



Masthead photo by Dick Otis



Message from the President By John Noss

Well, this last month certainly flew by. It's been another astonishingly busy month, we now sit at 468 glider flights for this year, compared with 279 at the same date in

2011, which was an all-time record year. We've cranked out a lot of very productive student training flights (thanks especially to Bob Sallada and Friday ops volunteers), and we've seen some notable personal flights including Shane Neitzey's ambitious cross-country boomerang retrieval attempts.

Coming up next week is the 'away day' excursion to Bill Burner's field near Woodstock. This will be the first year that we are deliberately making the offsite location the primary flying site, and dedicating all the club aircraft. We will launch and recover from Front Royal, but the duty crew, both towplanes, and all four club gliders will be at Burner Airfield for the day. Tom Gainer is the project officer, and is coordinating manning and glider reservations for private ships. This is a great opportunity to see something different, enjoy operations from a beautiful grass strip, and socialize. It's only 14 nm away by air, so an easy jump across the Massanutten ridge and you are there. Our thanks in advance to Bill Burner for allowing the club to use his place! Please go out of your way to thank him personally while you are there.

As always, there are some odd projects around the

airfield in search of volunteers. The older two-seat glider fly at the U.S. Navy's test pilot school—I consider this trailer, which is currently configured for the ASK-21, really both an honor and a privilege.

needs some attention, to include new fenders and some corrosion control on the frame and body panels.

Anybody able to lead the effort to start working on this?

Also, the club ops utility trailer needs work, minor items like replacing or repairing the tow hitch, securing the side panels, and most importantly organizing the contents. With a bit of creativity, this could become a much nicer layout, with a place for everything and everything in its place. Need a volunteer.

Finally, I will appeal again to take seriously the process of settling your bill before you leave the airport each flying day. It is NOT the job of the duty officer to catch you before you leave, it is your responsibility to find the duty officer and pay by check (or charge to your account if you have a positive balance). We put this in the recently revised Skyline Operations Manual, by the way. If you haven't read that yet, please download it from the club website (under public documents), and read it cover-to-cover.

Fly Safe, Fly Often, Have Fun!



Breaking the Tow Rope

By Tony Doggett

I am still new to soaring, having made my first flight on a FAST voucher in November 2011 with no prior flying experience. I wasn't sure if this sport would "take" with me, but I kept coming back to the field, and pretty soon I was hooked.

For the first few months I trained with whoever was DI, and I learned a great deal from Piet, George, John, Shane, Scott, and Charles. Then Bob took me under his wing, and he has been providing regular, consistent (and patient) instruction since then. Given Bob's incredible skill and background—I hear he taught astronauts how to

Slowly but surely I am starting to get results. After 30-odd flights I feel more comfortable in the air, especially now that I understand when I'm flying 60 knots an hour with my nose pointing at the ground, I'm not actually flying at the ground at 60 knots per hour. (Seriously, it took me awhile to figure that out.) My takeoffs aren't always pretty, but at least I've not swerving all over the runway; I am more or less checked out on aerotow; I can do passable slips and stalls; I know how to fly the pattern; and I'm getting close to attempting an unassisted landing.

My Achilles heel is The Box. While I'm starting to get used to passing through the wake, the first time was like descending through Purgatory into Hell. What kills me is the angles; craning my neck to look way up there at the tow plane, trying to stay level, keeping calm, and trying not to do anything that will drag us all crashing down to the ground. Once I get below and secure the correct upward visual, I can usually nudge myself over to the lower-left position, but then I get all squirely and angle rightward back through the wake, making my box a triangle. So, still some work needed, both mechanical and psychological...

The other day we were flying into the sun at around 2,800' MSL when I attempted a right-handed box. The idea was to edge right first, then descend, then move back left and rise through the wake. During the rightward transept, however, a huge amount of slack developed, and it was so sudden that I was unable to make the necessary correction in time. The rope pulled taught and then, with a sickening jolt, snapped. Fortunately we had plenty of altitude, but it was dramatic and unsettling to say the least. We got ourselves stabilized, entered the pattern, and made an uneventful landing.

It was the end of the day, so no one missed out on a flight. However, folks had to stay behind to repair the line and spool it back into the Pawnee before putting the planes to bed for the night. I was heavily chagrined but tried to be helpful, rather than stand around looking at my shoes. I was in equal measure impressed and grateful that no one called me out or made me feel incompetent in any way; indeed, people kidded me on my misfortune and shared other experiences with slack lines and broken towropes.

I decided to record this episode for two reasons: first to report on what happened, and second to take some of you experienced sky dogs back to your early days, before you got comfortable zooming around in these magnificent vehicles we call sailplanes, and recall the thrill of learning how it's done. My adventure was not pleasant, but it taught me something, and it solidified

my determination to become a safe, accomplished glider pilot. Boxing the wake is a rite of passage, and with Bob's help I will nail it eventually. Just don't cut me any slack.

In defense of the 1-26

Bill Vickland
Secretary Treasurer
1-26 Association



Meteorologist Drew Tuma Loving the view

Our 15 Minutes...

Skylines was the subject of a short new weather segment by Drew Tuma, the young meteorologist from TV3 in Winchester. Not sure when the article will air, probably at the end of the second week in May. He was doing a video piece on how gliders soar in thermals. We didn't have any cumulus clouds for a background or as a visual aid but a few nice strong blue thermals that were shared with 3 bald eagles, and later with Mike Ash in H3 for some good photo opportunities. In the snapshots are Drew inflight in the front of the K, and Tom Park being interviewed.

Drew said even if we cannot receive Winchester TV, there should be something available on their website, he will let us know. Thanks to everybody for making this a great flight for him, certainly seemed like he walked



Thomas Park in the limelight



Ken Eckman in 160 by Dick Otis

The glide ratio rule of thumb is approximately correct for the 1-26. The 1-26 has a 21.5:1 glide ratio which would predict 4.3 miles per 1000 which is pretty close to the actual 4.4 miles per 1000..

However, I really am curious as to why a email thread produced lots of 1-26 bashing jokes in follow up emails. I take no offense, but I wonder if new pilots are misinformed. Several years ago, I was told by a new pilot that he would not like to fly a glider (1-26) in which he could not see his landing point over the nose of the glider. His facetious observation was only partly a joke. He entered the glider world, tinkered around with local soaring, presumably got bored and quit. In my 50 years of soaring, I have seen this often. Many pilots never find the fun part and give it up. Yet they were never willing to try the 1-26, I think because ego gets in the way.

So, for new pilots I offer the following actually true interesting information. In the hands of a moderately experienced pilot the 1-26 will usually out climb the 40:1 glass birds. The difference is in the turning radius and the strength of the thermal core. A 1-26 can thermal in a 160 foot radius at about 36 mph. The difference between the core and the peripheral lift, may be as much as 200 fpm.

The cross-country capabilities of the 1-26 are much better than glass birds for the new pilot just learning XC flying, because the 1-26 can land almost anywhere safely. Does anyone doubt that Ken Ekman and Dave Collier, both relatively new XC pilots, are safer XC pilots than most of the rest of the Skyline pilots. It is truly a different form of soaring and worth exploring by new pilots if for only a couple of years. You will be better at thermaling and XC flying after two years, and if you have

the need to "move up" at that time, you will be a better glass bird pilot.



Pushing "160" out for launch By Dick Otis

Be forewarned however, you may discover that flying the 1-26 is great fun, and that being a member of a fun group like the 1-26 Association is really rewarding. So you may be hooked and may never "move up". You can own a XC ready 1-26 for \$8000. You can develop your competition skills in three or four contests a year, competing against other 1-26s. You don't have to invest big bucks every year just to stay on a par with last year's winner. The 1-26 contests are very competitive, but not cut-throat. They provide an excellent environment for learning how to make your bird go fast.

Portable GPS

By John Noss

Yesterday at the field I overheard a few folks talking about ways to get usable GPS navigation help in the cockpit. Other than high-end dedicated



glider navigation computers that hook into onboard power and data, there are lots of other cheap or free options. Modern smart phones support lots of free GPS navigation and moving-map utilities, and some excellent soaring-specific navigation programs, I have a handful on my Android and they all work great. I often carry an old hiking GPS as a backup, with coordinates hand-jammed in for the destination. It does nothing other than provide distance and bearing to the destination, but that's a great

Another option, if you have a portable GPS for your car, is to check the owners manual and see if it has settings for 'off road' navigation. Most Garmin units do. If so, you can type in the coordinates for a 'custom point of interest', select off-road navigation, and the unit will draw a straight purple line from where you are (when you ask) to the destination, and then continue to update range and estimated time en route based on your ground speed, while showing your current location and the destination and original course line on the map. Further, if you want to upload an entire set of custom POI's, Garmin has a free POI Loader (software) on their customer support site – you just hook up the GPS to your computer, launch the program, identify a source text file in csv format (decimal longitude, decimal latitude, and name), and upload. As an example, the attached csv file has 104 nearby airports and navigation turn points that I typically use for soaring tasks, sorted by distance from KFRR (Burner airport is on line 22). Now the ten-year-old portable GPS in my car has the same data as the systems in my glider, and the unit is happy to travel around in a shirt pocket and run for hours on its internal battery. There are so many ways to skin this cat. If you have questions, I will be happy to help.....



About That Orange Bag...

Recently, on pre flight of the ASK-21, Mike Christensen noticed that the tape along the horizontal stabilizer was cracked where it mates with the vertical stabilizer, so we thought it might be smart to remove the horizontal stabilizer / elevator, inspect, and reinstall. So, we went to pull the assembly / dis-assembly tool bag out of the storage compartment in the right wing root, where it is normally kept, and it was nowhere to be found. We eventually discovered it laying in the ops trailer. Lest there be any doubt, it is really important to have the specialized tools in the glider and ready to be used in the event that assembly or dis-assembly is required! Imagine

the glider landing out, arriving with the trailer, and no way to disassemble it.

By the way, when we did find the orange bag, we pulled the horizontal stabilizer off, Mike cleaned and lubricated the fittings and threads, everything looked fine, and we reassembled and put on fresh tape. It also seems quieter now. We did find that using the smallest hex key in the tool bag works as a handy tool to hold the spring safety wire aft and clear while turning the allen bolt. Not sure if it is related, but also remember that if you ever need to lift the tail and choose to do it from the horizontal stabilizer, your hand needs to be as close to the vertical stabilizer as you can get it and under the thickest part of the horizontal stabilizer – never apply any pressure from any distance further out.

Thanks...

Skyline SGS 1-36 Sprite Transition

By Douglas Hiranaka



Sprite landing - photo by Martin Gomez

The club owns a SGS 1-36 "Sprite". The Sprite is a single seat aluminum medium performance 31:1 L/D Glider. It is intended for

free up the two seat trainers for dual instruction and to expose pilots to a single seat glider. The Sprite is possibly one of the best "transition" gliders for moving up to a "high performance" ship. It has very light controls, is just different enough on tow to expose a pilot to something similar to other single seat ships and provide



In takeoff attitude

challenge after the effort of soloing. The controls (position and function) are similar enough to the trainers to avoid pilot workload overload. The tow in rough air due to its light wing loading is one of the more pilot intensive to stay behind the tow plane.

The Sprite is extremely light and easy to move around on the field. Some pilots choose to push the ship out to the ramp from the hanger without a tow car. The low mass is one of the main characteristics that requires attention during the first few flights. The pilot seating position is more upright and stretched out at the same time. The seat back is not as reclined as the trainers but your feet stick out straight in front of you in two holes in the instrument panel. The short nose and wheel position place the pilot in what feels like a nose down position on the runway and your head sticks out of a hole like a old bi-plane. The plane is aluminum and radiates heat quickly with the tiny canopy providing minimal solar heating so higher or winter flights require extra socks and a warm jacket to stay warm. Local flights are not any



different from the trainers.

The seat back and pedals adjust for all but the est and tallest pilots, the max pilot weight usually being the

limiting facotor in max pilot size. There is only a lap belt

and shoulder harnesses so "strapping in (on?)" the plane is straight forward. The release is a Schweizer (kind of makes sense...) and requires a large ring 3' adaptor rope. The Canopy requires careful attention to close and lock correctly. The yaw string must be outside and over center string must be inside while both locking pins must be in the retainer blocks. Most medium and light



weight pilots set the trim on the stick to 1" behind full front to full front for takeoff. The controls are slightly mis matched. The pitch is very light and very sensitive. The rudders are about right. The ailerons are light and sluggish. The mismatch between the ailerons and elevators is what makes first flights challenging. The pilot has to right the wings in



roll without moving the stick in pitch. The tow pilots have instructions to accelerate slowly but if the glider tips back keep the accepted technique is to leave the stick still and let it right its self. Use the stick to level the wings but make no pitch corrections. The plane flies when its ready and it is a few seconds after the tail of the tow plane comes up. The rest of the tow is normal except for the light controls. Most beginning Sprite pilots tow a little too low in order to see the tow rope. if you stretch your neck you can see the rope in a more conventional tow position.

The trim works reasonably well but attention to airspeed is required with the low stick forces required to overcome the trim setting. Thermalling is normal with steep turns being easy and requiring attention until the correct amount of rudder for coordination is learned. The stall is conventional with just a little tendency to drop a wing. Release the stick pressure let speed build up a little and recover from the descent. The Spoilers are less effective than the trainers but the ship drops like a rock in a slip. The controls are light and responsive but acro is prohibited by an airworthiness directive and club rules.



Landing on the grass is preferred, the brakes are OK but all you really need to do is lower onto the skid and the ship stops. A slightly longer downwind is used to accommodate the less effective spoilers. Per club policy a

minimum energy landing is the preferred style with the main and tail wheel touching at the same time and lowering to the



Sprite on the nose skid - photo by Martin Gomez

skid when braking is required. The brake is on the spoilers so using the brake is the same as the trainers. Landing on the Pavement requires aiming about 1/3 of the way down the runway because as soon as the skid

the plane stops shortly. This is preferred to the high energy style of approach used by commercial operations. With the light weight of the airframe it is easy just the pilot to push the ship onto the taxiway or the grass to allow departing or landing traffic use of the runway.

The ship can be towed with a single wing walker by rolling on a wing wheel and steering by picking up the tail on



Sprite pilot - photo by Martin Gomez

pavement and holding up a wing on the grass and dragging the tailwheel to point the nose until the pavement is reached then the standard pavement technique is used.

Recycled

Information

Worth

Repeating

SAY AGAIN



Paul Pruitt (Club Cirrus) and Jonh Noss (NG Ventus) were the first two club pilots to complete Skylines fixed training task. Congratulations!

On April 24 Chris Zaboij earned his "B" badge after completing a 53 minute flight in the clubs SGS 1-35 "Sprite".

Promote Our Club!

Jim Kellett

We have a small supply of "tri-fold" color brochures ("Come Soar With us . . .") that you can use if you're making a presentation on soaring, or displaying a glider, or participating in any event at which it's reasonable to meet people who might benefit from having a take-away reminder about the Club. The brochure has several nice pictures, some text describing our operations, directions, etc., and information about how to contact the Membership Chairman and the Club's website. The

supply can be found on the battery charging table in Hangar 5 (that's where H3 lives).

Party! Saturday May 5

Bill Burner has graciously invited Skyliners and their families to his airport in Woodstock, VA. To make the events more family friendly Bill has added indoor plumbing to his hangar. Soybeans have been planted so the Burner canyon will not be there this year. The weather should be milder for the hangar flying and Bill reminds us that both his birds will be available for curious and adventurous pilots.

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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.skyinesoaring.org

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