blue Angels work hard every day on their aerobatic maneuvers," he added.

Improving Skills through Aerobatic Flight—When asked about the aeronautical skills that are increased through aerobatics, Curtis responded, "Situational awareness is greatly enhanced because

you are spending more time looking outside. You also get a better feel for the airplane by feeling the G forces in your arms and seat of your pants." The characteristics of a really good aerobatic pilot are many, according to Wheeler. Good pilots take advantage of training opportunities like learning aerobatics. They show a respect for the aircraft, prepare properly for the flight and make sure they and their passengers are safe. Most importantly, they are a good judge of their own limitations. Good judgment is a pivotal aspect of flying and hardest skill for instructors to foster, according to Wheeler. Determining a student's judgment is not easy but can be deduced by their willingness to learn and improve. Curtis is pleased to provide service for private glider pilots, however, the challenge is only having one instructor and one aircraft certified for aerobatics. With such limited resources students need to be patient and realize it will take some time.

Greatest Rewards—One of the greatest rewards of being a flight instructor Curtis said, "Is the opportunity to build relationships with people and imparting instruction to make them a better pilot." Curtis's passion for helping others learn how to become successful, skilled aviators is evident to everyone around him—is demonstrated through his interest in the success of his students, and supportive teaching style.



Student Comments:—Kaye Ebelt: “I recently had the opportunity to take some aerobatic flight lessons with Curtis. It was truly life changing.” Once in the acro box Curtis coached me through a couple of loops. First we oriented ourselves perpendicular

to the runway. He told me to use the white hangar buildings as my aim point. Then began a 45 degree dive to reach maneuvering speed. Once at maneuvering speed I pulled the stick back (with help from Curtis) to reach 3.5 Gs. (I’m pretty sure time stood still for a brief moment while we were flying upside down!)

Then head back and to the side to make sure the wing is parallel the horizon. As we came out of the loop we eased the stick forward and once out gently pulled back again. We immediately went right into a chandelle to regain some altitude.

Next, Curtis demonstrated a high speed pass over the runway. He started the maneuver at 1500’ AGL, wings level and accelerated to 130 KIAS. We flew down runway 28 and pulled up into a teardrop pattern and landed on 10. This was truly a life changing experience and one I highly recommend. Even though Curtis made this look easy, I do recognize the level of proficiency and skill you must have to be able to fly aerobatics.



Robert Gray: “The main reason I’m taking aerobatic lessons is to be safe and comfortable recovering from unusual attitudes and comfortable thermaling at high bank angles like 45 to 60 degrees. I have already been rolled 90 degrees on tow. Although I have not

gotten used to high Gs yet, I am enjoying the Acro lessons and want to continue with them. For now I am lifting weights and practicing squeezing my butt and leg muscles and keeping breathing at the same time. Hopefully next lesson I will pull the loop myself and it will be better than just being the passenger in a loop demonstration. I have had spin training, but I would like some more in a trainer that really spins, maybe even one of those noisy powered ones. The 1-26 is approved for intentional spins. My goal is to have fun safely.”

Ertan Tete: “I am pursuing aerobatic instruction because of the sheer beauty of aerobatic flight but most importantly because I think the precision in aircraft handling and energy management it demands will increase my pilot skills and make me safer pilot. The exposure to unusual attitudes develops better feel of the aircraft and



elevates the situational awareness. Performing aerobatics in an aircraft without engine adds to the thrill and the challenge. I plan on completing the whole Skyline Soaring Club aerobatic syllabus—the opportunity is just too good to pass.



Position the glider so that the nose is perpendicular to the runway. Use the airport hangars as an aim point.



Lower the nose to 45° down and accelerate to maneuvering speed 98 kts wings level.



Apply back pressure to 3.5 Gs. Maintain a constant nose track as the airspeed bleeds off. Look out the side to ensure a straight pull-up. Lay your head back and look for the opposite horizon and ensure wings level. Reduce back pressure and recover.

Let the games begin...





DG1000 Experience

Keith Hilton

I have spent a lot of time over the past few months flight testing at Naval Air Weapons Station China Lake, CA. China Lake has a lot of sandy beaches, but no water for miles! I normally fly into Los Angeles and make the 157 mile drive to China Lake. On the way from Los Angeles on Highway 14, I pass through Mojave, CA, home of Mojave Air & Space Port, and Space Ship Two. Just a bit Northwest of Mojave is the small town of Tehachapi and Mountain Valley Airport. Mountain Valley Airport is the home of Skylark North, a commercial glider operation that offers instruction as well as a variety of sailplanes for rent. I had noted from their website that they had a DG1000S. I was very eager to show off my glider piloting skills in a high performance two-seat sailplane. So on 25 October, while heading back to Los Angeles from China Lake, I finally got my chance.

I leased the DG1000 and hired instructor Roger Tanner to fly along with me. Roger is an Air Force Reserve F-16 pilot and a civil service pilot at Edwards AFB. He instructs and gives glider rides for Skylark North.

The DG1000 is a high performance, 18 meter, 46.5 L/D two place glider. Skylark's DG1000 also had electrically operated retractable landing gear.

It was definitely a unique experience flying from a commercial gliderport. To begin with, the tow pilot helped push the glider on to the "runway," attached the tow rope, and then jumped into the Pawnee to ready us for the tow. Mountain Valley Airport is at an elevation of 4,220 ft and has a 4,890 foot x 36 foot runway. But did we use the runway? Nope. We took off from a "runway" that was just wide enough for the Pawnee's wheels and not in much better condition than a mule trail.

Roger gave me some quick instruction and went over all the controls before our flight. The takeoff and tow went great. At 4,220 ft MSL it took a while to get off the ground. I didn't think the Pawnee was ever going to leave the ground. We took a 4,000 foot tow until we were just above the Tehachapi mountains and released. It seemed like we were low enough to touch the trees. We immedi-

ately found ourselves in a bigtime sink. However, it didn't take long and we were in an abundance of lift (6–8 knots) off the mountains. We had a significant amount of wind too. We soared and had a great discussion about people that Roger and I both knew from our Air Force careers.

After about a half hour of thermaling, Roger had me fly the pattern over Mountain Valley Airport at about 4,000 feet. We then flew west of the airfield and had to nearly force the glider down (gear and spoilers extended) to return for a standard 1,000 foot entry into the pattern. I flew a pretty good pattern, but Roger had to "coach" me a bit on the landing. Like our trainers, the DG's wheel brake is activated with the spoiler handle. Roger noted that if you apply the brakes too hard the tail wheel will come off the ground. I didn't demonstrate that on landing.

The DG1000 is a very nice sailplane to fly and performed very well in thermals. It may have just been the way I had the glider trimmed during the flight, but the controls felt very heavy to me. That could be because it is a heavy glider. The ASK-21 and Grob-103 seem much more docile to me.

I very much enjoyed my flight in the DG and it was a great way to spend the afternoon. I encourage you to fly one out if you ever get the chance.

Above: Skylark North and their DG1000.

Below: Instructor Roger Tanner and Keith Hilton

Photos: from Skylark North



Flight Simulator

Shane Neitzey

I have gathered the final piece to my glider flight training simulator—an actual 2-33 fuselage—two to be exact. Now all I have to do is put it all together and hope it works well. When complete, I expect it may resemble an H. G. Wells time machine.

The goal is to make a device that will significantly reduce the number of flights-to-solo for newbies.

Is there anyone who would like to help me various evenings and weekend days with this project? There will be some engineering, electronics, welding and general tinkering.

Making the back seat very comfortable will be a must-have for Jim Kellett.

The plan is to use the real fuselage with real rudders and spoilers. An electronic joy stick with force feedback will replace the original stick. Rudder pedals and spoilers to be integrated with simulator controls and adding appropriate feedback with springs etc.—and a large monitor or monitors. We will also need to develop protocols and lesson plans.



Above: The visionary in his laboratory.

Left: Fuse two.

Below left: Many years in the attic.

Below: Thank you Caesar Creek Soaring.





Above: Skyline Soaring Club members Keith Overstreet (left) and Ken Ring (right) both passed their commercial glider pilot checkrides on November 23, 2014. They're shown here being congratulated by visiting examiner John Molumphy (center) in front of the club's ASK-21. Photo: Kaye Ebelt

It takes a sizeable covey of avians to make a successful day such as November 23. Much more comfortable in the air, they roost here to be recognized for a job well done. Left to right: Ertan Tete, Mike Ash, Mario Simula, Matt Linger, Keith Overstreet, John Molumphy, Keith Hilton, Ken Ring, John Noss, George Hazelrigg, Kaye Ebelt and Dick Garrity. (There were others as well, these just showed up for the photo op. Photo: James Perlmutter.





Away, you rolling river...

Those that are ground-bound never get to see our scenic and historical playground as we do. At ground level life goes about its

necessary business. All the myriad needs of humans are nurtured and implemented continuously—and for most this middle seat in life is enough. But for us there is much more. We want to wheel and soar in the sunlit silence.



*Left: After long flights Greg Ellis and Gordon Roesler pilot the Gator.
Below: Vern Kline works the wave while Carlos Troncoso photographs the scenery from the back seat of the Grob.*



Two Different Winter Days



Photo: Phil Jordan



Photo: Rick Hagen



Heads up, instructors—

Virginia Soaring Association: Stay tuned for more information about the 2015 Soaring Summit to be held on Saturday, January 17, 2015 in Charlottesville, VA! This winter's summit will continue the tradition of focusing on a common important area of Club management by inviting ALL Virginia CFI(G)s to participate in a day-long forum on the general topic of "how to help instructors maintain professionalism".—*John Noss*

if you're looking for an easy way to donate to SSEF while you shop for Christmas this year....do you're shopping through AmazonSmile, Amazon donates 0.5% of the purchase price to Skyline Soaring Education Foundation. AmazonSmile is the same Amazon experience you're used to, including Prime, but a portion of your purchases go to a good cause!

Support Skyline Soaring Education Foundation by shopping at AmazonSmile. Bookmark the link:

<http://smile.amazon.com/>

Happy Holidays and thanks for your support!
— *Charles Bennett Norman*

The Petersburg Wave Camp is scheduled for Friday, Feb 20 through March 1.

Subscribe to the mailing list by going to:

<https://groups.google.com/forum/#!forum/wave99-info>

It looks like we have a lot more interest for 2015 than we did for 2014 or 2013. Now... if we have a Petersburg contingent; which awesome member wants to be the Chief Petersburg Web Coordinator Master of Ceremonies and make all this stuff happen? We had Sobiek Dziadek in 2012, Dan Ernst in 2013, nobody in 2014 (too snowy). Which member is up to the task this year? Can I get a volunteer?



Skyline Soaring Club, Inc.

is a private, 501(c7) non-profit organization, dedicated to the enjoyment and promotion of the sport of soaring. SSC is based at the Front Royal-Warren County, Va. Airport and is an affiliate club of the Soaring Society of America.

For information about the club go to
www.skylinesoaring.org

President—John Noss
Secretary—Jim Kellett
Treasurer—Steve Rockwood
Assistant Treasurer—Dan Ernst
Membership—Steve Rockwood
Chief Duty Officer—Craig Bendorf
Chief Tow Pilot—Martin Gomez
Chief Flight Instructor—Piet Barber
Safety Officer—Charles Norman
Skylines Editor—Phil Jordan
flyingfish2@cox.net

Directors—John Noss, Jim Kellett,
Richard Garrity, Keith Hilton,
Ertan Tete, Martin Gomez

Could I get a tally of members interested in performing the tasks of:

- >Disassembling and towing our ASK-21 to Petersburg
- >Getting a demonstration in the wave
- >Being an instructor there on the wave days
- >Being an instructor on the non-wave days
- >Towing out personal gliders and doing personal private ship soaring there
- >Members who would like to camp there
- >Members who would get a hotel there
- >Members who are interested only in driving out there if it's going to be good soaring on that day
- >Members interested in getting intense instruction on non-wave-flying days.
- >Disassembling and towing the ASK-21 from Petersburg to Front Royal and re-assembling it once it gets back to Front Royal—*Piet Barber*

We've talked about vortices and lift. You may want to check this out, it's on hummingbirds.

<http://www.natureworldnews.com/articles/10623/20141124/aerobatic-hummingbirds.htm>

— *George Hazelrigg*

OPS report-Sunday, November 16—In a word COLD! ...Operations commenced at 9:30 AM and consisted of 18 instructional flights and 1 supervised first solo. No soaring flights. ... *Tommy Childress* completed his first Flight Review since being rated. Congratulations to *Steve Holdcroft* for his first solo and textbook landing under the supervision of *Bob Sallada*. Welcome to *Mike Heinz* who joins us as an introductory member and had his first two instructional flights today. Operations terminated about 4:30 PM due to rain. No incidents. A good training day.—*Bruce Spinney, DO*

Carolina Wave Project

Event Location: Shiflet Field, Marion NC

Dates: 2/24/2015—3/5/2015

Fly in wave to FL260 (weather permitting) from Shiflet Field (9A9), a wide grass strip near the base of Mt. Mitchell, highest point east of the Mississippi. Upon registration and payment, your spot is secure and materials and full info will be sent.

Fees: \$245. Includes all oxygen fills in your tank(s) and field use fee. Tows additional. Make check payable to CSA. Mail check to:

CSA
PO Box 53
Benton, TN 37307

Turnpoints: <http://soaringweb.org/TP/Shiflet> - .sua file includes wave window box.

Website: <http://wavecamp.chilhowee.com/>

Online Registration: <https://www.surveymonkey.com/s/JMXZ6KC>

Contact: Sarah Arnold info@chilhowee.com Phone: (423) 506-9015

I got my altitude diamond here in a 1-23 ... a long time ago. Lovely place!—*Jim Kellett, Resident Curmudgeon*