

# SKYLINE

SKYLINE SOARING CLUB NEWSLETTER

June 2009

## Piet's Swiss Soaring Report

I just had the pleasure of reading the duty officer's report for May 30 where it was a really nice day to fly, apparently. It was also a nice day to fly here in Switzerland. I got a five-hour flight in this club's Discus B. The winds were just right so that the hills right next to the airfield were popping off thermals all day long. The winds weren't quite strong enough for ridge running but this is a really small ridge anyway. I tried some Massanutten-style ridge running at the beginning of the flight and got very low. I had to fight my way back up on a weak and gusty thermal, just over the town of Kehrsatz. After gaining enough height to find something better I flew over to the Gurten tower and noticed the crowd of people looking up at me as I flew figure-eights and circled up in a very bumpy, gusty 3 meter/second thermal.

Unfortunately, there was a cloud deck over the Alps while it was clear blue over Bern and the airport. A trip to the Alps would probably have met with an out-landing as it sure didn't look like there was anything going on downwind. There was a brief break in the overcast where I attempted a downwind run for the Alps but I turned back when I found miles and miles of smooth flying and no bumps. I was leaching off the local expert pilots and decided to follow on the return leg when I saw them all turn back too. I spent much of the day very close to the airport. So did everybody else.

Also, all of the other club ships came up to share the airspace with me. That would be: three Duo-Discus', three Discus Bs (of which I was flying one), two DG-300s, two ASK-21s, one DG-800 and a pair of private ships, a Libelle and a DG-800. Yeah it's a tough life here.



**Piet Barber's Swiss flight trace reminds his fellow club members of a child's scribbling, but an enjoyable flight nonetheless.**

So, over this little patch of airspace it was very crowded. There were several thermals where there were six gliders climbing in the same one m/s thermal for 400 meters.

Thankfully, everybody had a FLARM (flight alarm) equipped on their dashboards and a few times the FLARM told me about an oncoming glider that I hadn't otherwise seen. The FLARM makes a very loud and alarming noise when a head-on situation is forming. I didn't rely on the FLARM but treated it like a second set of eyes scanning the sky looking for traffic. Most of the time I would see the other glider first; sometimes the FLARM would tell me about another glider that I had not yet seen. The most alarming thing about it is that it acts like a very skittish passenger that cries, "Oh no! We're going to hit, do something!" But, it doesn't tell you exactly what to do.

If you're curious to see the flight profile I have uploaded it to my maps on Google. I'll have to agree with the Swiss who pointed out that the flight trace does rather look like a kid with a crayon colored on one small part of airspace.

See the flight in Google Maps at: <http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=113008276731271976448.00046b4696d206c437cec&t=h&z=13>

See the flight in Google Earth at: <http://maps.google.com/maps/ms?ie=UTF8&hl=en&vps=1&jsv=160f&msa=0&output=nl&msid=113008276731271976448.00046b4696d206c437cec>

Watch a short video of my flight at: <http://b.static.ak.fbcdn.net/swf/mvp.swf?8%3A152716%3A1&v=1173485979318&ev=0>

Check out the instrument panel, everything is metric. The altimeter is the hardest one to get used to, with the zero on the bottom, and it winds up or down a third as fast as the altimeter that you're used to. One full turn of the big hand is about 3300 feet. (Greg Ellis, this is just like the altimeter on your old PW-5). Wouldn't that drive you nuts? What's worse is that all radio contact with the tower has to be done in feet and knots, so many of the gliders at the club have a feet-to-meters conversion chart pasted to the instrument panel.

—Piet Barber, Webmaster in Exile

# Copy That **i**

## Away Day, June 6

Mark your calendars for Skyline Soaring Club's second "Away Day." On Saturday, June 6, the club will split its fleet, taking the Husky, ASK-21 and possibly the Sprite to a lovely, private, rural grass strip for a day of relaxed flying without the hassle of concrete, flush toilets or other pilots.

This is a good time for club pilots to get a chance to take off and land at a completely different kind of airport, one rather more like most real gliderports in the world. It's also a chance to meet the requirement for cross-country flying in club gliders (flying at a different airport) and a perfect way to gain experience landing on unfamiliar territory, and finding the airport in the first place.

### How to get there

If you're driving and want to plug the address into your car's GPS, it's 311 Swimley Road, Berryville, VA 22611

If you're driving without GPS find Leesburg, Virginia and take Route 7 west to Berryville and take a right onto Crums Church Road. This will be the third traffic light past the Shenandoah River, about 30 miles from Leesburg. Take Crums Church Road 4.5 miles to the T-intersection at Old Charlestown Road and make a right. Go half a mile and make a left on to Swimley Road. Go 1/3 mile and turn into driveway at stone gateposts.

If you're driving and bringing your own glider, go past the main entrance and turn into the field gate entrance.

If you're flying—let the owner and duty officer know first—it's on the Washington Sectional as High View Farm, N

39°14.242', W78° 00.640'.

### Parking

For members bringing their gliders go past the main entrance to the farm about 150 yards. Turn into the gate following the road past the pond and turn left staying on the road past the barn and park to the left of the runway. Mr. Hageman, the owner, will be there to help park the first ones.

For everyone else driving, turn in the main farm entrance and park alongside the driveway before the circle at the end of the driveway. Parking between the trees is okay. Other than the initial staging and removal of the tent and equipment keep vehicles off the runway. Mr. Hageman will supply his ATV for ground towing gliders and will try to supply some type of ferry service if we are using runway 03.

Remember we are guests on private property, behave accordingly. The house and other buildings are off limits. There will be a porta-potty available.

There's no food or drink available so bring a cooler with lunch, snacks and drinks.

Bring sun block and bug repellant. Deer ticks are going to be common this year and we're going to be in a grassy area, so come prepared.

There will also be operations at Front Royal so you'll need

to decide where to fly and let the instructor, Jim Kellett, and/or duty officer know.



## Capstan Partners Wanted

Skyliners, I'm renewing my efforts to either sell or find one or two partners to

share my Capstan. I prefer the partner option. \$20,000 is the sale price to a Skyline club member, \$10,000 for a half share or \$6,667 for a third share, but I'd need two partners to join at same time.

—Regards, Shane Neitzey

## New Member

Welcome to new probationary member Elaine Chou. Elaine is close to taking her checkride and hopes to take it soon. She's been training in California, Chicago and Florida over the last several years but has not been able to stay in one location long enough to get her rating. Hopefully, SSC will be the lucky club to get her certified.

## Want To Fly With an Eagle?

Karl Striedieck lives and flies from his ridge top strip on Bald Eagle Mountain near State College, Penn. He's a U.S. Air Force and Pennsylvania Air National Guard pilot, and, more importantly to this conversation, started flying gliders in 1965.

In 1968, Karl set an out-and-return world distance record flying a KA-8B from an auto-tow launch out of his home field. Later that year those of us at the Capitol Area Soaring School in Leesburg, Va. were privileged to have him visit and describe this impressive flight, and show videos of him doing

---

**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](http://www.skylinesoaring.org) or e-mail [welcome@skylinesoaring.org](mailto:welcome@skylinesoaring.org).

**President — Craig Bendorf**

**Secretary — Jim Kellett**

**Treasurer — Daniel Noonan**

**Membership — Steve Rockwood**

**Chief Tow Pilot — Curtis Wheeler**

**Chief Flight Instructor — Jim Kellett**

**Safety Officer — John Noss**

**Skylines Editor — Dennis Johnson**

**Directors — Shane Neitzey, Spencer Annear,**

**Paul Seketa, Jim Parrish, Vern Kline**





touch and go landings on his mountain top strip.

Karl went on to many more national and international soaring accomplishments, too many to list here, and was named to the U.S. Soaring Hall of Fame at the National Soaring Museum at Harris Hill, N.Y. in 1980.

Generous with his time and talent Karl often offers other pilots the chance to fly with him in his Duo Discus during soaring contests. For a \$200 donation to the U.S. Soaring Team Fund you can spend the day in the plane with one of the finest soaring pilots in the world. He will do this again at the Region IV North contest to be held in Fairfield, Penn. (hosted by M-ASA) on Oct. 11-17. At this time there are slots available on three of those days. You'll learn more about real soaring in one day than in any other six months of your life. To get more information or to sign up write Karl at: [karls@uplink.net](mailto:karls@uplink.net).

—Jim Kellett

## Competitive Soaring

We don't have many (any?) racing pilots at Skyline, but it's a topic that can be, and is, exploited with several efforts to promote the sport within the larger aviation community. There's a nice blog post at AOPA's "Let's Go Flying" blog about sailplane racing. (<http://blog.aopa.org/letsgoflying/?p=120#more-120>)

For Skyliners who want to get a closer view of this aspect of the sport they should attend one of the two very popular SSA contests in Region IV, in Fairfield, Penn. Oct. 11-17 and one in Newcastle, Va. Sept. 21-26. You'll see a whole different kind of operation.

—Jim Kellett

# Joe's Towing Tension Thought Experiment

**Q:** Last month's question involved varying levels of tension in the towline for a fully loaded ASK-21 during climb to altitude and a cross-country aerotow to Petersburg W. Va.

Piet Barber provided the first correct response. Andy Gerner also provided a very clear and succinct explanation.

**A: Andy's Answer**

1. I compute the tension in a climb based on:  $T = (W \cos FPA) / (L/D) + W \sin FPA$ . The flight path angle is given by  $\arcsin (V_v/V)$  where the vertical velocity ( $V_v$ ) is given as 600 feet per minute and  $V$  is the true airspeed. Given an indicated airspeed of 60 knots which, based on the pilot operating handbook is approximately equal to 60 KCAS, we need to know the PA and OAT to compute KTAS. Since the problem didn't specify I assumed a nominal temperature range of 70-80 degrees F. and a PA between 1000 and 3000 feet MSL to bracket the problem. This yields a true airspeed range of 61.7-64.6 KTAS which results in an FPA range between 5.2-5.5 degrees. So,  $T = (1320 \cos 5.2^\circ) / 31.8 + 1320 \sin 5.2^\circ = 161 \text{ lb.}$  (on the low side) to  $T = (1320 \cos 5.5^\circ) / 31.8 +$

$1320 \sin 5.5^\circ = 168 \text{ lb.}$  (on the high side).

2. At 1320 lb. MTOGW with a 31.8:1 L/D in level flight that should yield a nominal tension of 41.5 lb. Note:  $[L/D]_{\max} = 33.5$  at  $V_{\max}$  range, but at 60 KIAS I compute an L/D of 31.8 from the POH.

3. At 1320 lb. MTOGW with a 7:1 L/D in level flight should yield a nominal tension of 189 lb. ( $\pm$  transients due to gusts).

The real message is that there's very little tension in the towline during level flight and the pilot must be ready to use the dive brakes if significant slack builds up in the rope.

Congratulations Piet, and thanks to Andy for the great explanation.

**Q: July's Question**

For this month's question let's extend the discussion of glider and tow plane performance on aerotow a bit further. You're still in a level cross-country aerotow toward Petersburg. If you left full dive brakes out on the ASK-21 and the tow plane went to full throttle, what would be the rate of climb or descent? Thanks to Judah Milgram for the question idea. Send your answer directly to me at: [joe@parrish.net](mailto:joe@parrish.net).

—Joe C. Parrish

## It's a Boy's Life

*Scouting magazine features gliding in spring issue*

Anyone who was a Cub Scout or Boy Scout, or has a child involved in Scouting, would be familiar with Boy's Life Magazine. June's issue has a six-page gliding article with some nice photos featuring a Scout troop working on their aviation merit badge at the Tucson Soaring Club. Unfortunately, the story cannot be read online, but it's a good story if you can find a copy.

—Kevin Barrett



# Photos by **Martin Gomez**



**Martin Gomez** has been regularly photographing operations at Skyline Soaring.  
To see his latest collection of soaring images go to: [www.flickr.com/photos/21003395@N08/sets/72157619066484188/](http://www.flickr.com/photos/21003395@N08/sets/72157619066484188/)  
Some members may also be interested in viewing Martin's homebuilt Van's RV-7 project at:  
[www.bashingaluminum.com](http://www.bashingaluminum.com).

