

# The Harbor Soaring Society Newsletter

JULY 1992, VOL. 29 NO. 7



## HSS JUNE MEETING MINUTES

The meeting was brought to order at 7:50 PM by Ben Clerx, president. The minutes from the last meeting were accepted as read. Frank Chasteler gave the treasurer's report on the balance of club funds, new club shirts, contest funds, etc. The treasurer's report was accepted as read.

Frank announced the completion of the new retrievers and turn-arounds with special thanks to the following. Jim Parsons, Blair Hamilton, and Dick Pantzar for working on the retrievers. Jim Parsons, Blair Hamilton, and Steve Hendry for completing the turn-arounds. It was also noted that the club has a one year's supply of winch line.

Dick Johnson gave status of the video library tapes, and noted that all tapes were present and accounted for.

Ross Thomas talked about future contests: an SC2 hosted by HSS in July, and a fun fly between HSS, El Dorado Silent Fliers, and SULA. Ross asked volunteers willing to help to contact him directly.

Gordon Ritschke requested that rules be applied on winch usage, making room for planes waiting in line for winches, and to move the ready area across to the non-winch side of the bike trail. These details will be published in a later newsletter.

The meeting closed at 8:15 PM and was turned over to guest speaker Tim Renaud from Airtronics.

Tim brought word of several new items from Airtronics. A built up and finished 2M Whisper was displayed. This has a wood fuselage and built-up wing, fully

sheeted on top similar to the Legend. It is designed to use mini servos, but can use a full size servo in the center to the wing for ailerons, similar to power models. Standard size batteries and receivers will fit. The 2M Whisper kit should be out later this month, retailing for \$99.95.

In July, a 95" Whisper will be available, priced at \$129.95 retail. An electric powered Whisper will be coming out later in the year. Several Whisper prototypes have been flying in the region for the past year.

In order to better support the soaring community, Airtronics has formed the Airtronics Specialty Division (ASD). A newsletter will be sent to all who join, at no charge, with product news and information for the glider pilots exclusively.

Airtronics is making kits at their own plant in Irvine. The company that made Airtronics kits in the past is no longer doing so.

Tim asked that anyone interested in seeing the Irvine plant should give him a call, set up a time for a

(continued on page 2)

## MEETING LOCATION

Lakes at Seabridge Condos. On Adams Ave. in Huntington Beach. Turn right at the first traffic light heading East from Beach Boulevard. You will need to check in at the gate. Tell the guard you are there for the HSS meeting. If there are any problems, call 969-1524

## H.S.S. BOARD MEMBERS

President: Ben Clerx	(714) 721-8848
Vice President: Dick Johnson	(714) 673-7553
Secretary: Woody Grosvenor	(714) 969-1524
Treasurer: Frank Chasteler	(714) 545-2185
Contest Coord: Ross Thomas	(714) 638-0705
General Dir: Pete Richardson	(714) 557-4782
Newsletter Ed: Pete Young	(714) 892-3473

The Harbor Soaring Society newsletter is published monthly. Editorial comments and articles are welcomed. Please provide all material for consideration by the 15th of the month prior to publication. Wordprocessed material is appreciated (any major IBM compatible disk format and program). Handwritten material must be clear and legible. The editor reserves the right to edit all material. Submissions should be made to Pete Young in person or by mail to: 6592 Belgrave Ave., Garden Grove, CA 92645.

Printing Courtesy of OCB Reprographics  
Irvine, CA (714) 660-1150

HSS June Meeting Minutes, cont.

visit, and see how the kits and products of Airtronics are made.

A new version of the Infinity radio will be coming out this year called the Infinity 1000. This radio will be unique in that frequencies can be changed at the flying field without changing crystals. The Infinity 1000 will have 10 channels and will be expensive at \$1500 retail (approximate). Frequency changing will be possible with a cable between the transmitter and the receiver. Manual crystal changing can also be accomplished on the receiver without the cable. After the crystal is changed on the receiver, the transmitter must be re-synched to match.

The 407 servo replaces the 401 Airtronics servo. The 407 will use the same gears as the 401, but will have slightly less power because of a non-coreless motor.

Tim recommended the Infinity 600 system over the 660, if the exponential feature is not required.

Changing crystals in standard radios was discussed, and it was recommended that frequency changes should be within 2 channel numbers either way of the original frequency. This method will provide safety margin. A further step is to always range check after changing a frequency.

Woody Grosvenor, Secretary

June HSS Monthly Contest

Nobody said it would be easy. Gusty breezes, fast moving clouds, marginal and infrequent thermal activity and downwind launches overshadowed an otherwise perfectly sunny day, setting the stage for HSS' 2M/Open June club contest. The tasks: a standard 3/5/7 with measured landing tapes and a twist: no more than two of each time would be permitted!

Plagued by the typical pilot grumbles about early withdrawals, Cliff Ross Thomas gathered the pilots prior to the second round to discuss alternatives to handle the difficult conditions. Shortly thereafter, the winch and retrieval equipment was arranged to face the apartment/condo complex. Landing approaches were from the north over the dirt mounds and seemed to pose no difficulty for most, although the shifting air continued to be challenging.

Third round flying required some skill and patience, but proved still rewarding for those pilots able to capitalize on substantially increasing wave lift mixed with lightly scattered drifting thermals. The entire day was a blueprint for short flights, but obviously a few pilots managed to tailor their flying style to the rapid weather changes to capture trophies. Congratulations to all the winners!

Final results: in 2M, Norm Kutch, Larry White, and Ross Thomas finished 1-2-3. Steve Hendry won Open Expert, followed by Larry White; Mike Aguirre took third in Expert with his Sportsman score. Morry Smith and Dick Long took first and second in Advanced. And Andy Sanders and Nick Buzolich took first and second in Sportsman.

Thanks also to all who participated, despite the unusual conditions. Of course, a special thanks to the individuals providing their winch equipment and additional support necessary to conduct another successful flying contest.

- reported by Curt Nehring



JULY MONTHLY

FYI

...congrats to Ben Clerx, Tony Martin, Don Edberg, and Roger Lackey for finishing 1st, 2nd, 5th, and 6th at the May SC2 tournament hosted by North County Clouds...other HSSers placing well were Frank Chasteler, Don Zink, Steve Hendry, and Curt Nehring...at this point of the SC2 season, HSS leads by a slim margin in the points standings over NCC and TPG...the contest was marred by a disorganized impound which released the wrong TXs and frequency pins throughout the day...wit and wisdom from Frank Weston: "It is a fact that 80% of construction time can be spent on improving looks the last 10%. We think a ship that is too good looking is an indication of misplaced priorities, and possibly an unhappy childhood. Our philosophy on finish is to spend as much time on it as required to give optimum performance."...new ships spotted at the field: Andy Sanders' Sealy Laser, Brett Young's Alcyone, Ross Thomas' re-engineered Spirit 100...casualties at the field, please send flowers: Nick Buzolich's Spirit 100, Dick Pantzar's Legend...on the field: Steve F. seen redefining "wing loading" using John O's Alcyone wings...next SC2 contest is June 28th at Poway, hosted by TPG...George and Jo Joy have invited touring HSSers to stop over at their new house for lunch and a swim...contact George at the contest for directions...



DATE: Sunday July 5, 1992

CONTEST DIRECTOR(S): Curt Nehring and Pete Young

FORMAT: 3 rounds, 20 minutes add-em-up, min/max times to be set at the field, 1 point per second, mandatory 3 flights.

LANDINGS: carrier landings, 50 points max per attempt.

PILOTS' MEETING AT 8:15 AM

FIRST ROUND AT 8:30 AM - NOTE THE EARLY START TIME!!

Starting flight group to be decided at the pilots' meeting.

FOR SALE

RnR NOVA Slope Racer  
New in Box, \$250 firm  
Call Keith (714) 832-1099

Mueller COMET F3B/Slope sailplane. This model has a veneer wing skin (as shown in the Dec 1991 Model Aviation, page 102). The wings are Comet 87 (two piece plug-in, tapered tip sections) with the HQ 2.0/9 airfoil. The fuselage is from a Comet 89T with the stabilator middle-mounted. This is a sound model, capable of full power F3B launches, and I use it for slope racing as well. \$400 includes two good servos in the fuselage, no wing servos. \$350 for no servos. Contact Don Edberg at (714) 552-1812 evenings and weekends.

Kits new-in-box: Airtronics Adante, Sagitta 900, Sagitta 600; Mark's Mirage, Midnight Model's 2M Icarus; Ace Quasoar, Prodigy; Sig Citabria, Goldberg Super Chipmunk; LJMP Meteor and Pantera;  
Top Flite Nobler, Klingberg Wing. For prices, call Pete @ (714) 892-3473.

SPHINCTER STORY #17, May 30, 1992

...here's another masterpiece by master glider-guider -writer Manny Tau...

Well, here we are, Miguelito Canyon in Lompoc. It's another slope race with the California Slope Racers. Things are going fairly well. The lift is pretty good, ranging from the velocity of an elephant having flatus to some good winds around 15 mph. I've been flying my Swift 800 (SD 2062) with 2 lbs of ballast quite successfully, but managed to dork it on a landing during a practice run after the first round of three.

You know, I spend lots of hours practicing for various competitions, and it just eats me up when I do something stupid. Like coming in too slow in crow configuration with a wing loading equivalent to a Volvo with stubby wings, and then tip stalling the Swift like an idiot on too much medication. So the damage was minor, and it was time to switch to the Modi 900.

The next two rounds went well, placing first in both, and again with ballast (2 1/2 lbs) in the Modi. It was getting to be around 4:30 PM, and get this, the fog started to roll in. It was amazing to see this stuff just take over and reduce visibility to around 50 feet. It was like a scene from the movie Excalibur when Merlin would call out the dragon's breath, and the heavy fog would roll in and blanket the ground in a matter of seconds. It was eerie.

Now it became time for the flyoffs. Rich Spicer (RnR Products) and Steve Condon (Forrey Pine Gulls prexy) flew off 4th and 5th place. We waited for a break in the fog, and then flew the race amongst laughter, hecklers, and cheers, as the fog almost blanketed the course. We still had to fly off the 3 way tie for 1st amongst myself, Rich Tiltman (RnR Products, #1 CSR 1991), and Jim Lytle (Santa Clarita Soaring Assn.)

Rich Beardsley, the CD for the race, asked us if we wanted to go by the fastest times throughout the day, rather than fly in the dense fog. We couldn't even see the far pylon unless the lights were activated. Well, I guess it was the moment and testosterone was abundant...we three decided to go for it. It was scary. My Modi is white, the worst possible color in the fog...it figures...one of those 50-50 chances, and making the wrong decision...should of gone left instead right, etc. Lap 1 was OK, barely able to see the friggin' ship, then the fog got thicker...and then it happened. On lap 2, my ship disappeared into the fog after I initiated a turn at the far pylon...I freaked, I yelled out that I lost my plane...laughter and heckling prevailed amongst the spectating crowd...flashes of tip stalls and splintered composites haunted me.

I then chilled out, and figured I've made these pylon turns hundreds of times before...this is familiar. So I let my thumb do the flying...get this, it worked. IFR a la thumb. I completed the turn and flew out of the fog without incident. Then it happened again. The fog continued to get thicker, and visibility was down to 25 feet. Again I lost the ship as I initiated a turn at the far pylon...I'm not used to

this...sphincter atightening. So here goes with the thumb again...and yes it came out fine, though I totally lost track on the plane and my caller, Steve, had to point out the plane as it emerged. The crowd was going wild. Tiltman had stuffed it a lap earlier, and Lytle, taking the more intelligent route, conceded. We ended this last race before lap four. Barry Mattingly videotaped this race, and it's wild to see the planes go into the fog and disappear then reappear.

Suggestion: when you're a couple of mistakes high, practice flying and turning without visuals, get it down. It might come in handy when visuals aren't available and you don't want the fat lady to sing. Oh, by the way, results for the CSR race: 1st - Manny Tau, 2nd - Jim Lytle, 3rd - Rich Tiltman, 4th - Rich Spicer, 5th - Steve Condon.

Side note, there's going to be an F3B contest on June 14th over at SULA. More notes on this latter, as this contest is used to qualify for the September US Team trials.

## VIDEO LIBRARY

RC Video Magazine (Vol. 7 - 1986)  
Striking Back \*\*\*\*  
Foam, Fiberglass, Flight \*\*\*\*  
Tournament of Champions (1988)  
Monokote 1&2, Interesting \*\*\*  
MIG Killers \*\*\*  
Hook Down, Wheels Down, Naval Aviation history \*\*\*\*  
F3E Bridgeman's Plane  
Electric Flight  
Dawn Patrol, WWI movie \*\*\*\*  
Thunderbolt, Fight for the Skys, WWI air combat \*\*\*\*\*  
F3E USA Finals, June 22, 1988

Number of \* indicates reviewer's opinion of the tape. More tapes are being added all the time. All tapes are VHS format. Ask at the club meeting for information on borrowing a tape.

## ISS Hand Launch Contest - Ben Clerx

This year's contest was held on June 13th, a perfect day with plenty of lift and a very light breeze. As usual, Inland Soaring Society, Riverside, put on a great contest with Ian Douglas directing.

If you haven't been to a hand launch contest, they're a lot of fun and pretty low key. Flight groups of six or seven fliers are called out and given a ten minute window in which to accomplish the task. The first round was a total of your three longest flights in the ten minute window. Round two was to launch as many times as you wanted to get a 5 minute flight. Round three was the tough one: six launches to get five 2 minute precision flights. Round four, for the top twelve pilots, was as many launches as you wanted to get five 2 minute precision flights. It's tough to get five 2 minute precision flights to fit into a ten minute window, but it doesn't matter: all rounds were scored "man-on-man". The person who comes closest to accomplishing the task within each flight group gets 1000 points and everyone else gets a percentage based on how well they flew against the flight group winner. If there is no lift when your flight group is called out, that's OK - just do better than the guys standing next to you. Also, there were no spot landings to worry about.

It's amazing how much lift there is below 50 feet. This is something that will help you improve your thermalling ability with larger sailplanes and give you a better understanding of micro-scale weather patterns (micro-meteorology).

These are low tech airplanes - most cost less than \$20. Not wanting to spend money on a lot of micro radio equipment, I used my standard radio gear with the exception of a 270 mah battery pack that cost \$13. I used my regular 8 channel receiver and two Futaba S-133 servos, the ones I use in my Falcon wings and fuselage. The

overall weight of the plane was a competitive 15 ounces - lighter than many other planes. So, go out and built one of these and have a blast! There will be more of these contests in the future - the next one may be in September - watch the newsletter.

A new trend will be to allow the use of a short 50 ft hand tow in case you don't have a baseball pitcher's arm. You can have any helper throw or tow your plane. However, keep in mind the Clerx Potato Chip Theory: "wing loadings are generally so light that no matter how hard you throw the plane, it will only go so high."

Results? I was the only HSSer there out of about 34 pilots. In each of the first 2 rounds, I got max points (1000), but the tough third and fourth rounds dropped me to 8th. Gary Anderson of TPG won with a fine display of soaring skills.



## Tidbits from Competition Products on cutting foam wings...

by Ed Berton

Learning how to cut a GOOD 66 - 72 inch foam wing core was one of the most frustrating projects I have ever attempted! Don't misunderstand me, I could cut 6 foot cores but unfortunately each one had something wrong with it. To make matters worse, they all had different faults; I couldn't even make the same mistake twice! The trailing edge gave me the most problems. It would go from thick at the center to thin at the ends, then it would just be the opposite, thin at the center, thick at the ends. It would curve out, curve in, and even melt away. The trailing edge did everything except come out straight and sharp! The leading edge was doing many of the same things the trailing edge was. Finally I had to admit to myself that I didn't know what I was doing. Cutting a straight and true 72 inch wing core was going to be harder and more involved than I had anticipated.

I read everything available on cutting foam wing cores. All of the information covered wings up to 4 feet long and nothing much was being said about anything longer. The technique in 1981 for cutting good 6 foot long cores was very vague and the guys who knew were not talking! The one piece 6 foot long wing core project would have to be done the hard way and with little or no outside help!!

The two most important problems were wire sag and good foam. Since 1981 I have cut about 3000 foam wing cores, and FOAM is by far the biggest problem.

### POLYSTYRENE

Expanded bead polystyrene is used for almost all foam wing cores. The exception is "BLUE" foam, a 2 pound density foam used for most "bagging" procedures. White polystyrene weighs approximately 1 pound per cubic foot, this is called 1 pound density foam. Density is controlled when the material is manufactured, most of which is 1 pound density as this is commonly used for insulation boards. After manufacture the product is removed from the mould and is called a "log". Most logs are anywhere from 2 foot square to 4 foot square and between 6 and 12 feet long, I have seen logs as long as 40 feet! These logs are then cut into 2 inch thick x 8 feet long sheets and are usually used as an insulation product. During manufacture steam is injected into the mould, this is the first foam problem...MOISTURE!!!

MOISTURE IS BAD NEWS. Trying to cut a wing core out of "wet" foam is like nailing the foam to the bench and cutting the nails with the hot wire! When the hot wire hits the moisture, the wire immediately cools and will not cut the foam. However, the wire only cools in the "wet" area, this means the wire in a "dry" area will get hotter because it is not moving and cutting foam. You can cut through areas of moisture but it usually ruins the core. How do you know if you have a moisture problem? After the cut, examine the surface. If there are shiny circular areas, the problem is moisture. On large (4' x 8' x 2') sheets, moisture usually occurs in the center area because of restricted air circulation. Moisture in foam is very inconsistent and can

be present in any part of a sheet. I have cut cores where the top cut was fine and the bottom cut ruined because of moisture. There are two ways to solve the problem:

- Specify "aged" foam. "Aged" foam is cured in warehouse for 4 - 6 weeks.

- Allow your foam to cure and "age" 4 - 6 weeks before cutting.

Another problem is in the raw material used. Many foam manufacturers use or add "re-grind" when the log is made. "Re-grind" is made from waste polystyrene. The waste is processed in a chopper and the pieces are re-manufactured into logs. After hot wire cut, "re-grind" looks like the outline of a finger with a raised center and must be sanded. It can also look like wet cement after it has been touched, many times it will be darker in color. "Re-grind" foam may have areas that are hard to cut and reacts similar to moisture. The difference between "re-grind" and "moisture" is in the shape and texture. When you order foam, specify "VIRGIN" foam. Tell your supplier the foam is NOT for insulation and that it is to be cut with a hot wire you must have "VIRGIN" foam. Make sure you don't get "re-grind". If you buy foam from a distributor that sells insulation products you will probably get "re-grind", and if you haven't you have been VERY lucky. Check all your foam sheets before leaving the warehouse! Many times you can see signs of "re-grind" on the surface. Moisture, on the other hand, is never seen.

The raw material beads used to manufacture the foam log are available in different sizes. The smaller the beads the better the foam is for wing cores. Try to get foam made with small beads as this will make the smoothest core with little or no air space between beads.

Buying foam from a distributor is the hard way to go. If you are using small quantities you will have to hope for the best. If you are going to cut large quantities of wings, find a foam manufacturer.

### WIRE SAG

The question I've been asked most in the past 8 years is "How can you cut a 68-72 inch foam core straight when the wire sags?" The answer is: DON'T USE NICHROME WIRE!!! This wire has been around for many years and has cut a lot of wings. The problem is sag! When you cut a 72 inch core, the hot wire should be about 76 inches long. After you apply pressure and heat, the sag is so bad it cannot be used. The wire to use is a stainless steel single strand fishing leader wire, it is available in most fishing tackle stores. Wire size used is from .011 for a small bow (12") to .016 - .022 for a large bow (76"). This wire is called PPC fishing wire, from Pringle-Fabri Corp., 4103 Clar Rd., Sarasota, FL 34233.

(to be continued)

- Ed Berton produces two fine sailplane kits, the 2M Mari<sup>ah</sup> and the unlimited class Phoenix. This article, originally published in Northeast Sailplane Product's 1990 catalog, is reprinted by permission of the author.

## LO TECH STUFF

by Earl Levin

Handling those sleek all-glass round fuselages on the workbench while you are installing servo trays, linkages, radio gear, setting everything up, etc., etc., can be a real chore. The darn things keep rolling from one side or the other. Add a tow hook and things can get even worse. One neat way I've found to avoid all this flopping around is to make a foam block cradle. Not just any foam block, but one that is easy to obtain and works really well. It can be readily obtained from the foam blocks used to protect hi-fi and home computer products as they are shipped in their original cartons. These odd-shaped pieces (roughly 4"x6"x18") are usually thrown away once the gear is unpacked. Being flat or straight on the outside edge serves as a convenient bottom for your new fuse cradle. Cut a "V"-groove or semi-circular notch at each end of the other side and you are in business. That's all there is to it. The notches in the styrofoam firmly hold your fuse in place while you are working on it, and raise the fuse off your workbench as well. You might have to trim off some extraneous parts of the foam piece. It varies. Now you have a real helper with a minimum amount of effort and money, and you have done your part to recycle extra styrofoam.

The other item I've come across that you might want to give a try is a glass reinforced composite wing rod material, which I originally found out about a few years ago when I bought an original EAGLE from Ed Holder. The tip panels were held on with this lightweight white-colored 1/2" diameter rod. This glass composite material can be found at any local TAP Plastics store. The rods come in 6 foot lengths; in 1/4", 5/16", 3/8", 1/2", and larger diameters. The stuff is cheap, with the 1/2" diameter rod about \$6.00 for the 6 foot length. It is extremely strong (120,000 psi minimum tensile strength) weighs 1/2 or less than the equivalent steel rod, and you cannot bend it permanently! Yes, it will flex a little but that's all. I've used it on several Falcon-type sailplanes with no problem whatsoever. Best thing yet for a light but strong wing rod that's cheap and won't take a set! TAP has several other goodies like this that glider guiders can readily use (epoxies, glass cloth, microballoons, disposable gloves, filament wound epoxy tubing, chopped glass strands, etc.).

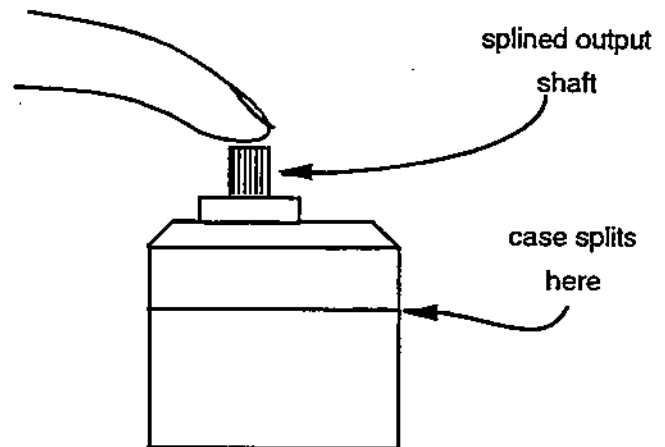


## 94141 GEAR REPLACEMENT

by Alan Borg

As I mentioned last meeting, I got directions for replacing gears in stripped Airtronics '141 servos. I have now successfully done it (4 times) and I can report it is a very simple operation.

The key to the operation is to keep the splined brass output shaft seated in the servo while removing the top case which exposes the gear train. To do this remove any servo output wheel attached to the servo and the four long screws in the bottom of the case. Ignore the top three screws, they simply hold the output shaft bearing. If the plastic bottom of the case comes off just ignore it. Set the servo upright on a flat work surface, (the output shaft towards the ceiling), and hold the servo firmly down in this position with an index finger on the splined output shaft. Using your free hand, pull the top of the case up and the case will split where you need it to. Remove the top case, making sure the output shaft stays firmly in the guts of the servo.



Anyone who has opened a servo before can figure out how to replace the gears, and so long as the splined output shaft isn't pulled out of the servo body; you can't do any damage. As I mentioned Airtronics supplies the number 2 gear, which is the one which normally strips, for free. Call them at (714) 830-8769. I have heard that there may be someone who has cast the number 1 gear as well, so if anyone out there has specific information please let us know. If that is true, then a 100% metal gear train can be constructed.

In the prevention is the best cure department, Steve Toschi has been using 'servo savers' for some time and swears by them.....

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# (SC)2 July 26 contest, 1992.

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To be held at the HSS field, Costa Mesa, Ca.

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Contest Director: Ross Thomas

Times: Signup at 8:00 AM with Pilots Briefing at 8:45 AM Flying begins at 9:00 AM

Entry fee: \$6.00

Events and Scoring:

Three Rounds of Flying

Standard Sc2 3/5/7 except no more than two of any one flight time

HSS Scoring chart for scoring

Landings, 300/200/100

Runway style landing

LANDINGS SHALL BE FROM THE EAST passing between boundary gates

Existing Sc2 rules apply in addition to AMA rules

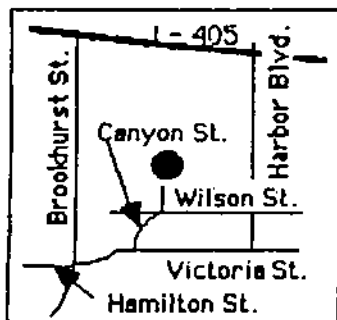
Transmitters must meet 1991 rules  
(Gold Sticker)

12 volt winches with retrievers with 700  
ft. winch lines

Contacts:

CD Ross Thomas: (714) 638-0705  
(Home)

Ben Clerx: (714) 721-8848 (Home)



The Oldest Chartered  
Soaring Club  
in the  
A.M.A.

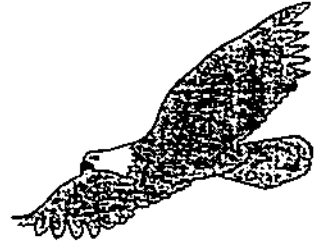


Charter # 128



# Southern California Soaring Clubs

## T P G Torrey Pines Gulls



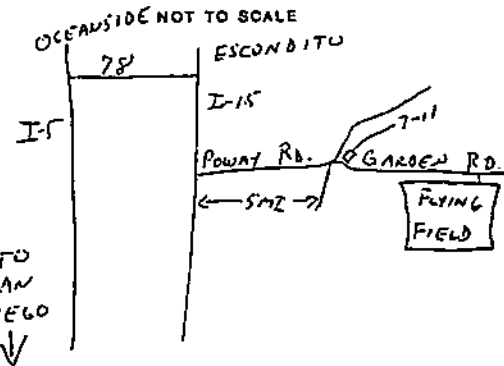
CONTEST DATE: JUNE 28, 1992  
 PRESIDENT: STEVE CONDON  
 CONTEST DIRECTOR: GEORGE JOY 619-748-2157

LOCATION: GARDEN ROAD POWAY, CA  
 ROUND 1: 3 MIN. PRECISION DURATION (AMA BELL CURVE) 900 FLT. PTS. 100 LDG. PTS.  
 ROUNDS 2 & 3: 3, 5, 7 PILOTS CHOICE  
 3 MIN. - 700 FLT. PTS. 300 LDG. PTS.  
 5 MIN. - 800 FLT. PTS. 200 LDG. PTS.  
 7 MIN. - 900 FLT. PTS. 100 LDG. PTS.  
 ALL LANDINGS - STANDARD 25 FT. TAPE

PILOTS MEETING AT 0845. OPEN WINCH AT 0900 SHARP  
 LAUNCH EQUIPMENT - 12V WINCHES WITH RETRIEVERS  
 LINE LENGTH - APPROX. 850 FT

LANDING AREA - MOWED WEEDS

ALL TRANSMITTERS MUST BE GOLD STICKERED



STANDARD SC2 RULES APPLY: i.e. 2 PILOTS MAY FLY SAME AIRCRAFT,  
 TIMER MAY COUNT LAST TEN SEC, 10 SEC. TO ACCEPT RELAUNCH  
 OR FLY IT OUT. MIDAIRS ON LANDING APPROACH - RELAUNCH FOR LDG. ONLY  
 VEHICLES MAY HAVE TO CROSS FLOWING CREEK APPROX. 1 TO 2 INCHES DEEP

## CONTEST CALENDAR

July 5	HSS Club Contest
July 26	SC2 H.S.S.
August 9	HSS Club Contest
August 16	SC2 P.S.S.
September 6	HSS Club Contest
September 27	SC2 I.S.S.
October 3- 4	Visalia Fall Soaring Fest.
October 11	HSS Club Contest
October 25	SC2 S.W.S.A.
November 8 15	HSS Club Contest
November 22	SC2 T.O.S.S.
December 6	HSS Club Contest

HARBOR SOARING SOCIETY OPEN CLASS  
 RESULTS OF JUNE CONTEST OF 06/14/91  
 CONTEST DIRECTOR - *ROSS THOMAS*

PLACE	NAME	CLUB	CLASS	SCORE	NORMAL	TROPHY
1	HENDRY, STEVE	HSS	EXPERT	2883.0	1000.0	E - 1
2	WHITE, LARRY	HSS	EXPERT	2787.0	966.7	E - 2
3	AGUIRRE, MIKE	ONE	SPORTSMAN	2701.0	936.9	E - 3
4	MARTIN, TONY	HSS	EXPERT	2689.0	932.7	
5	CHASTELER, FRANK	HSS	EXPERT	2462.0	854.0	
6	SMITH, MORRY	ONE	ADVANCED	2450.0	849.8	A-1
7	THOMAS, ROSS	HSS	EXPERT	2379.0	825.2	
8	LONG, DICK	ONE	ADVANCE	2358.0	817.9	A-2
9	NEMECEK, DAVID	HSS	EXPERT	2251.0	780.8	
10	ZINK, DON	HSS	EXPERT	2241.0	777.3	
11	KUTCH, NORM	HSS	EXPERT	2224.0	771.4	
12	SANDERS, ANDY	ONE	SPORTSMAN	2199.0	762.7	S - 1
13	BUZOLICH, NICK	ONE	SPORTSMAN	2175.0	754.4	S - 2
14	NEHRING, CURT	NONE	ADVANCED	2162.0	749.9	
15	RITSCHKE, GORDON	HSS	EXPERT	2156.0	747.8	
16	PANTZAR, DICK	HSS	EXPERT	2154.0	747.1	
17	CRON, AL	HSS	EXPERT	1634.0	566.8	
18	LACKEY, ROGER	HSS	EXPERT	1528.0	530.0	
19	SEMMELMAYER, ERIC	NONE	SPORTSMAN	1515.0	525.5	
20	DUNCAN, BILL	TWO	ADVANCED	1444.0	500.9	
20	SCHEER, PAT	NONE	SPORTSMAN	1444.0	500.9	
22	BOESE, JIM	ONE	ADVANCED	1100.0	381.5	
23	FINK, STEVE	HSS	EXPERT	1081.0	375.0	
24	POULSEN, GORDON	HSS	EXPERT	516.0	179.0	
25	RAMSAY, DON	NONE	SPORTSMAN	472.0	163.7	
26	MONAHAN, SEAN	NONE	ADVANCED	371.0	128.7	

HARBOR SOARING SOCIETY 2-METER  
 RESULTS OF JUNE CONTEST OF 06/14/91  
 CONTEST DIRECTOR - *ROSS THOMAS*

PLACE	NAME	CLUB	CLASS	SCORE	NORMAL	TROPHY
1	KUTCH, NORM	TWO	METER	2801.0	1000.0	E - 1
2	WHITE, LARRY	TWO	METER	2682.0	957.5	E - 2
3	THOMAS, ROSS	TWO	METER	2561.0	914.3	E - 3
4	MARTIN, TONY	TWO	METER	2465.0	880.0	
5	AGUIRRE, MIKE	TWO	METER	2432.0	868.3	
6	LONG, DICK	TWO	METER	2110.0	753.3	
7	SCHEER, PAT	TWO	METER	1969.0	703.0	
8	BUZOLICH, NICK	TWO	METER	1657.0	591.6	
9	SEMMELMAYER, ERIC	TWO	METER	1545.0	551.6	
10	DUNCAN, BILL	TWO	METER	846.0	302.0	
11	LACKEY, ROGER	TWO	METER	805.0	287.4	
12	FINK, STEVE	TWO	METER	692.0	247.1	
13	MONAHAN, SEAN	TWO	METER	644.0	229.9	
14	RAMSAY, DON	TWO	METER	396.0	141.4	

SOUTHERN CALIFORNIA SOARING CLUBS  
RESULTS OF NCC (SC)2 CONTEST OF 05/31/92  
CONTEST DIRECTOR - KEITH FINKENBINER

PLACE	NAME	CLUB	CLASS	SCORE	NORMAL	TROPHY
1	CLERX, BEN	HSS	EXPERT	2987.0	1000.0	E - 1
2	MARTIN, TONY	HSS	EXPERT	2985.0	999.3	E - 2
3	MEIENBERG, KEN	NCC	EXPERT	2974.0	995.6	E - 3
4	SMITH, MICHAEL	NCC	EXPERT	2970.0	994.3	E - 4
5	EDBERG, DON	HSS	EXPERT	2952.0	988.3	E - 5
6	LACKEY, ROGER	HSS	EXPERT	2945.0	985.9	
7	MORAN, MYLES	TOSS	EXPERT	2944.0	985.6	
8	REAGAN, MIKE	TOSS	EXPERT	2940.0	984.3	
9	LEUKEN, JIM	NCC	EXPERT	2932.0	981.6	
10	ANDERSON, GARY	TPG	EXPERT	2916.0	976.2	
11	LEVOE, MARK	PSS	EXPERT	2913.0	975.2	
12	BLEDSSLOE, RICHARD	TPG	EXPERT	2911.0	974.6	
13	WEISMAN, EDGAR	TOSS	EXPERT	2898.0	970.2	
14	JOY, GEORGE	TPG	EXPERT	2889.0	967.2	
15	CHASTELER, FRANK	HSS	EXPERT	2885.0	965.9	
16	ANDERSON, ROBERT	TPG	EXPERT	2884.0	965.5	
17	ATWELL, BLAIR	SULA	EXPERT	2883.0	965.2	
18	BILLMAN, TODD	ISS	EXPERT	2866.0	959.5	
19	RAYMOND, KEN	NCC	EXPERT	2858.0	956.8	
*20	SPITZER, GEORGE XX	PSS	SPORTSMAN	2853.0	955.1	S - 1
*21	SADORF, STAN XX	ISS	SPORTSMAN	2847.0	953.1	S - 2
22	ZINK, DON	HSS	EXPERT	2847.0	953.1	
23	FINKENBINER, KEITH	NCC	EXPERT	2844.0	952.1	
24	WARNER, GARTH	NCC	EXPERT	2789.0	933.7	
25	CONDON, STEPHEN	TPG	SPORTSMAN	2771.0	927.7	S - 3
26	HENDRY, STEVE	HSS	EXPERT	2748.0	920.0	
27	NEHRING, CURT	HSS	SPORTSMAN	2721.0	910.9	
28	BATES, JEFF	NCC	SPORTSMAN	2705.0	905.6	
29	THACKER, BOB	NONE	EXPERT	2607.0	872.8	
30	BRISTER, KEVIN	TPG	SPORTSMAN	2602.0	871.1	
31	SMITH, STEVE	DUST	SPORTSMAN	2599.0	870.1	
32	SAGE, FRED	NCC	EXPERT	2578.0	863.1	
33	OLSEN, PETER	SWSA	EXPERT	2571.0	860.7	
34	GATTI, MARK	PSS	SPORTSMAN	2569.0	860.1	
35	VALDES, AARON	TPG	EXPERT	2557.0	856.0	
36	RODRIGUEZ, JOE	ISS	EXPERT	2549.0	853.4	
37	FAULKENHAM, RON XX	ISS	SPORTSMAN	2472.0	827.6	
38	DUNCAN, BILL	EDSF	SPORTSMAN	2464.0	824.9	
39	STROBEL, RICH	TPG	EXPERT	2442.0	817.5	
40	WIDMAN, DAVID	NONE	EXPERT	2426.0	812.2	
41	DEAN, THOMAS	NCC	SPORTSMAN	2415.0	808.5	
42	SLIFF, BOB	HSS	EXPERT	2410.0	806.8	
43	WILSON, DAN XX	EDSF	SPORTSMAN	2386.0	798.8	
44	VAN GUNDY, SUE	TPG	SPORTSMAN	2371.0	793.8	
45	GUSTIN, RON	DUST	EXPERT	2364.0	791.4	
46	MARKLE, JIM	SULA	EXPERT	2346.0	785.4	
47	DOUGLAS, IAN	SWSA	EXPERT	2340.0	783.4	
48	KEIL, DAVID	NCC	SPORTSMAN	2302.0	770.7	
49	YOUNG, BRETT	HSS	SPORTSMAN	2297.0	769.0	
50	LEE, MICHAEL	TPG	SPORTSMAN	2274.0	761.3	
51	PUCHALSKI, MARK	SULA	EXPERT	2251.0	753.6	
52	VAN GUNDY, DON	TPG	EXPERT	2241.0	750.3	
53	HALL, DAVID	DUST	SPORTSMAN	2238.0	749.2	
54	KUTCH, NORM	HSS	EXPERT	2226.0	745.2	
55	CONDON, SCOTT	TPG	SPORTSMAN	2222.0	743.9	
56	STAFFORD, IRV	NCC	EXPERT	2219.0	742.9	
57	HALLFORD, PHILIP	PSS	SPORTSMAN	2217.0	742.2	
58	CONWAY, PATRICK XX	TPG	SPORTSMAN	2212.0	740.5	
59	JOY, BRYAN XX	TPG	SPORTSMAN	2199.0	736.2	
60	LUGO, BRENDAN	NCC	SPORTSMAN	2189.0	732.8	
61	DOIG, AL	NCC	EXPERT	2174.0	727.8	
62	FINK, STEVEN	SULA	EXPERT	2133.0	714.1	
63	AVESON, BRUCE	SWSA	SPORTSMAN	1973.0	660.5	
64	WAGER, MARVIN	TPG	SPORTSMAN	1962.0	656.8	
65	HUNTER, CLIFF	NCC	SPORTSMAN	1950.0	652.8	
66	CLARK, DEAN	NONE	EXPERT	1895.0	634.4	
67	AKERS, THOMAS	TOSS	EXPERT	1865.0	624.4	
68	JENKINS, HARVEY	ISS	EXPERT	1803.0	603.6	
69	KLATSKIN, BILL	SULA	SPORTSMAN	1762.0	589.9	
70	RICHMOND, DON	TPG	SPORTSMAN	1716.0	574.5	
71	FINK, DAN	SULA	EXPERT	1660.0	555.7	
72	THOMAS, ROSS	HSS	EXPERT	1656.0	554.4	
73	AGUIRRE, MIKE	HSS	SPORTSMAN	1642.0	549.7	
74	MONAHAN, SEAN XX	SULA	SPORTSMAN	1641.0	549.4	
75	SWANSON, NORM	NCC	SPORTSMAN	1575.0	527.3	
76	BUZOLICH, NICK	HSS	SPORTSMAN	1547.0	517.9	
77	YOUNG, PETER	HSS	SPORTSMAN	1310.0	438.6	
78	ANDREWS, ROBERT	ISS	SPORTSMAN	1297.0	434.2	
79	SHELBY, RICK	NCC	SPORTSMAN	1130.0	378.3	
80	SANDRONI, HUGO	DUST	EXPERT	652.0	218.3	
81	MERRIFIELD, HAROLD	TPG	SPORTSMAN	0.0	0.0	

Southern California Soaring Clubs  
RESULTS OF NCC (SC)2 CONTEST OF 05/31/92  
TEAM SCORES

NBS	15	MCC	16	TPG	17	ISS	6	TOSS	4	PES	4	SWSA	4	DUST	7	SULA	4	SWSA	3	EDSF	2	SVFP	0	MCCS	0
1000.0	995.6	976.2	959.5	985.6	975.2	985.2	870.1	850.7	828.9																
999.3	994.3	974.6	953.1	984.3	955.1	785.4	791.4	783.4	798.8																
988.3	988.3	967.2	883.6	970.2	860.1	753.6	749.2	680.5																	
985.9	956.8	965.5	827.6	624.4	782.2	718.1	218.3																		
3973.5	3928.3	3883.5	3593.6	3564.5	3532.6	3218.3	2629.0	2304.6	1623.7																

\* GEORGE SPITZER AND STAN SADORF MOVE TO EXPERT



The Oldest Chartered  
Soaring Club  
in the  
A.M.A.



Charter # 128

JULY MEETING

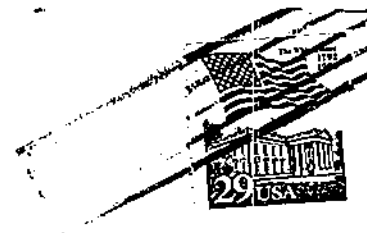
DATE: Wednesday, July 1, 1992  
at 7:30 PM.

LOCATION: Clubhouse at Lakes at  
Seabridge Condos. Refer to  
instructions on page 1.

GUEST SPEAKER: HSS clubmember  
HOWARD DOERING will provide a  
"show and tell" on his electric  
powered, AMA record holding,  
control line speed models!



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