

The Eagle's Nest



THE OFFICIAL NEWSLETTER OF THE SACRAMENTO VALLEY SOARING SOCIETY

October 2005

Sacramento Valley Soaring Society

Volume 16, No. 10

President's Message

By Ron Kucera

Well, I think summer has at last bit the bullet. I am looking forward to a few rainy days so that I can do a little building and repairing.

At the last club meeting I was told that our field has gotten a little thirsty as there has been no water since about the middle of September. We have been attempting to contact both Yolo County and the folks that did the repair work so that we can get things back in order.

I also heard at the meeting that our own Ed Lockhart is pretty under the weather so I'm sure a call or an e-mail might brighten his day a little.

Our last meeting was, to say the least, a little under-attended. One member present actually brought up the possibility of changing the monthly meetings to quarterly meetings if

the trend continues. It is very disheartening to take the time planning, scheduling, and/or presenting to have so few people show up. The past two months Ed Granger presented two very timely and informative modeling discussions to fewer people at both meetings combined than we used to have at a single meeting. As a club we need to decide if the monthly meeting is something we want SVSS to continue with. I am sure it is something that the new board will give serious consideration.

Now, speaking of the new board, here is one last request to fill a couple of slots for next year's board. As always, the position of president is still open as well as secretary. It may be that for the first time in SVSS history we will start a new year without a complete board. I know that most

people really don't want to work any harder in a fun club than they have to (so that they can have fun), but a club without leadership is an organization doomed to extinction (that is a science-type term meaning that it is going to fall apart).

Several people on this year's board have agreed to stay on in their same positions and at least one in a different capacity. Well, so much for my less-than-subtle approach to filling the remaining board positions.

Back to the September meeting! Scott Woodward was unable to attend this month, so I will be presenting some abbreviated meeting minutes.

There were two brand new club members present. One new member was Ken Seymour who not too long ago retired from the Navy where he

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Neil Nolte—2nd Place Grey Cup, Joan Nolte—1st Place Grey Cup, Jim Kirstine—3rd Place Expert, Bruce Moore—1st Place Expert, Scott Meader—1st Place Master, Bob McGowan—2nd Place Master, Bill Curry—3rd Place Grey Cup, Richard Hanschu—3rd Place Master, Mehrdad Amir—2nd Place Expert, Dave Finberg—1st Place Sportsman. Joan beat hubby Neil by 1 point for the Grey Cup win. Nice going Joan!

Notice!
SVSS
Club Contest
Saturday October 8

CD, Dave London

Pilot's Meeting 9:45 a.m.

1st Flight, 10:00 a.m.

Events

To Be Announced

Explanation at pilot's meeting

Points normalized to 1000

Entry fee: \$8.00

The Eagle's Nest

Published monthly by the Sacramento Valley Soaring Society.

Purpose

SVSS is a social organization whose purpose is to promote the efficient use of radio controlled model sailplanes. SVSS is an AMA chartered club (Number 2752). Membership is open to the general public.

SVSS Officers for 2005

President	Ron Kucera 916 686 2661
Secretary	Scott Woodward 916 681 2259
Treasurer	Stan Scharosch 916 987 1173
V.P. Competition	Scott Meader 916 660 9080
V.P. Field	Kipp Geisler 707 693 1771
V.P. Equipment	Rich Hanschu 530 759 9892
Club Instructor	Dave London 916 944 3948
New Member Mentor	Kipp Geisler 707 693 1771
Web Master	Dudley Dufort 916 991 1266
Newsletter Editor	Mike Clancy 415 897 2917

Related Websites

<http://www.svss.org>
<http://www.modelaircraft.org>
<http://www.silentflight.org>

Monthly Meetings

SVSS general membership meetings are usually held each month in Sacramento, California. Our club meetings are open to the public, and visitors are always encouraged to attend. The meetings are held on the **fourth Wednesday** of the month at 7:00 p.m. at SMUD, 6201 S St., Sacramento

Club rules

1. Have fun.
2. See rule #1.

AMA

Membership in the Academy of Model Aeronautics is required prior to flying in any SVSS organized event or using any SVSS equipment.

Field

The SVSS flying site is located at Yolo County Grasslands Regional Park south of Davis, CA.

Contests

Monthly contests are usually held on the second Saturday of the month at 10 a.m. Beginners and spectators are always welcome.

Training

Training is usually on the Saturday following the monthly contest.

Editor's Corner

Just a Great Time!

By Mike Clancy



First I would like to apologize for this late issue of the "Eagle's Nest." I've had a lot of family business to deal with this month in addition to getting ready for Visalia.

With Marty Falarski's help I managed to get my Tsunami repaired (Jim Kirstine-collision damage), repainted and test flown in time for Visalia. I'm happy to report that even without a test flight at the contest site the plane did well—got all the flight times. The pilot, however, wasted lots of points attempting to score on landings. We finished 39th in Unlimited and 2nd in Grey Cup.

Next month I will have extensive coverage of the "Fall Soaring Festival." Twenty SVSS members participated and I believe we all had a very nice time.

There were very few accidents, lots of thermals, lots of that "one round Visalia sink" which really changed the standings each round, and the usual wining and dining with old friends. I have attended 30 FSF's and they all seem to have one thing in common: no sooner than the contest is over, I can hardly wait for the next one.

One of the most important things about this contest is meeting old friends and acquaintances that you don't regularly see during the year. It seems like the social aspect of the contest gets stronger with each passing year, especially since each year there are folks who were not able to attend or that have passed on.

Here is a quick initial report of SVSS standings: in Unlimited, Jim Thomas 13th, Mehrdad Amir 15th, Joan Nolte 21st, Shawn Lenci 22nd, Marty Falarski 25th, Mike Clancy 39th, Paul Ferradas 40th, Bruce Moore 46th, Bill Curry 54th, Neil Nolte 62nd, Scott Meader 79th, Nick Kassem 81st, Kevin Webb 84th, Kasra Naghshineh 92nd, Bob Huff 95th, Jim Rolle 98th, Ron Lenci 150th, Craig Allen 167th. In 2 Meter: Mehrdad Amir 6th, Dave Finberg 17th. RES: Scott Allen 4th, Ed Granger 42nd, Craig Allen 63rd.

SVSS Preliminary Financial Statement

September, 28 2005

1. Checking Account	Income	Expenses
Starting Balance		\$2,616.53
Expenditures		
RC Soaring Digest	\$50.00	
American Red Cross Donation	\$225.00	
Neil (Stamps, newsletters)	\$37.00	
Dave Finberg (Mower Gas)	\$30.41	
Ron (Field Supplies)	\$31.38	
Porta Potty (Spring Fling)	\$262.05	
Porta Potty (Monthly Service)	\$116.97	
Dudley (Pump Repair)	\$1,500.00	
Richard Hanschu (Equipment)	\$207.49	
Total Expenditures	\$2,460.30	
Balance		\$156.23
Income		
Pump Donations	\$50.00	
August Contest	\$225.00	
Total Income	\$275.00	
Ending Balance		\$431.23
2. Savings Account		\$736.21
Total Operating Funds		\$1,167.44
Increase (decrease) in operating funds		(\$2,185.30)
Pump Fund Accounting Included in Monthly Statement		
Prior Balance	\$1,655.00	
Monthly Donations	\$90.00	
Total Donations	\$1,745.00	
Pump Payment (Dudley)	\$1,200.00	
Pump Payment (Dudley)	\$1,500.00	
Total Payments to Dudley	\$2,700.00	
Ending Pump Balance		(\$955.00)

"Gordy's Sailplane Balancing System"

By Gordy Stahl

In my travels I get to meet lots of RC sailplanes, and their owners. It amazes me how little we all know about trim and balance.

So often I see a plane flying that I know is way out of balance. It balloons, lands like a rocketing rock, and falls out of low-speed, down-wind turns, or just ends up in a tree somewhere with its owner saying, "I don't get it, it just wouldn't turn!"

When I ask about how they balanced their sailplanes, they say, "Just where the plan said!"

Aside from the science involved in determining Center of Gravity, Center of Pressure and all those other cool terms, I find that to get a sailplane to fly at its optimum, you have to get the lead out.

After balancing one fella's plane, which moved its "balance" point back about a full 1-1/2" from what the plan showed, I asked him a simple question. You see that your plane flies the same at virtually any speed, it doesn't porpoise, and it lands super slow, it turns on a dime and shows the smallest thermal, but its balanced way behind what the plan shows. Are you going to put the lead back in so it balances where the plan showed, so it flies goofy again? He said yes he would because the designer must know the right spot to balance it at, since he designed it.

So he put all the lead back in and proceeded to put it in the top of a tree on the subsequent flight. Go figure.

I hear guys say things like, "I like my plane a little nose heavy, it makes

it more stable." Or, "If you get the balance point too far back, it gets too twitchy."

The first statement implies that "more stable" is a good thing, so we should all fly an unbalanced plane. The second statement has a negative connotation, because of the word "twitchy."

The "more stable" statement implies that the guy has through trial and error found the farthest balance point back behind or at the "neutral" balance point, then added lead to the nose to get it just right. Which he didn't. Guys like this add lead to get the plane to balance slightly ahead of where the plan showed—really nose heavy. A plane balanced forward of the neutral point, takes more elevator to get the nose to raise, as in when you are low and slow, going down wind. That condition causes you to add more up to get that heavy nose to raise when there is very little air for your elevator to react against, causing you to pull even more elevator. All that up causes the airflow to stop traveling over the surface, which causes a "snap roll," what other guys would blame on a "tip stall."

The second statement has a negative connotation because of the word "twitchy." How about substituting a different word—and stating that a neutrally balanced sailplane is "controllable"? Doesn't sound like a bad thing now does it? So if when the plane is "balanced" it doesn't need much up elevator to raise the nose, you can reduce the travels or use dual rates to "calm" the plane down at high speeds.

You've heard of the "Dive Test"—probably the dumbest thing anyone ever came up with for checking balance. I hear modelers talk about it saying that when the plane is nose heavy, it will cause the model to pull up quickly and one that is neu-

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Left to right; Bob McGowan, Jim Kirstine, Perry Fruge and John Fruge. These flyers from other clubs add interest and income to our contests. Bob is holding his Hobby Club "Onyx." It is a nice flying machine and is less than half the cost of the current crop of European molded sailplanes.

R/C COUNTRY

The Hobby Shop

M-F - 10:30-7:00
SAT - 10:00-5:00

6011 FOLSOM BLVD.
SACRAMENTO, CA 95819
(916) 731-5868

CHET & TERRIE VAN SCYOC

**Minutes of the Meeting,
SVSS, October 2005**
By Scott Woodward, Secretary

Scott was unable to attend the meeting. President Ron Kucera included notes from the meeting in his monthly President's Column.

SVSS Sept. Contest



Jim Kirstine sadly contemplates the wreckage of his unlimited ship. The plane was a victim of a launching accident. Jim is a past member of the old NCSL club based in Auburn and now belongs to the Reno based Sierra Silent Soarers. He flies regularly at SVSS meets.

Bob Umburger and his wife/timer pose with Bob's Oly II. Bob flew the Oly to a 3rd place finish in the Sportsman class at the September contest.



Oops! A.J. McGowan sits with what is left of his Psycho sailplane. According to his Dad Bob a "suspect" battery was used—turned out to be faulty. A little lesson here. Don't use any equipment that is not in top condition—modern sailplanes are expensive.

SVSS Field Improvements

This is our very handsome picnic table. It meets our lease requirements. It is very heavy so it won't be carted off easily and is made of recycled composites. It should be weatherproof and maintenance free. President Ron Kucera has been very proactive in obtaining new facilities for our field.



Here is an aerial photo of our flying site taken prior to completion of some of our many improvements. Since this photo was taken we have: added a sprinkler system and planted grass, finished the shade structure, placed a rock patio and pathway for the structure, placed a network of log barriers to guide vehicles and protect our owl burrows, added picnic tables and BBQs. Further improvements are ongoing.



Our latest BBQ / Grill. It is all steel and permanently mounted. It is quite substantial and should last for a long time. I can't wait to see Chef London using it.

Shipping cast iron items in cardboard boxes doesn't seem like a good idea. Here is a photo of our BBQ as it arrived from the shippers. Surprisingly enough, the BBQ was not damaged even though the cardboard box was almost destroyed.



President's Message

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was a back-seater in an S-3. He started flying when he was back in Virginia where he had the nickname of "Sparkie" because he was the first one at his club to fly an electric powered model. Ken stated that he is currently working on a (or at least what I believe he said) "Red Card Jolly."

Our other new member is Pete Lucas. Pete comes to the Sacramento area by way of San Francisco. I believe he said that his wife had just completed either her masters or her doctorate and both of them landed jobs here in the Sacramento area. Pete says he remembers his first modeling experience was with free flight models with Jetco engines but that he has been out of modeling for about 20 years now.

On behalf of SVSS, I would like to welcome both these folks to our organization.

As mentioned earlier, Rich Hanschu reported on the water issues at the field. Rich also stated that he would consider taking over the responsibility of the VP in charge of the field.

Mr. Dudley Dufort discussed the upcoming SVSS cross country contest that is slated for October 22 and 23. Dudley asked that anyone that would like to volunteer to be a team should watch for a list of pilots competing (or I am sure a phone call or e-mail to Dudley would also do the trick).

There was also a somewhat lengthy discussion about this year's new contest pilot categories. There were many opinions for and against but it ended with the President (once again, that's me) stating that this year's board agreed that we would critique the new system at the end of this season. So stay tuned for further information on that matter.

The meeting ended on a high note with the second in a series on modeling aerodynamics by Ed Granger. And what a ball we had with this one!

Ed brought in several small balsa gliders that had removable tail feathers set at different degrees of decalage to the wings (very cleverly held on with magnets for quick changes and minimal crash damage).

Ed started by talking about how we have to consider the wing plan form when deciding how far back from the leading to balance the model. He then launched (a pun I guess) into the effect that the decalage difference between the horizontal stabilizer and wing can have on the balance point. Here, Ed was busy changing the setup of the

gliders and giving them a gentle push across the room.

We then divided into teams of two and we got to go out in the main entry way to modify our glider for maximum glide. When all was said and done we found out that a positive decalage of about 1-1/2 degrees gave us the greatest glide ratio. As the degrees continued to increase towards the maximum of 6 degrees, the nose weight continued to move farther and farther out the nose.

Ed ended his presentation with a discussion of the dive test as a means of testing for balancing. In a nutshell, Ed stated that the dive test wasn't worth a plug nickel; that it is only accurate for the particular decalage that your model has and that may or may not be at the optimum for the aircraft. This is the same philosophy adhered to by avid soarhead and author Gordy Stahl, and to say that he does not like the dive test would be a major under-statement. (*I have sent an article by Gordy Stahl to Editor Mike. It is published on page 3 of this newsletter.*) What Ed said that we needed to do was to start with a slightly nose heavy model and start hand tossing for maximum glide distance without any tendency either to raise or lower the nose while gliding. You eliminate the up or down tendency by changing the horizontal stabs trim setting. Once a level glide path is achieved (as Gordy would put it, the model consistently lands on its tow hook) weight can be removed in small increments and you continue your hand tosses.

I know I probably missed or messed up something so read the article from Gordy or give Ed a call.

Hope that you all enjoy the cooler fall weather and that it will give rise to our spirits.

Ron Kucera

Club Meeting

Wednesday,
October 26

7:00 p.m.

SMUD Building
6201 S Street
Sacramento

Presentation TBA

Show and Tell & Raffle

Please try to attend this meeting. Important issues to be discussed. Lots of fun to be had. There are also cash prizes in the raffle.

SVSS — Events 2005

October

1-2

CVRC Fall Soaring Festival

8

SVSS Club Contest

Dave London

26

Club Meeting

November

12

SVSS Club Contest

Peter D. II

23

Club Meeting

December

TBD

Awards Dinner

10

Toy-Fly

Bruce Moore

NEXT MONTH

Special Coverage of
SVSS at the

Visalia
FALL
SOARING
FESTIVAL

"Gordy's Sailplane Balancing System"

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trally balanced or tail heavy will "tuck" or increase its dive angle as speed increases.

All probably true but goofy to be talking about in the context of Balance.

A nose heavy plane has to fly with UP elevator trim, so naturally it will balloon with airspeed. More air passing over the elevator's surface gives it more authority. A tail heavy plane tucks because it has some down elevator, since a tail heavy plane flies a lot better backwards, that's where the weight is!

But lots of things affect what a sailplane does at high speeds. Tail boom flex, causes a reaction on the pushrods changing the position of the rudder. The shape of the stabs can put huge twisting down loads on its tips. Push rod flex can also create things like tuck. But all this is still goofy to be used for determining optimum balance. Since when do we ever achieve and maintain those kinds of speeds when circling in a thermal?

There is never a good reason to have an unbalanced plane. Because the plan shows a CG, that doesn't ever mean it is the optimum balance point for the plane you built. (A lot of what we have done with CG comes from the Free Flight days, where planes were balanced forward so that if they got tipped into a dive they would pull up. We don't fly free flight, we pay big bucks for a Transmitter so that WE can decide when or if we want our plane to pull up.)

Here is a simple way to get your plane almost perfectly balanced before launching.

Keep in mind that this system is easiest to use with a sailplane equipped with a full flying stabilizer, as fixed stabs bring decalage, or the alignment (usually mis-alignment) of the horizontal stabilizer to the wing, leaving the elevator to attempt to compensate for the two surfaces fighting each other.

Its called "Gordy's Sailplane Balancing System," named after a brilliant, intuitive RC soaring legend.

On the bench, balance the plane on a couple of pencils, or your finger tips, at about 40% of the root chord, from the leading edge of the wing. (Root chord is the width of the wing panel at the center of the wing). (No I don't care what the plan says, unless it says 50%, then go ahead.)

Go do a few hand tosses to get the plane trimmed so that hands off, it flies flat and level, not diving not ballooning, just a long flat glide. If your glide is heading downward, it's not trimmed for a long flat glide!

Now, once trimmed as stated, give it a good toss, get it flying straight and keep your hands off of the elevator stick! The only important part of this system is the last 10' of its glide, so watch what the nose does very carefully. If at the end when the sailplane slows, the nose suddenly drops to the ground, GET THE LEAD OUT.

The nose dropped because the elevator ran out of power (air moving over it) to hold all that lead in the nose up. So start pulling lead. (Note! With each chunk of lead you pull out, you will need to take some up trim out, as the elevator is having to do less work.)

When finally your plane flies flat off the toss, and at the very end, the tow hook touches first, YOU ARE BALANCED, or at least as close as you can tell this close to the ground.

Next step, launch the plane and get it trimmed in the air for flat and level flight. Then flip it over inverted. Your goal is to pull lead until almost no (like almost NONE) down elevator is required to hold the plane inverted in level flight.

Now when your plane enters lift it will pop its tail up like a dog in heat, as it is not being forced downward with compensating up elevator, trying to hold a lead laden nose from diving down. It will land like a feather, because it can be slowed to incredibly low flying speeds without the nose dropping like a descending rock.

The bottom line is that it doesn't matter where the balance point of your sailplane measures. What matters is that your sailplane is optimized to be as "clean" in the air as possible, that it reacts when told, and always maintains its attitude, regardless of air speed.

So get rid of that plan and get that plane balanced! Once balanced, you can reduce surface movement travel, use your dual rates or expo, and get that plane tuned up for attempts at the winner's circle!

You can reach me for questions at GordySoar@aol.com.



You're Addicted to RC, When...

Submitted by Dave Finberg

You read nothing but TX and model manuals in the bathroom.

You have converted a mobile home to have room for all your planes, with just space enough to sleep.

Your RC insurance costs more than your cars.

You have something RC in a radius of 5 ft. from you, at all times.

You've heard "Hey, that looks just like the plane I tossed in the bin after crashing last week" more than once, at your club field.

A full scale plane passes overhead and you move your thumbs to match its movements.

If you plan to go outside for any reason, and it's windy, you go back inside again and find out when it's due to be calm next.

When the power steering goes, you tell the people at the car garage to change the servo.

If you worked feverishly in all your free time, it would take three years to clear up your backlog of kits.

There are pictures of your models in your office but none of your wife.

You host a fun fly when it's so cold that one of the events is starting your engine.

You accept a crash as an opportunity to start that great new kit.

Every time you pass a garage sale, you look for wings.

If you spend more money at the LHS in one hour than you make in a month.

You keep your old van just to transport planes in.

When you go to Home Depot and the PVC pipe and fittings section gives you ideas for new wing racks instead of plumbing projects.

The smooth tarmac bike trail at your local park has funny airport markings sprayed on it.

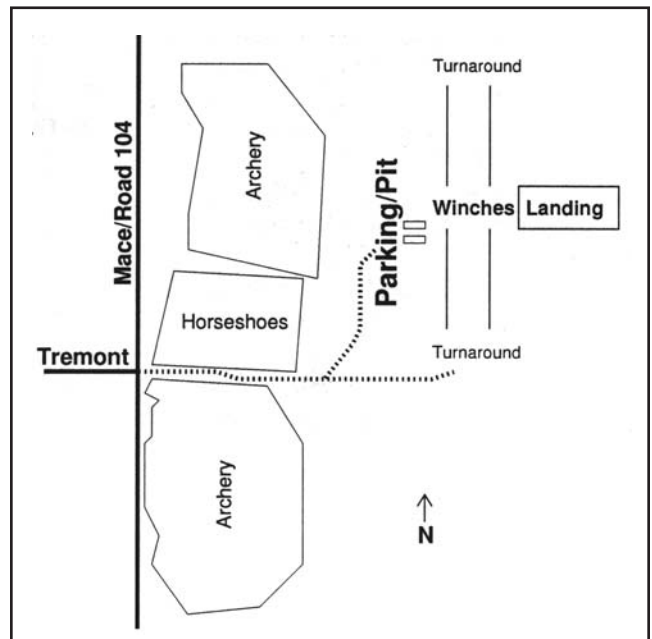
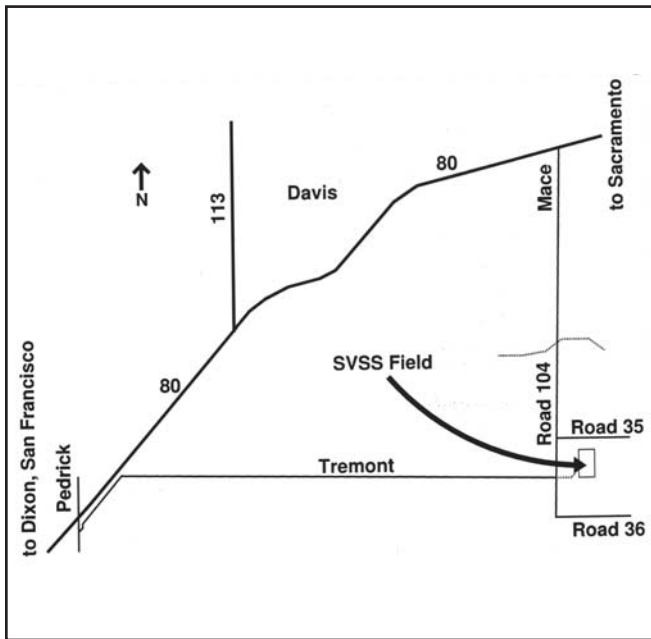
Your car has a ski box on its roof, yet you NEVER go skiing.

You have a "special room" for your planes.

You have a gallon drum of adhesive in your shed.

You have at least 3 different heating irons.

Your neck shows a white strip, that is the same width as your TX strap.



SVSS flying site is located at Yolo county's Grasslands Regional Park south of Davis, CA.

Directions: From I-80, take the Mace Blvd. exit. Follow Mace south 4.0 miles. The gravel driveway entrance is directly opposite Tremont Rd. Follow it into the park for approximately 200 yards past the horseshoe and archery areas to the field.

Shortcut for eastbound I-80: From I-80, take Pedrick Road exit. Follow the frontage road eastbound on the south side of I-80 for 0.8 miles. Take Tremont east for 5.4 miles.

Sacramento Valley Soaring Society
 Editor
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