

# The Flight Line

## News about Sugarbush Soaring

SUGARBUSH SOARING ASSOCIATION, INC.

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<http://www.sugarbushsoaring.com>



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### *From the Cockpit of Y6*

I went to the airport last weekend to see what was happening. The runway has emerged from the snow and the south sides of the hangars are clear. As I watched a power plane coming in for a landing, I got the idea to pull Y6 out of the trailer and sit in the cockpit for a while. I went to open the hangar doors but they were resting on the frost heaved hangar floor and would not budge. I had to settle for opening the trailer and looking in. The wings, fuselage, horizontal stabilizer and wing tips were still there and so was my excitement about flying! I can't wait to give the thumbs up to the line crew, wag the tail and get towed down the runway towards a strong spring thermal.



Last year was a successful year for the club. The club operations generated enough cash to pay off a large part of the debt and put some funds in reserve for this upcoming year. The club was also very fortunate to have an excellent group of employees. They endured some long periods of poor weather, but still managed to pull off a successful season. I can't say enough about work ethic, dedication to safety and can do attitude that the employees exhibited last year. There is also a group of local club members who work long hours taking care of a wide range of tasks including general business matters, web site work, flight safety, organizing cook outs, tow plane maintenance, Flight Line, staffing, sailplane and field maintenance. The contributions that this group makes are vital to the clubs operation. The Granite Corp., which owns the land and tower, has bought a rebuilt set of mower reels for the club to use. Thanks to all for the contribution!

The total revenue for the club was up from \$192,880 in 2007 to \$200,299 in 2008. The increase in revenue was mostly due to the upward adjustment in the rate structure from the previous year. The total tow count was down by about 5 percent and the membership was also slightly off from the previous year. The net income in 2008 was \$25,870, up from \$5,772 in 2007, although the depreciation expenses were about \$10,000 higher in 2007 than in 2008. One area of concern is the clubs inability to attract new members. The median age of the membership is increasing and we must attract new members to maintain the long term viability of the club. I urge all the members to spread the word about our beautiful club and to actively pursue new members. The tow planes will need some major engine and fabric work in the up coming years and we must start putting away reserves to cover those repairs. I hope we can start this with the profits from the 2009 season.

*We will be able to roll the gliders out and start to fly again soon. I look forward the 2009 season and I hope to see you all on opening day.*

*Buddy*

**Opening Weekend 16 - 17 MAY**

**Put together days, Mandatory Safety Briefing and Opening Dinner. See Page 6 for details.**

## Magnificent Obsession

**Everyone needs one. I guess one of the great disappointments of life is that, generally, day-to-day existence is pretty humdrum. As Paul Simon put it, “We do our jobs – collect our pay – believe we’re headin’ down the highway when we’re really slip-slidin’ away.” There’s more.**

Maybe flying isn’t the same thing as devoting one’s life to medicine, music, or art, but it is, in many ways equally creative and takes us beyond ourselves to a better understanding of ourselves and our place on this insignificant little green pebble in an unimaginably huge universe we only partly understand. Overly dramatic statement?

Neil Heulett died early this winter. He ran a little, nearly forgotten airport in Granville, New York – a few



old airplanes, some new ones in rusting t-hangers, a couple of metal and cinder block hangar buildings jammed full of “projects,” Cub wings, bent Schweizer fuselages, engines undergoing rebuild, ribs, spars, jigs – all in a chaotic arrangement that Neil understood and all projects that he planned to finish. He would, at age 89, take an interested visitor on a guided tour of it all, a living lexicon of aviation minutia. He would glow with excitement over a bundle or wingtip-bows that he had found at an aviation swap meet in Pennsylvania, dig through a pile of dust-covered flying magazines for a picture of the Kingfisher aircraft that rolled off the production line at the Chance-Vought factory when he worked there during WWII. He drove a battered twenty year-old Dodge, couldn’t afford to put in new fuel pumps, or fix

the cantankerous hangar doors or leaky windows, but he worked with hundreds of pilots doing annuals and repairs on their airplanes, tinkered and worked on his many projects, and was “rich” beyond words.

No, it doesn’t make sense to spend money flying for fun. It is not fiscally responsible to own, train in, and fly aircraft that are not “practical transportation.” It seems obsessive to subscribe to aviation magazines and spend every weekend at the airport watching, talking about, and flying sport aircraft, aircraft that serve no “practical purpose.” But it is magnificent to participate in one of the real miracles of the last one hundred years – human flight. Soaring is the purest and possibly the least practical form of this.

Experience that rush of a ten-knot thermal or the hypnotically smooth mountain wave taking you for your first excursion into oxygen-required altitudes above the commercial traffic and you will begin to understand. It is a magnificent obsession.



*- Rick Hanson*

**Hangar/Shop for Sale – available immediately, desirable runway side hangar and shop located in the southernmost new building, equipped with aircraft winch. Contact Doug Jacobs at [soarer@cox.net](mailto:soarer@cox.net) or (401) 523-2219**

## A South American Winter

**One benefit of running a small business with customers around the world is a far-flung network of friends.** One lives in Cordoba Argentina; another in San Martin de los Andes, Argentina. A Boston friend has a vacation home near Santiago, Chile. After 22 years spending most of the winter in Vermont, we decided on a warmer venue this year.

The first stop was with Eduardo Toselli, the Cambridge Aero and NK agent in Cordoba. Within 2 days of our arrival we were off to a regional glider competition near Buenos Aires. Much to my surprise, there were 3 classes with 54 gliders. Soaring on the day we arrived was excellent with 300 to 450 Km tasks called and flown! The Argentinians have developed a sophisticated handicapping method that allows a mix of old and new gliders in the "Club Class". As with the US system, handicaps are assigned based on known glider polar curves, but different handicaps are assigned for Strong, Normal, and Weak conditions. Performance of the top 10 gliders on each competition day is used to choose appropriate handicaps for that day. The internationally accepted SeeYou scoring program is used, with modified code for the Argentinian handicapping system.

Argentina has an interesting mix of gliders. For example, there are more than 40 PW-5 World Class gliders, so the 2012 World Championship for that class as well as the handicapped Club Class and Standard Class will be held there. Another rare bird I spotted is the Schleicher ASK-18 (pictured on the right). All but one of these gliders in Argentina were built there under license from Schleicher. They have been lovingly maintained and restored as shown by the picture of the ASK-18 from the Cordoba club that took second place in the competition. Another striking feature of this competition was the large number of young pilots; very different from our demographic.



After a week with Eduardo and his family, we travelled 22 hours by deluxe overnight bus to San Martin de los Andes in the "lakes region" of northern Patagonia to visit with Wolf-Dietrich Herold. Some of you may remember Wolf from his visits to Sugarbush Soaring. Upon retiring from his physics employment near Zurich, he became involved with the "Quo Vadis" Mountain Wave Project spearheaded by Klaus Ohlman. This culminated in a 3000 km World Record flight in 2006 that I suspect will stand for a long time. The picture shows Klaus (right) and Wolf at a dinner that lasted well past midnight. Klaus is definitely one of a kind! I have a video about the project and the record-breaking flight for those interested.



Wolf decided he likes Patagonia better than Switzerland and is currently living in an inactive small "Hosteria". The place is for sale and he is acting as a caretaker. This meant we had a very nice place to stay for several weeks at minimal cost. The warm sun, cool winds and wonderful hiking scenery was very invigorating. And Wolf's background of physics and soaring made his criticism of my Total Energy Compensation research especially helpful. The other half of our trip was spent in Chile. It included my attempt to climb Volcan Villarica and a small-boat cruise to the San Rafael glacier that terminates on a lagoon where we quaffed a glass of Scotch whisky in a glass filled with transparent glacial ice. After three more 12-hour bus rides I looked into the hole dug by the world's largest copper mine, and we spend 4 days at a touristy North Chile desert oasis. The trip finished with a 2-week stay on the Chilean coast north of Santiago. If you are interested in visiting either country, we would happily bore you with 400 pictures and videos.

*- Dave Ellis*

**TOW OPERATIONS** Here are some of the 2008 statistics for those that like to look at the numbers. 14L made 1099 tows while 84P made 316 tows totaling 1415. This translates to about 175 hours for 14L and 55 hours for 84P. The disparity in the numbers is due to a couple of factors. The first being that 14L has a Tost tow hook like the tow hooks on modern gliders. This mechanism is of better design than the Schweizer hook presently on 84P. Given the choice some tow pilots opt for the better equipped aircraft. Can't blame them! To eliminate this issue we applied for a Field Approval from the FAA to mount a Tost hook on 84P. We received this approval over the winter. This changeover will take place during 84P's annual inspection in May. Dave Ellis has procured a Tost hook at an attractive price which will arrive at the field before the season starts. The other reason that 14L was flown more was that Dave Neilson prefers that aircraft because the rudder forces are lower and he did 765 of the 1415 tows. No serious maintenance work on either aircraft is anticipated however you never know. We do know that before too long we will need to replace the fabric on 14L. Hopefully by keeping 14L in a hangar we can go two or three more years. Re doing the fabric always leads to other necessary work as long as the ship is torn down. We need to remember that it is important that we have funds available for the day the fabric will not pass inspection. Not sure what redoing 14L might cost but \$25,000 might be in the ball park. The other expensive item to plan for regarding tow plane operation is engine rebuild. This is a \$30,000 proposition. An unexpected engine problem can bring this situation upon us at any time on either plane. In any event even with out problems engine overhaul should be planned for at about 1800 hours. 84P has far fewer hours than 14L and should be good for a long time but 14L is getting close to the time when engine rebuild may be necessary. For the above reasons in the coming season we should favor towing with 84P.

That brings us to the topic of tow pilots for the 2009 season. A letter has been sent to all past regular tow pilots as well as prospective new ones and a schedule is being worked out. Although a little nerve racking at the moment it looks like we will have seven day coverage. Keep your fingers crossed in the mean time. The tow planes will be ready and insured for flight May 1<sup>st</sup>. Step one will be to get them one at a time to Vermont Flying Service for their annuals. One plane will be available for towing May 1<sup>st</sup> so if you want to fly before opening day you may be able to.

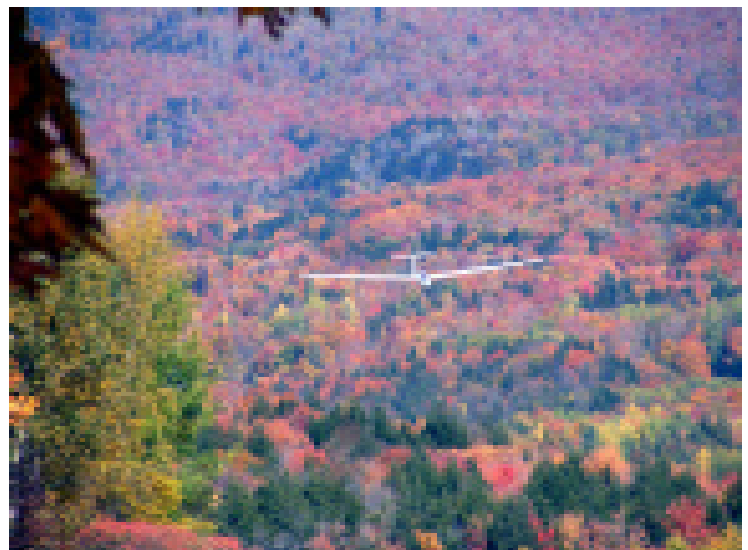
Contact Rick Gehlert or Ron Webster and they will try to scare up a tow pilot for you. You could also just call this secret number (802)-496-7111 and ask the man that answer the phone if he will tow you.

**FUEL OPERATIONS** We ended the season with 500 gallons in the ground which means that we will need to get 3,000 gallons delivered about the end of May. This will be arranged. Round figures we burned 4,500 gallons in the tow planes and sold about 1,000 gallons and expect to do the same this year. It looks like the fuel will be much less expensive this season.

**FIELD MANAGEMENT** Granite Intersection has offered to pay for six rebuilt gang mowers to replace the mowers we presently have. The existing mowers except for one that was replaced two years ago are totally worn out. These mowers should be available before the season starts but must be picked up in Gorham Maine. If you are mechanically inclined you may be able to give a hand assembling them into the old mower frames.

**GLIDER FLEET** We have one significant glider issue to be resolved. Over the winter we received an Airworthiness Directive on the Blaniks. It involves looking for cracks where the control stick mounts to the fuselage. This could be a big problem if cracks are found as parts would have to be ordered and repairs arranged before we could put the glider in service. To date we have not heard of any Blaniks where cracks were found. This inspection will be carried out as soon as feasible.

- Ron Webster & Rick Gehlert



## Treasurer's Report.

The financial picture certainly looks rosier after last years operations (2008) than in the past. Our net income was a little over \$20,000. Our favorable cash flow permitted us to pay off much of our long term debt, a total of about \$22,000, which was mostly outstanding member loans, leaving us with a principal due of \$12,000 on the member, or shareholder, loans. That is our only debt at this time. We have \$26,000 in cash, which, depending on the membership and other activity income for this year, may permit us to repay the remainder of the loan balance. We DO NOT have any reserves set side for tow plane engine overhauls, major fabric work, or other exigencies which might crop up. This of course will play a role in any decision on the loan repayment issue. See you on the "other" flightline.

- Pierre Swick, Treasurer SSA

## DUES PAYABLE

Please pay dues promptly. They are due by May 1st, but if you pay earlier, you will help the Treasury with extra cash to pay for startup costs, like filling the 10,000 gal. fuel tank.

## FEFY Supports Our Line Crew.

Our Flight Experience for Youth (FEFY) program has been up and running for three years now, and has paid for some three hundred flights for our Line Crew youngsters. FEFY also sponsored two students in our 2007 Youth Week program. Last year we soloed two of our crew, and helped two others (Cody Long and Quincy McDougal)) to earn their private glider certificates.

FEFY is a registered IRS Section 501c3 (tax-deductible) program, and is dependent on contributions from Club members and friends to fund our Line Crew program and our other youth programs. In the past three years, FEFY has paid \$33,221 for lesson flights, solo flights, and licensing fees for these talented kids. We feel this is a wonderful accomplishment. Flying has become so expensive that it is very difficult for youth to participate in it. Programs like ours help make this possible for deserving kids. Perhaps on the disappointing side, the contributions have come from just about 20 individuals and a few foundations. Some of these individuals are not even Club members. We sincerely hope that more of our members will realize the importance of this part of Sugarbush Soaring and will make even just a modest contribution this year. Contributions should be made out to Flight Experience for Youth (or just FEFY) and mailed to PO Box 123, Warren, VT 05674.

Thank you for your support.

The FEFY Board: Ginny Hanson, Bob Holden, Bob Messner, and Frank Rodgers.



## SOARING CAMP

When Millie and I were still operating the Valley Inn we were able to work closely with Sugarbush Soaring and provide the lodging for those attending Soaring Camp. When we retired from the Inn so did soaring camp. Rick Hanson became the driving force behind this very important part of our soaring program and camping on the field with Rick and Ginny was then part of the camp. The toll on them was tremendous and without a viable alternative we were forced to cancel an important part of our youth instruction last year. So Youth Soaring Camp and its revenue was lost.

This year I approached Buddy and Rick with an idea that will allow us to reinvent "soaring camp". It will eliminate the "camp" aspect but put more emphasis on the teaching part. The idea is simple. These students are supposed to be responsible teenagers who can handle the skills of flying and are interested in becoming qualified pilots. Definitely a cut above. I have suggested that those of us who live or have homes in the Valley take a student into our homes for a week. We would be responsible for providing simple room and board plus in many cases transportation to the airport and return. There would be no one youth soaring week as such. They could pick any time period that would

be convenient to their host and the teaching staff. This would mean that the problems associated with not having enough instructors or aircraft would hopefully go away.

This is how I think it would work: Mary has already upgraded our web site saying that our youth soaring program is back. When our office manager Gail receives an inquiry she will get basic information from the student and family as to date and length of stay. I will contact one of you as to housing availability and then contact the student to finalize arrangements.

I have already volunteered to take in a student and I have a couple of other members who are interested. I hope you see the value of this program both to soaring in general and to our club in particular and will consider volunteering to host a teen this season. How many times have you heard or read about soaring dying a slow death because there are no new young people getting involved. This is our chance to breath new life into our soaring program.

If you have any questions please take a minute to call me at 802-496-3450 or e-mail me at home.

- Bill Stinson  
sugarhollow@gmavt.net

### **Glider for Sale / ASW 24 with Trailer**

#### **Price:**

**\$49,000 Glider**

**Model ASW24**

**Serial number 24221**

**Year 1993**

**Total time 1200 hours**

**Wing "B" modification**

**Tinted canopy**

**Contact Mark Evans**

**pageevans@aol.com**

### ***Opening Weekend.***

*The club will open on May 16-17. The following events are scheduled:*

*Glider Assembly. Saturday and Sunday. All members are asked to participate.*

*Mandatory Safety Briefing. To be held on Saturday morning at 9:00 am in the DinerSoar by Bill Stinson.*

*Opening Dinner Saturday. Hyde Away Restaurant Rte 17 Fayston. Meet in lounge at 5:00 pm. Seating for dinner between 5:30 and 6:00. See website or office for menu choices.*

### **Current Sectional Charts**

The new charts come out in June. The club has agreed to start a list of members wanting the new New York and Montreal sectionals. Please tell Gail if you want your name on the order list in the office. Don't fly with outdated charts!

## **SUGARBUSH SOARING GROUND SCHOOL – 2009**

Saturday Mornings 8-10:30 a.m. June and July - Satisfactory completion will result in sign off for taking the knowledge test (In accordance with 61.103e) for Private (61.105 a&b), or (In accordance with 61.307a) for Sport Pilot (61.309 a-l) Knowledge Tests and for the ground portion of the Flight Review for both power and glider pilots. This course is designed for both airplane and glider ratings. Cost is \$185 for all eight classes or \$25 for individual classes. Books and materials will run an additional \$60 approximately.

General Outline of Material to be covered in each class. Note: classes 3 and 4 will both be given on the third Saturday, classes 5 and 6 will cover material over three consecutive Saturdays for a total of eight Saturday sessions (June 6, 13, 20, 27 and July 4, 11, 18, 25) makeup weekend will be August 1 in the event of cancellation or conflict on July 4 weekend.

### **I. Introduction**

#### **A. Certification**

##### **1. Requirements of Part 61 for Commercial, Private, Sport Pilot**

###### **a. Minimum requirements, differences: Sport Pilot, Rec. Pilot, Pvt., Comm,**

###### **Glider/SEL**

##### **2. Aircraft: Category, Class, Type, Requirements of registration**

##### **3. Currency requirements**

###### **a. Flight Review**

###### **b. Medical**

###### **c. 90 - day**

#### **B. VFR/IFR - Part 91 General Flight Regulations**

### **II. Mechanics**

#### **A. Powerplant**

##### **1. Recip. Engine functions/ fuel requirements**

##### **2. Maintenance requirements/owner assist**

##### **3. Time – TBO, logs, etc.**

#### **B. Airframe**

##### **1. Maintenance requirements**

##### **2. Monocoque aluminum/composite/tube and fabric construction and repair**

###### **a. Inspection, maintenance, rebuild**

##### **3. Aircraft Design**

###### **a. Tricycle/conventional gear**

###### **b. Tandem/side-by-side**

###### **c. Stick/yoke**

##### **4. Aircraft instruments**

### **III. Flight Maneuvers**

#### **A. Basics of flight**

##### **1. 3 axes of control/ control function/ forces of flight**

##### **2. Coordination, steep turns, rate of turn, slip/skid, spins**

##### **3. Torque, “p factor,” gyroscopic effect**

#### **B. Steep turns – 360’s, 720’s**

#### **C. Stalls, Stall recoveries – turning and straight**



## **SUGARBUSH CHILDRENS SWING**

**During the Region One Contest last year Gilly Smith, the Contest Director, noticed that the childrens swing was broken. At the end of the contest he bought new parts and completely refurbished it.**

**Gilly, all members aged twelve and under thank you from the bottom of their hearts for restoring their favorite occupation at the airport.**

### **EDITORIAL HELP**

**Many thanks also to assistant editor Felix Krowinski for his help in beating members over the head for contributions to this edition.**

**-JD**



**Look on our website at [Sugarbush.org](http://Sugarbush.org) for up to date news and a complete Schedule of events for 2009.**

# **The Flight Line**

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