

Off Tow Newsletter

Puget Sound Soaring Association, Inc.

Editor: Dave Kremers

April, 2006

Seattle, WA

Upcoming Events:

Flying, we hope! It's been a little discouraging recently due to a lingering winter, or very cold and wet spring, whichever way you wish to look at it. There have been a couple of dynamite days but too many soggy ones. In any case, it's been difficult to get into the air and we're all getting a bit antsy. However, keep that ear to the ops number (660-0019), the good, consistent soaring weather can't be far off.

Tripp'n? It's time we started thinking about getting out and about to find exciting new challenges in various hot spots of the Northwest. Tripmaster Supreme, Wayne Ginther, has been conjuring up a list of exotic destinations for our consideration and will share them with us shortly. Look for his announcement and give him your response.

Recent Events:

Operations are underway at Bergseth with all club craft in service. Member pilots have been coming out for that season-opening checkout flight with an instructor and new members are in the process of getting their log books filled toward that all important "pilot, glider" rating. We've even racked up our first solo flight of the new season. Congratulations, Brigit!



The flying weather has been excellent on a couple of occasions, if not a little crisp.

If you were at the Museum of Flight Soaring Expo last month you got a chance to mingle with some of our soaring brethren and pump up the juices for the coming season. Thanks to those of you who could make it out to present PSSA to the public. Our great display was very well received.



Board News:

Last month we began the practice of publishing an account of our Board of Directors meeting which was a response to members wanting a closer look at what decisions the board is making to move our club along. This month we will alter that practice just a bit by publishing this account to members on the Yahoo Users Group instead. If you are not yet a member of the users group, contact Glenn Chouinard about getting connected. It's a very simple way to keep connected with an automatic sharing of messages between members.

Reports From Members:

Before hearing from some of our members we want to recognize three new members: **Brigit DuBois, Ron Rogers** and **Alex Sandlin**. Welcom aboard! (Bridget is the one who recently put her first solo flight behind her.)

Here's a good spot to share an article written by our own Mark Allen (of "dynamic approach" fame) on a subject which all of us should be giving thought to each time we launch at Bergseth - where are you gong if things don't go as expected on tow? Each time we prepare for takeoff we should have given careful thought to Mark's valuable information.

Question for the Month: Which way is home on a rope break? – Part 1 (By Mark Allen)

There I was skimming the ground at 20 feet and 60 mph kicking ground hogs as I traded soil for wind. Suddenly my reindeer cuts me free 200 feet from the beginning of purgatory. The very nerve. That's the last time Rudolf drives. I quickly lose interest in ground hogs and reindeer and must decide – land my craft in the remaining runway or pioneer my way to some unexplored outpost?

Have I got time to land?

If you figure you can stop in three seconds from 60 mph once you reach the ground, then you'll

use up 130 feet. That's a very fast deceleration and one that requires skid marks or an arresting hook. A four second stop takes 175 feet while a five second one uses 220 feet (a tad over the distance between you and the towplane), and six seconds - 265 feet. But before you can stop, you've got to make contact with the ground. Assuming you can descend with a glide ratio of 5 (a very steep angle equating to over a 1,000 feet per minute descent rate) with full spoilers, a skid, and hefty forward stick, that means you will travel 50 feet across the ground for every 10 feet of descent. This adds to your stopping distance. If you descend at the more probable glide ratio of 10, then your ground distance will double to 100 feet for every 10 feet of descent. So, from a 20 foot altitude, you may use anywhere from 230 (130 + 100) to 465 (265 + 200) feet to stop in. And that's only if you react instantly and do a carrier landing. In any case, you're going into the trees off the end of the runway based on the 200 foot remaining runway scenario above if you try to stop. If your altitude were 50 feet instead of 20 feet when you find yourself being left behind, then it would be reasonable to add an additional 150 to 300 feet to your stopping distance (total descent and stopping distance varying between 380 and 765 feet).

On any day, we will normally achieve at least 50 feet of altitude by the time we reach the end of the runway at Bergseth, but the normal is closer to 80-100 feet. If we assume we will reach 100 feet by the end of the runway to estimate a climb rate and we are moderate in our stopping distance, say we assume 250 feet once the brakes are applied, then our go/no go point will be around 700 feet from the end of the runway, which will give us time to descend from an approximate 45 foot altitude with a glide ratio of 10 and stop. This is more than one third of the whole runway length. Clearly these numbers are relative but should be ballpark distances that you might expect to stop in. You could easily take considerably more or less distance depending on your reactions, your skills, your glider's performance, your brakes and whether the ground is wet or dry. Whatever distance you decide you can land and stop in, note a ground reference point where this distance is and commit to it (see figure). The best method to decide what you need is to demonstrate it to yourself. This is best achieved by simulating a land out.



**Reference Distances to end of Runway
for Go / No-Go Decision**

Smokin' Brakes

My recommendation is to, after a normal flight, land to the west at Bergseth since we have obstacles (trees) at that end, which forces you to demonstrate (practice) three vital skills needed. The first is setting up for a landing at a field with obstacles with some unfamiliarity, such as would be expected at most land outs and are present at all of the fields available to us after a rope break at Bergseth. The second is practicing altitude loss as rapidly and as safely as you are capable of doing. In order to decide how much runway you need to land in after a rope break, you need to know how quickly you can get the glider on the ground from any altitude. The last is determining how much distance it takes to stop once on the ground. You'll need to know all of this information when deciding on which fields you can safely land in from a rope break or an unplanned land out and where your transition point lies on a Bergseth departure.

On this practice landing, make any comfortable approach and try maintaining 60 mph until you clear the trees at the approach end. Once cleared of the trees, descend, land and stop as quickly as possible. Your altitude will be approximately 100+ feet above the ground when you start down (we have tall trees on a hill). Note where you touchdown (best to arrange for someone beforehand to mark this spot) and stop. What are the distances? Your descent glide ratio will be your ground travel from the trees to your touchdown point divided by your descent altitude (~100 feet). I managed to get the glider down on the ground doing this exercise in 600 feet two different times (two different gliders). Thus my descent glide ratio was 6 (600/100). I then took another 250 feet to stop in, both times. So I have to assume that I will use 850 feet to land in a field with obstructions at the approach end. Realizing that most of the available land-out fields are less than 800 feet long, I have had to rethink how I will set up to these fields in an emergency since I won't be able to stop before uniting with compact objects from a conventional approach. I suspect that most others need to do the same.

Part 2 of this discussion topic will cover turn backs to Bergseth after a rope break. Part 3 will discuss landing out. I believe these will cover new material from what you may already know.

Mark Allen

(Ed. - In order that members might get right on to the next topic in Mark's trilogy, all three articles will be available as files on the Yahoo Users Group so you can get all this good information while your flying season is young.- when we need it most!)

Safety and Training:

Let's give PSSA Safety and Training Officer, J.C. Hauchecorne some space to weigh in on one of his favorite subjects:

The Link

As I said so many times, safety is an attitude. If we have the right attitude towards safety, we will be safer pilots! Did you know that our region, region 8, has the worst safety record in the US? Does that mean we in the NW have a bad attitude towards safety? Maybe!

Today I would like to talk not only about a safety issue but also about safety equipment; the parachute. As far as the rules are concerned, we don't need to wear parachutes. If it is not required,

why bother?

Again, let me go back to 1973 when I was a fledgling hang glider pilot, and yes, those were the pioneer days. Safety parachutes on hang gliders appeared sometime in 1975 or so. As soon as they became commercially available, with no exception, every hang glider pilot in my club in Switzerland had one. May be not in the initial training, which was ground skimming from small hills, but as soon as you qualified for your first high flight, you had to have a parachute.

Because it was such a natural thing to have, I never considered flying without a parachute. By the way, the same was for flying with helmets. Initially there were no helmets. Very quickly, helmets became mandatory, not by rule or law. No, simply because everyone had one. So deviant was it considered that one would rather not open their equipment than fly without a helmet.

Back to parachutes. Like I said, I don't remember ever soaring without a parachute. Fast forward to my start in Sailplanes, sometime in the early 90's. I went to a commercial operation in Golden B.C. I decided to do a conversion course from power to glider, very similar rules as here in the US. I showed up at the airport signed up, got my instructor, rented the plane and a parachute and went for my first lesson. Let's go back to what I just said: I rented a plane and a parachute. It never even occurred to me to fly the Blanik without a chute. I would not have considered stepping into the Blanik without an initial briefing on how to get out in an emergency.

Over the years, either participating or instructing in safety seminars every spring in my hang gliding club, I became so used to wearing helmets and other accoutrements required for safety that I had a difficult time not putting on a helmet when I went flying in a sail plane. Using a helmet and a parachute was to me like getting in a car and buckling my safety belt.

Now, here is my point: The use of safety equipment will become a habit, and you will feel nicked and exposed if you don't have them. We rent out four seats - we should provide a parachute for each seat. Providing a parachute for each seat will do more than just save a life in case of an emergency in one of our gliders. Forcing a new potential glider enthusiast and possible pilot to put on a parachute will start a habit that may save a life.

So, rather than spending money on a new club house, who will support me in getting four new parachutes? At \$12.50 per flight, it will only take 480 flights to recover our cost!
Safety first! Until the next "Link"

Be Safe!

Jean-Claude

Operations:

Recent operations have been hampered somewhat by weather, but we know that's going to change. However, we want to be a bit more flexible to accommodate weather, when we can.

The board has given more consideration to the possibility of holding operations on days which offer better soaring conditions than weekends. In the past we have held weekday operations on dedicated days such as Thursday but it's often the case that most many other days can offer excellent conditions. The board has decided, therefore, that it should be possible for any licensed member to hold an operation on any day of the week provided that there is a club tow pilot available and there are at least three members involved. This should give members more flexibility to catch those special days we often watch go by untouched. Curt Bryan has announced his availability as tow pilot on many weekdays, but he just needs to be given some advance notice of your intentions to plan his day.

Rates:

Ops Officer, Stefan Perrin, has made a recent announcement of revised tow rates which we repeat

here in case you missed it, along with an explanation by president Tim Heneghan.:

Due to increasing fuel prices and the cost of maintenance, the PSSA Board of Directors has elected to make the following adjustments to tow rates effective 4/1/2006:

Rope Break <500' AGL: \$15.00 (previously \$12.00)
Minimum Tow charge \$19.00 (previously \$16.00)
The charge per 100' above the first 1000' will remain at \$1.00

Tow fees will be reassessed in July and adjusted accordingly based on cost of operating the cub and the amount of tows provided. The BOD will continue to review and adjust tow fees at the beginning and midseason to ensure we charge for the actual cost of operations.

Stefan H. Perrin
PSSA Operations

Would you like to see your tow rates decrease rather than increase? Yes, it can be done, and it may be easier than you think. PSSA tow rates are determined by dividing our current towplane operating costs by the number of tows we estimate will be made to the "average tow altitude" over the year. The average tow altitude is 2,200' agl. That number was derived by averaging well over 5,000 tows made at Bergseth over several years. Towplane operating costs consist of fixed costs and variable costs.

There is really little that can be done to reduce per tow variable operating cost such as fuel, oil and maintenance. However, fixed operating costs are a different story. The more tows made, the less the fixed cost is per tow. For example; the tow planes fixed operating cost for 2006 (insurance and tie down) is \$5,213.00. If we fly 570 tows the fixed cost works out to \$9.15 per tow. If the number of tows were to increase to 1,000, the fix cost per tow is \$5.21, a reduction of \$3.94 per tow. Thus, the way to reduce the cost of tows is to simply make more tows. Now, lets not kid ourselves.

Flying more is going to take more out of your pocket in the long run, but there are several advantages to be had. You will increase the number of hours you fly while reducing your overall cost per flying hour. You will spend more time enjoying your favorite pastime. You will become more proficient, which in turn will make you a safer pilot, and, you will be helping to build a better PSSA.

Considering the very low, average number of hours flown and tows made by PSSA as a whole, more tows is something that would benefit us all, in more ways than one.

Tim Heneghan
PSSA President

One last item regarding the availability of PSSA demo flight gift certificates:

Gift Certificates:

New Procedure for Gift Certificates

If you haven't tried it yet, the use of the stunning new gift certificate is a great way to promote guest rides and recruit new members. How many times have you been asked to donate to a charity gift basket or charity auction? The PSSA gift certificate can be a very effective way to talk gliding and excite perspective flyers.

In order to assure that the certificates are a useful tool in marketing PSSA, members are encouraged to secure a number of them (3-5?) from Glenn Chouinard. On the certificate you can check a box that indicates whether money was being paid to PSSA, or if you, as a member, will be responsible for the payment of \$75 each. Each certificate is individually numbered and will be trackable to the member requesting it. With this process the gift certificate is chargeable only when it is used. Payments can be sent to Mark Allen or to Glenn directly to assure proper crediting of the purchase (to the customer or to the member). **Also, be sure to write the certificate number on the check!**

Glenn Chouinard

Field Manager schedule:

Sat. Apr. 22 Stefan Perrin
Sun. Apr. 23 Kim Sears
Sat. Apr. 29 Dariush Zand
Sun. Apr. 30 Van Chaney
Sat. May. 6 Curt Chenoweth
Sun. May 7 Glen Choinard
Sat. May 13 John Ennes
Sun. May 14 Wayne Ginther
Sat. May 20 Dean Gittleman
Sun. May 21 Tom Graham
Sat. May 27 Tim Heneghan
Sun. May 28 Dave Kremers
Sat. June 3 Charlie Long
Sun. June 4 Brano Mikulik
Sat. June 10 Marlene Nelson
Sun. June 11 Kenji Ominato
Sat. June 17 Stefan Perrin
Sun. June 18 Kim Sears
Sat. June 24 Dariush Zand
Sun. June 25 Van Chaney

Note: Please remember to notify Stefan immediately of any changes you have made to your original assignment or if, for any reason, you can't fulfill your obligation.

Newsletter contributions:

As always, your input to this newsletter is very important. Please let us know if you have new information, valuable experiences, constructive comments, even gripes which will help to make this a better club offering the safest and most cost effective soaring opportunity in the area. Send items to Dave Kremers (dkremers@earthlink.net).