

Harbor Soaring Society
P.O. Box 1673
Costa Mesa, CA 92626



FIRST CLASS MAIL

WILL CONRAD
9359 SHRIKE AVE
FOUNTAIN VALLEY, CA 92708



(The Soaring) Society Column

President:	George [unclear]	(714) 556-6385
Vice Pres:	Rich Garner	(714) 526-6734
Secretary:	John Lasater	(714) 645-2805
Treasurer:	Frank Chasteler	(714) 545-2185
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News Letter Ed:	Bob Sliff	(714) 895-1203

"The Oldest Chartered Soaring Club In the AMA"
Chapter # 128

March 1990

Volume 27 Number 3

March Club Meeting: The March club meeting will be held on Wednesday, March 7, 1990, 7:30 pm at the Consolidated Water District Office, 1965 Placentia Ave., Costa Mesa, Ca. The Monthly club contest will be on the 11th of March, field conditions permitting.

In our program this month, we will have Mike Taibi as our guest speaker. He will be discussing balsa materials. Be there!

April Club Meeting: The April club meeting will be held on Wednesday, April 4th, 1990 at 7:30 pm at the Water District Office.

MINUTES HSS FEB 90 MEETING

The meeting was called to order by Pres. George Joy at 7:30 p.m.

1. The minutes of the January meeting were approved as published.
2. The Treasurer's report was approved as stated.
3. Frank Chastler reported on some SC2 rule changes.
4. V.P. Rich Garner informed the club that he has many programs planned to follow our monthly club meetings.
5. New Faces: Rick Meredith and Duane Gibbs were introduced to the club.

Old Business:

1. Tom Paste shared with us information about Explorer Scouts, mostly of what is required of the club to start and run a Scout unit.
2. Ross Thomas announced that after the April HSS Monthly contest there will be a discussion (at the field) regarding Sportsman F3B possibilities. (**Be there!**)
3. Norm Hutch informed the club that there was a little incident, during a weekday, when a glider was flying a little too close to a full-sized aircraft. So, when you are flying at the field and a full-sized aircraft enters the area, move away from it. Even if you are above it, I still move to the other side of the field.

Jared Stalls

(acting secretary)

NEW MEMBERS

SEE FRANK CHASTELTER TO PICK UP YOUR CLUB NAME BADGES

THE HSS VIDEO LIBRARY

The following club owned videos are available for viewing.

Name	Comment	Rating (0-5)
Saber Jet	F-86 History/shoot-em-ups	4
Striking Back	4
Foam, Fiberglass, Flight	4
First Flight	0
Monokote 1 & 2	Interesting	3
MIG Killers	3
Hook Down, Wheels Down	NAVY Aviation Hist	4
F3E USA Team Selection 1988	Elect flight	none
Dawn Patrol	WWI Movie	4
Thunderbolt, Flight For The Skys	WWI Air Combat	5

More tapes are being added all the time. All tapes are in VHS format. I believe that Rich Garner is the current custodian. Check with him at the next meeting. (ed.)

HSS 1990 CONTEST SCHEDULE

MAR 3	SULA 2-METER
MAR 11	HSS CLUB CONTEST*
MAR 11	SULA MONTHLY
APR 8	HSS CLUB CONTEST*
APR 8 & 9	FSS FRESNO CLASSIC
APR 22	ISS SC2 CONTEST
MAY 6	HSS CLUB CONTEST*
MAY 19-20	ASTRO FLIGHT ELEC. CHAMPS
MAY 27	SULA SC2 CONTEST
JUNE 1-3	F3E TEAM SELECTION (PROPOSED)
JUNE 10	HSS CLUB CONTEST*
JUNE 17	PSS SC2 CONTEST
JULY 1	SC2 LEE RENAUD CONTEST
JULY 8	HSS CLUB CONTEST*
JULY 29	TOSS SC2 CONTEST
AUG 5	HSS CLUB CONTEST*
AUG 26	NCC SC2 CONTEST
SEP 9	HSS CLUB CONTEST*
SEP 30	HSS SC2 CONTEST
OCT 14	HSS CLUB CONTEST*
OCT 28	SWSA SC2 CONTEST
NOV 11	HSS CLUB CONTEST*
NOV 18	DUST SC2 CONTEST
DEC 2	TORREY PINES SC2 CONTEST
DEC 9	HSS CLUB CONTEST*

*****ATTENTION!!!*****

We will need CDs for our contests--Sign up ASAP!!

Contact--Ross Thomas

*****MARCH CLUB CONTEST*****

CONTEST DIRECTOR--BOB SLIFF

WILL BE A 15 MINUTE ADD-EM-UP: THREE FLIGHTS, NO FLIGHT OVER 7 MINUTES. EACH FLIGHT WILL BE SCORED TO THE EXACT MINUTE, OVER OR UNDER WILL BE DEDUCTED. EACH LANDING WILL COUNT UP TO 100 POINTS. OPEN FLIGHT ORDER.

*****FRESNO SOARING SOCIETY 1990 FRESNO CLASSIC*****

Formerly the "Dr. Pepper Classic"

April 8 & 9

To insure confirmation, register by March 31, 1990. Acceptance subject to available frequencies. Entry Fee is NON-refundable. {\$20.00 for Open Class, \$20.00 for 2Meter Class, or \$30.00 for both classes. Events are: Saturday--4 flights for 20 minutes, no flight over 6 min; Sunday--3 flights precision duration, 3 min., 7 min., 7 min.} For those of you who are interested, copies of the form are available from the Editor.

Harbor Soaring Society

February Monthly Contest Results

Open Division

	Name	Actual Score	Normal Score	Class	Trophy
1	LUPPERGER,J	2,934.0	1,000.0	E	E-1
2	MARTIN,T	2,934.0	1,000.0	E	E-2
3	RITSCHKE,G	2,929.0	998.3	E	E-3
4	BRATRUD,R	2,920.0	995.2	E	
5	LAMPRECHT,D	2,914.0	993.2	E	
6	STALLS,J	2,900.0	988.4	A	A-1
7	ZINK,D	2,892.0	985.7	E	
8	HENDRY,S	2,890.0	985.0	A	A-2
9	CHASTELE,F	2,883.0	982.6	E	
10	PANTZAR,D	2,876.0	980.2	E	
11	KUTCH,N	2,855.0	973.1	A	
12	DURHAM,J	2,844.0	969.3	E	
13	FINKS	2,822.0	961.8	A	
14	SANDRONI,H	2,820.0	961.1	A	
15	HENDRY,M	2,814.0	959.1	S	S-1
16	CRON,A	2,802.0	955.0	A	
17	GIBBS,D	2,799.0	954.0	S	S-2
18	SLIFF,B	2,796.0	953.0	E	
19	GERMANE,B	2,765.0	942.4	S	
20	RICHARDSON,P	2,755.0	939.0	E	
21	LONG,D	2,744.0	935.2	G	
22	COLLETT,M	2,688.0	916.2	S	
23	PARSONS,J	2,684.0	914.8	S	
24	WHITE,L	2,684.0	914.8	E	
25	NEMECEK,D	2,669.0	909.7	A	
26	MAHER,M	2,669.0	909.7	S	
27	THOMAS,R	2,657.0	905.6	E	
28	AMIES,J	2,606.0	888.2	E	
29	JOY,B	2,520.0	858.9	S	
30	STOVALL,L	2,448.0	834.4	S	
31	ANDERSON,J	2,420.0	824.8	A	
32	BUZOLICH,N	2,335.0	795.8	S	
33	JOY,G	1,792.0	610.8	E	

Yearly Standings - Open Division

Through February

	Name	Score	Avg	Class	Contests
1	ZINK,D	1,985.7	992.9	E	2
2	MARTIN,T	1,947.1	973.6	E	2
3	SLIFF,B	1,946.4	973.2	E	2
4	GIBBS,D	1,904.9	952.5	S	2
5	NEMECEK,D	1,892.3	946.2	A	2
6	PANTZAR,D	1,891.1	945.6	E	2
7	HENDRY,S	1,885.1	942.6	A	2
8	CRON,A	1,855.1	927.6	A	2
9	HENDRY,M	1,852.6	926.3	S	2
10	RICHARDSON,P	1,845.7	922.9	E	2
11	KUTCH,N	1,839.8	919.9	A	2
12	WHITE,L	1,814.2	907.1	E	2
13	STALLS,J	1,813.3	906.7	A	2
14	THOMAS,R	1,683.5	841.8	E	2
15	JOY,G	1,559.3	779.7	E	2
16	BUZOLICH,N	1,548.0	774.0	S	2
17	GERMANE,B	1,482.9	741.5	S	2
18	STOVALL,L	1,458.5	729.3	S	2
19	PARSONS,J	1,423.7	711.9	S	2
20	LUPPERGER,J	1,000.0	1,000.0	E	1
21	RITSCHKE,G	998.3	998.3	E	1
22	BRATRUD,R	995.2	995.2	E	1
23	LAMPRECHT,D	993.2	993.2	E	1
24	CHASTELE,F	982.6	982.6	E	1
25	GARNER,R	969.7	969.7	E	1
26	DURHAM,J	969.3	969.3	E	1
27	FINKS	961.8	961.8	A	1
28	SANDRONI,H	961.1	961.1	A	1
29	COLLETT,M	916.2	916.2	S	1
30	MAHER,M	909.7	909.7	S	1
31	AMIES,J	888.2	888.2	E	1
32	JOY,B	858.9	858.9	S	1
33	ANDERSON,J	824.8	824.8	A	1
34	LOWERY,R	544.4	544.4	A	1

February Monthly Contest Results

2 Meter Division

	Name	Actual Score	Normal Score		
1	DURHAM,J	2,930.0	1,000.0		
2	STALLS,J	2,913.0	994.2		
3	JOY,G	2,906.0	991.8		
4	HENDRY,S	2,861.0	976.5		
5	THOMAS,R	2,808.0	958.4		
6	FINKS	2,802.0	956.3		
7	LAMPRECHT,D	2,796.0	954.3		
8	JOY,B	2,749.0	938.2		
9	ANDERSON,V	2,728.0	931.1		
10	HALL,H	2,721.0	928.7		
11	PARSONS,J	2,699.0	921.2		
12	COLLETT,M	2,679.0	914.3		
13	MARTIN,T	2,657.0	906.8		
14	WHITE,L	2,644.0	902.4		
15	LONG,D	2,643.0	902.0		
16	SLIFF,B	2,640.0	901.0		
17	LUPPERGER,J	2,607.0	889.8		
18	RICHARDSON,P	2,536.0	865.5		
19	KUTCH,N	2,443.0	833.8		
20	STOVALL,L	2,285.0	779.9		
21	BUZOLICH,N	2,115.0	721.8		
22	DUNCAN,B	935.0	319.1		

Yearly Standings - 2 Meter Division

Through February

	Name	Score	Avg	Class	Contests
1	JOY,G	1,976.2	988.1	E	2
2	STALLS,J	1,947.0	973.5	A	2
3	MARTIN,T	1,879.5	939.8	E	2
4	THOMAS,R	1,868.0	934.0	E	2
5	RICHARDSON,P	1,865.5	932.8	E	2
6	HALL,H	1,856.7	928.4	A	2
7	ANDERSON,V	1,837.8	918.9	A	2
8	PARSONS,J	1,799.6	899.8	S	2
9	SLIFF,B	1,775.8	887.9	E	2
10	WHITE,L	1,763.4	881.7	E	2
11	STOVALL,L	1,674.2	837.1	S	2
12	BUZOLICH,N	1,512.6	756.3	S	2
13	KUTCH,N	1,504.0	752.0	A	2
14	DURHAM,J	1,000.0	1,000.0	E	1
15	HENDRY,S	976.5	976.5	A	1
16	FINKS	956.3	956.3	A	1
17	LAMPRECHT,D	954.3	954.3	E	1
18	JOY,B	938.2	938.2	S	1
19	HENDRY,M	935.8	935.8	S	1
20	COLLETT,M	914.3	914.3	S	1
21	LUPPERGER,J	889.8	889.8	E	1

HARBOR SOARING SOCIETY, COSTA MESA CA

RADIO IMPOUND RULES

1. Place transmitter in the impound area (under HSS sign) by channel # in rows. Each transmitter will have a Channel # on the antenna or the top of the transmitter.
2. It is required that you have your name on or over your transmitter so that other flyers will know who is up next. (G. Joy has a labeler.)
3. Your position in the row of transmitters determines your turn to fly. Your transmitter coming to the front and the frequency pin coming back in, you may fly.
4. Never turn on your transmitter without a frequency pin.
5. As an extra precaution, always call out your channel numbers as you walk out to fly and as you turn on your transmitter.

6. Upon landing, be sure to collapse your antenna before you walk out to pick up your plane.

7. After flying, return the frequency pin to the pin board, make sure your transmitter is switched off, and return your transmitter, with the antenna collapsed, to impound behind the other transmitters in your row. Do not remove your transmitter from impound unless you are going to fly or are leaving for the day.

8. After flying of Electric models, make sure your airborne pack is turned off and make sure the motor arming switch is off or the airborne pack is disconnected.

9. Make double sure that your transmitter power switch is off.

GENERAL FIELD RULES AND FIELD SAFETY RULES

1. Do not fly at low altitude over the pit area.
2. All winch launching shall be in a Westerly direction from the launch area. Electric powered models will be launched/ROG'd to the North of the winch launch area in a Westerly, Northerly, or Easterly direction.

EXCEPTIONS:

- a) Relocation of the pits and launch area to the Western end of the field.
 - b) Electric powered models, in the event of South winds, may be launched to the South or East provided launching is not over the pit area and is clear of people.
3. All pilots shall fly standing in the area "B" (between the bike path and the landing area,) or in area "C" well clear of the winches, and not East of area "D" (the landing area.) In order to minimize intermodulation possibilities, pilots should not stand in tight groups.
 4. All Electric power planes (planes other than pure soaring types) shall be flown only to the North of the launching and standing area "C" when operating at low altitudes. F3E models doing laps should operate in the area between the winches and the bluff "E" so that the landing approach area is kept clear for landing models. A flight assistant should accompany the flyer during operation of the model for safety guidance.
 5. Hand launching of models either for test gliding or for thermal hunting shall take place to the North of the winch launch and pilot standing area "C & D". (Obviously a pilot hand launching does not have to stand in the normal pilot standing area.)
 6. All intentional low level approaches to landing shall be from the North and East. All high speed approaches shall be to the North of the winch launch and pilot standing area C & D, and shall not carry into the launching or standing area.
 7. Under most circumstances, launching models have right of way over sailplanes inflight. But, the bottom line is to maintain courtesy and consideration for others whether you are flying or launching. (Note: Right of way for launching models is an AMA rule for contest flying, where the intention is to keep flying sailplanes from holding up launches and thus delaying

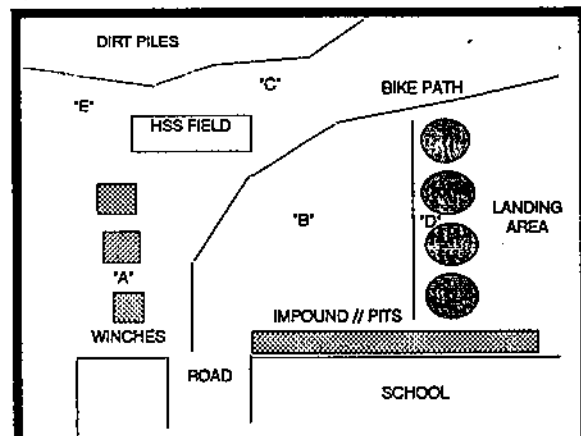
the operation of a contest.)

8. When other flyers are on your frequency, you should limit your flight to 15 or 20 minutes. This courtesy time limit also applies to Electrics and Hand Launch thermal hunting, but is not intended to limit the number of hand launches made in search of thermals. (Remember, common courtesy prevails!) Exceptions to this are if one is attempting to achieve an LSF goal or if prior arrangements have been made with the other flyers on one's frequency.

9. The AMA safety code requires that your model be identified with your name and address or AMA number on or in your model. (Note: For AMA sanctioned contests, all nonscale and non-indoor models "... shall be identified by the contestants AMA licence number permanently affixed to the upper side of the right hand lifting surface...[with the] height of the numerals...[being] at least one inch or 1/3 of the wing root chord, which ever is less.")

10. Visiting pilots from other clubs are welcome on a limited basis with proof of AMA insurance.

11. Beginner pilots are welcome, and we will offer help in learning to fly through our Club Trainer Program.





Harbor Soaring Society

P.O. Box 1673
Costa Mesa, CA 92628

A.M.A. Club # 128

"The Oldest A.M.A. Chartered
Soaring Club In The World"

APPLICATION FOR MEMBERSHIP IN THE HARBOR SOARING SOCIETY FOR 19 _____
JANUARY to DECEMBER

I understand that by applying for membership in the Harbor Soaring Society, I must be a current member of the A.M.A.

NAME _____ HOME PH. (____) _____
ADDRESS _____ WORK PH. (____) _____
CITY _____ STATE _____ ZIP _____

A.M.A. NUMBER _____ (PROOF OF STATUS REQUIRED)

SENIOR MEMBER - (17 years or older) - Renewals prior to January meeting = \$12.00.
New applicants or renewals after January meeting = \$15.00.

JUNIOR MEMBER - (16 years or younger) - At time of application = \$6.00.

FAMILY MEMBER - \$4.00 for each additional member at same address.

Attach a separate application and proof of A.M.A. membership for each name.

New applicants making application for senior membership between July 1st and October 31st, pay reduced dues of \$10.00.

New applicants making application between November 1st and December 31st will pay the annual rate as indicated above. Such dues will make the new member paid in full for the following year.

SIGNATURE _____ DATE _____

TOTAL DUES OWED AND ATTACHED \$ _____

SIGNATURE OF CLUB OFFICER RECEIVING APPLICATION _____

Please check the areas listed below in which you are interested or willing to help:

- _____ Contest Director
- _____ Contests (Scoring, Winches, Radio Impound, etc.)
- _____ Field Maintenance
- _____ Public Relations
- _____ News Letter Contributor
- _____ Asslst New Filers
- _____ Other _____

COMPOSITE MOLDING TECHNIQUES FOR SAILPLANE FUSELAGES AND CONTROL SURFACE ACCESSORIES

by E.S. Popko & J.G. Smith

Extracted from Soar Tech No. 5, Jan 1986

Part 2

WHAT TOOLS DO YOU NEED?

If you are already building conventional balsa and air-ply models, you already have 90% of the tools you will need. An electric drill with sanding disk attachment, Moto-tool, and coping saw are about all you need in addition to the usual thing like razor blades, paint brushes and sandpaper. Disposable gloves will help if you tend to have skin reactions to epoxy or fiberglass cloth and a good supply of newspapers, paper cups, and paper kitchen towels are indispensable.

WHAT YOU CAN NOT DO WITH FIBERGLASS.

GRP offers the modeler a rich medium to work with but there are some limits too. Resins will not bond to wet, oily, waxy, or painted surfaces. Fiberglass over dry, bare wood or clean, non-rusted metal if you are bonding them together. Do not use polyester resins on styrofoam like foam wings - use epoxy resins on foam. Do not apply polyester resins over epoxy finishes.

HOW TO MIX POLYESTER RESIN.

Polyester resin looks like pink honey. The tint comes from cobalt nathenate, a pre-accelerator that is mixed at the supplier to shorten curing times. The hardener, sometimes called a setting agent or catalyst, reacts with the cobalt creating a hard plastic. Hardener is a clear and slightly oily liquid called methyl ethyl ketone peroxide (MEK). Only a few drops of MEK are needed to catalyze an ounce or so of polyester resin. The exact quantity depends on the temperature and humidity of your working environment. Ideally, you want to use the least MEK possible to get a cure in order to achieve the longest pot life and most flexible result. Adding more MEK will certainly speed up curing but it also makes the resin more brittle and thus susceptible to cracking.

At 75°F we typically use 15 drops of MEK in 4 fluid ounces of resin. Decrease the MEK at higher working temperatures and increase it at lower temperatures. Catalyzed polyester resin typically has a pot life of about 20-30 minutes. After this time, it begins to congeal and should be discarded.

Never mix more than about 4 fluid ounces of resin at a time. Catalyzed resin is exothermic, that is, the chemical reaction between MEK and the cobalt gives off heat. Warm resin, in turn, cures even faster. If you catalyze large amounts of resin, the heat generated could cause the resin to cure in just a few minutes. We suggest that you do not mix the MEK with the resin until you are ready to use it. Always add MEK to the resin - never resin to the MEK. Pour your resin into a paper cup and catalyze when everything else is ready. Never use styrofoam cups, they will melt. If you are thinning or thickening the resin with other additives, mix them into the resin after catalyzing. Stir the resin-MEK mixture thoroughly. Wooden popsicle sticks or balsa paddles work best. So not use redwood, teak, or oak; their saps will react with the mixture. Do not mix MEK into the resin with a brush. The bristles absorb resin and will not uniformly mix the chemistry together. You can reuse your mixing cups or jars after the resin has completely cured and cooled off. If you are using flexible plastic cups or Tupperware-like containers, you can simply break the cured resin out by flexing the container sides a bit.

CLEANING UP

You should work over newspapers. Tools and resin spills can be cleaned up with paper kitchen towels and acetone. Ethyl alcohol is safer than acetone and you may find that it is less hard on your skin too. Be sure to clean your brushes before the resin begins to congeal. Once the resin sets, you will not be able to dissolve it.

A WORD ABOUT SAFETY.

Work in a well ventilated area and avoid skin contact with fiberglassing materials. Polyester resin fumes, especially the styrene monomer in it, are very strong. If you have skin reactions to epoxy glues or paints, you may also have a reaction to polyester resin or MEK so use disposable gloves. MEK is a very powerful oxidizer. It is particularly dangerous to your eyes. Once MEK enters the eye, there is no known way to remove it. It will destroy your vision if this happens. If you should get any on your skin or in your eyes, flush the area with a lot of running water and get immediate medical attention. You are risking blindness if you don't! The key to successful handling of these materials is preventive hygiene. At the first sign of irritation (often a rash resembling poison ivy on the inside of the wrist) you should get medical attention. Remember, too, that the solvents, thinners, resins, and catalyst are very flammable. Store them accordingly!

Fiberglass cloth and chopped glass strand can irritate your skin. When it is warm and you are perspiring, your pores open and you are more susceptible to getting glass dust or fibers in them. Wear long-sleeved shirts and long pants. Keep covered up and wash these items separately from your regular clothing.

Keep All Fiberglass Materials Out of the Reach of Children!

****STEP 1 - PREPARING A PLUG FOR MOLDING****

By far the most important step in obtaining quality results is to have an accurate and warp free copy of the design you want. Your original model, or "plug", needs to be the best design reproduction you can make. Weight and color are not important; only the shape and finish. Keep in mind that which ever design you intend to make, the geometry must not have reverse curves or undercuts. If it does, the molding process will simply lock your plug to the lay-up.

The molding process you are about to undertake will make an exact copy of your plug. Exact means that every imperfection will be copied. If you are copying a balsa and air-ply fuselage, seal the wood with a single coat of clear epoxy such as K&B Clear. Apply two thin coats of K&B primer on top of the clear, lightly sanding each coat when dry. Exact also means that if this step is done well, every lay-up will come out perfectly the first time.

If you are making a mold of an existing fuselage, canopy openings, radio and servo trays, wing tubes, spoiler conduits, and rudder/stabilizer control rod openings must all be covered to keep the molding resins from entering your model and ruining it. The larger openings can be covered with masking tape or filled with modeling clay.

Wax the plug several times to prevent any molding material from sticking to it. In between each coat, buff it to a hard, high gloss using a soft cotton cloth. Add a second coat if the pores are not completely filled. You can remove the wax later with Prep-Sol or floor wax stripper if you want to use the plug for something else.

To be continued next month!

**** (Next month--Building the mold, forming the Separator dam. ***)*

FEBRUARY 1990 F3E CONTEST

By Bob Sliff

To begin with, I, and the other officials wish to apologize to some of the club members for not notifying them of the the change of dates for the F3E contest. The original date was canceled because of rain, both Sat. and Sun. So, it was brought to the board at the scheduled meeting (Wednesday night 2/21) to reschedule for the following Sat (2/24). There were some from out of town who could make it on the 17th & 18th, but not at a later date. Since there was no reasonable say to notify the entire club, we thought that most everyone would understand the likelihood of a change. (This was NOT a Club Contest, cancellations were not to be rescheduled.) Still, we now recognize that we should have notified some specific individuals of the change in order to avoid conflict.

Still, those of us who flew in the contest had a really good time. It was especially helpful for those of us who are preparing for the coming team selection. Practice under contest conditions is an extremely important aspect for which there is no substitute. In fact, I was surprised that one of the local contenders for the US team did not participate, for opportunities like this are rare.

At any rate, on behalf of the flyers, I wish to thank the club members who helped out, with especial thanks to Frank Chasteler for CDing it.

The final results follow. (Since laps are very important, I will list both the score and the laps make on each flight.)

OPEN CLASS:

	<u>Round 1</u>	<u>Round 2</u>	<u>Round 3</u>	<u>Final Score</u>	<u>Lowest Round dropped</u>
1st Jerry Bridgeman ...	638/23	618/21	633/23	1271	
2nd Bob Sliff	631/21	572/18	635/21	1266	
3rd Grand Messinger ..	578/18	584/18	539/16	1162	
4th Bobby Gerbin	454/12	447/11		901	

7 CELL CLASS:

1st Jared Stalls	496/13	508/14	500/13	1008
2nd Chuck Hollinger ...	448/12	481/12	470/12	951
3rd Skinner	461/11	465/11	457/11	926
4th Lowel Norenberg ..	436/11	334/10	454/12	890
5th John Lupperger ...	449/11	298/10		747

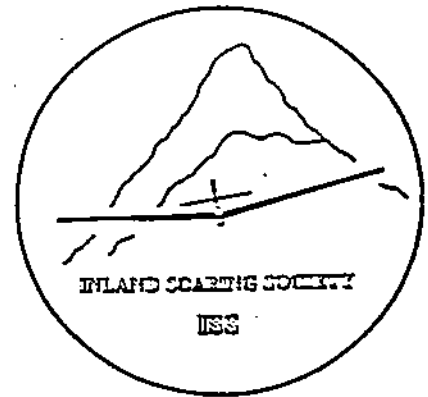
INLAND SOARING SOCIETY

HOSTS

SOUTHERN CALIFORNIA SOARING CLUBS

APRIL 22, 1990

CONTEST



ROUNDS 1, 2 and 3 - Contestants fly choice of:

3 min., 700 flight points and 300 landing points OR

5 min., 800 flight points and 200 landing points OR

7 min., 900 flight points and 100 landing points

LANDING target will be a 25' half circle

Flight score will be a straight line with 0 flight points at 0 seconds

Grass field, 12 volt winches, 600 ft. plus winch line

CONTEST DIRECTOR:

Mark Higginbotham
(714) 882-7384

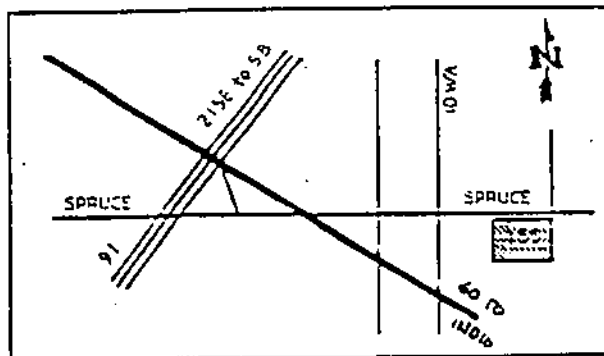
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