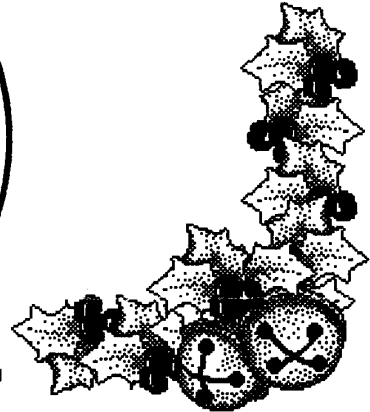
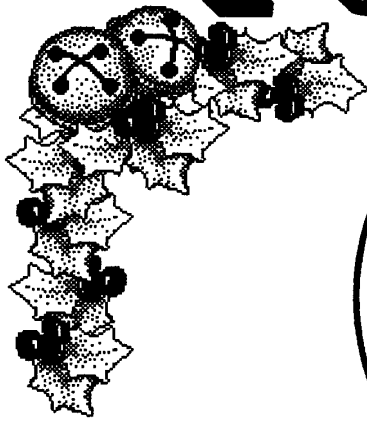


T O S S " U P



NEWSLETTER

DECEMBER 1990 T.O.S.S. P.O. BOX 1955 THOUSAND OAKS, CA. 91360

A.M.A. CHARTERED CLUB # 1493

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Next Contest; JAN 12th 1991
C/D: Ralph Morgan
Type: Paramount Ranch

Next Meeting: DEC 26th 1990
Place: Oaks Mall
Next to Bullocks
Hillcrest Dr. T.O.
Time 7:30 p.m.



Minutes of the November Meeting

The meeting was called to order at 7:35 pm by President Edgar Weisman. There were 12 members present.

Chuck Griswold gave the treasurers report. \$418.00

After a brief discussion a motion was passed that we continue to participate in SC Squared during 1991.

Eric Hendrickson volunteered to C/D the 1991 SC Squared contest.

Edgar Weisman volunteered to C/D the 1991 TOSS Cross Country.

It was agreed that the 1991 monthly contests would alternate between Saturday and Sunday. The Saturday contests will be at the Paramount Ranch field and toe Sunday contests at the Redwood School field.

1991 contest Contest Directors are as follows:

- Jan (Sat) Ralph Morgan
- Feb (Sun) Edgar Weisman
- Mar (Sat) Mike Leal
- Apr (Sun) Myles Moran
- May (Sat) Bob Goldsmith
- Jun (Sun) Chuck Griswold

- Jul (Sat) Terry Koplan
- Aug (Sun) Bob Swet
- Sept TOSS CROSS COUNTRY
- Oct (Sat) Mike Regan
- Nov (Sun) Eric Hendrickson
- Dec (Sat) Richard Hartman

Secretary Mike Leal

Larry Jimenez volunteered to assist Chuck in getting out the monthly newsletter.



A motion was passed that 1991 trophies will be metal plaques and Eric Hendrickson volunteered to order one years worth to cover 1st thru 3rd in OPEN, 1st and 2nd SPORTSMAN, and 1st and 2nd 2 METER.

The last order of business was the election of 1991 club officers.

- President Edgar Weisman
- VP Bob Swet
- Treasurer Chuck Griswold

Terry Koplan will put together a program for the January meeting.

Myles Moran will CD a Delta Dart, build it and fly it contest at the February meeting.

Bob Goldsmith



Eric's Final VP Blurb

Another year bites the dust. I guess I'm getting old because they are going by so fast. It sure was great seeing all the new and old faces at the meeting. I can't believe I finally made it to one.

I would like to thank Edgar for a job well done. Everyone in this club owes Edgar. The next time something needs done how about volunteering. That is a great way to show thanks. Don't let him carry all the weight. The next thank you goes to Chuck who year in and year out puts out the newsletter. Its a big job, I know I did it once or twice and have helped in the mailing too. The next thank you goes to all the members who helped at SC2, the X-C, and some of the other jobs that needed done. People like Bob Swet, Mike Leal, Bob Goldsmith to name a few. Thank you all.

Next a comment on the club. The club is YOU. If you want to try something, do it. If you don't like where it is heading, change it. One guy can make the difference. We have two of the nicest sites in Southern California, there is no reason why we shouldn't have 100 members. Look at how

many fly up on Smith hill. Oh yea it cost you 20 bucks a year plus AMA membership(if you fly without it you're crazy) but what do you get. Well how about 10% off at the local hobby shop not to mention a place to meet once a month, a newsletter, launching equipment and two places to fly, one of which is any day of the week AND you get to meet a great group of people. Thats just for starters. What other hobby can you get all of that for 20 bucks. Why am I telling you this, because each and every one of you have at least one person who should be a member and is not. The 20 bucks is well worth it.

I heard some excellent ideas at the last meeting. I hope some of them get followed up on. If every member would organize and put on one thing a year we would have more activites than we can shake a stick at. That equates to fun fun fun. If your bag is contests, run one. If it is helping new members, put on a seminar. If it's building, show us how to do it. If its writing send Chuck a article. He loves them. If its just flying, take care of the winch for a few months. If its BBQs set one up at Paramount. If its night flying, set one up. Whatever it is, DO IT. Oh, it

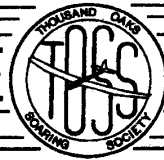
takes a little time but its worth it. Some people and I'm talking about the entire sport take take and take. I say give just a little. What is the first step, Decide on what you are going to do. Then announce it at the meeting and get it in the newsletter. Then follow through with phone calls and whatever else it takes.

What are my goals and ambitions. Well to fly in a few contests next year and do a lot more fun flying. To be competitive against Wurts at the X-C. To pry my son away from his other activities long enough to get him hooked on the sport again and to finish my LSF level five. A tall order. See you at the field.

Eric

C/D's For the Year.

Jan (Sat)	Ralph Morgan
Feb (Sun)	Edgar Weisman
Mar (Sat)	Mike Leal
Apr (Sun)	Myles Moran
May (Sat)	Bob Goldsmith
Jun (Sun)	Chuck Griswold
Jul (Sat)	Terry Koplan
Aug (Sun)	Bob Swet
Sept	TOSS CROSS COUNTRY
Oct (Sat)	Mike Regan
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**Secretary's Soapbox
Bob Goldsmith**

I would like to take a moment and express my gratitude for the hard work and dedication to the other members of the Club Officers for 1990. They managed to secure not one- but two new club fields during the past year. Also a special thanks to Treasurer/ Newsletter Editor Chuck Griswold. His task seems thankless at times I'm sure but Thank you, Chuck! from all the members. We can only hope that 1991 is as good a year as 1990. Let's all get out and fly some contests - it's fun.

Bob

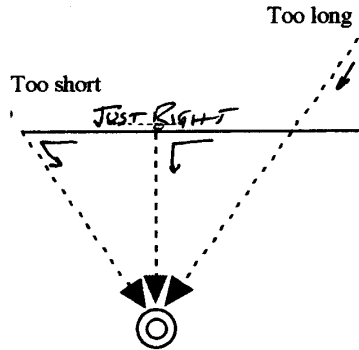
**How to Improve
your Landing Scores
By Frank Deis**

Now that you have the entry into the landing down pat, we are ready to talk about the down wind leg. It doesn't last for long so we have to talk fast.

The Downwind leg

Typically, the down wind leg is a fast flat glide, directly downwind, lasting 5-10 seconds and ending in a high banked 90

degree turn onto base leg. The only decision you have to make is how long it should be. The length of the leg has two important effects. First it establishes the length of the final approach leg- the further downwind you go, the further you must come back to reach the spot. Second, it strongly affects the time to complete the landing pattern.



Lets consider the length's affect on the final approach first. There are many things to do on the final approach leg. First, we must recover from the turn ending the base leg and beginning the final approach, we must get lined up with the spot, and adjust the glide slope. Then we must fly back up wind keeping everything lined up and finally we must kill off the speed to minimize the slide. All of this takes time and airspace. So the secret is- don't make the downwind leg to short. If you do you will find

the final approach leg too cramped to get everything in. Now, can it be too long? Probably not, at least as far as its affect on the final approach is concerned. It is important to use the same length each time (normally 30-40 meters) so that the times for the turns are consistent. Once the length is selected, adjust the altitude and time to go at the entry point to go with it and you are in business. For example, if you like a long down wind leg you may have to hit the landing pattern entry point with 35-40 seconds to go before touchdown and 10 ft' more altitude than is typical.

The other concern is the impact of the downwind leg length on the total time in the landing pattern. We are forced to adjust the length of the downwind leg in flight to compensate for the wind. In fact, this adjustment is the most important and easiest way to account for the wind. Lets consider two flights with an airplane that has an airspeed of 20 mph. The first flight occurs in no wind. If the downwind leg is 10 seconds long then the final approach will also be about 10 seconds long totaling 20 seconds. Suppose the second flight takes place in a 10 mph headwind. The groundspeed on



the downwind leg is 30 mph and on the final approach is 10 MPH—a factor of 3 difference. If the downwind leg is 10 seconds long, the final approach will be 30 seconds long (totaling 40) and the landing will be 20 seconds late. The downwind leg must be shortened to 5 seconds giving a final approach of 15 seconds to total 20 seconds again and an on time landing. Note that even though the downwind leg is half as long, there is still plenty of time on final approach in average wind conditions to get everything done. In summary, pick the length of the downwind leg to allow a comfortable final approach leg in average wind conditions and then compensate for higher or lower winds by extending or shortening it in flight.

Turning onto Base leg

The turn from downwind leg onto base leg is my favorite part of the landing pattern. If this goes well the landing is in the bag! If it goes poorly I am usually in serious trouble. Most of all it is a thing of beauty to execute with a sailplane. I set up the downwind leg to be a fast glide, typically one of the fastest part of the entire flight. (recall the down trim adjustment made

prior to entering the landing pattern?) At this speed and with this trim, the airplane has little tendency to pull up and stall. The nose is low, the tail is high, it is moving fast and the control response is quick and accurate—this sailplane means business! The turn we want is quick but not so quick as to kill off any speed. The sailplane should roll up quickly into a 60 degree bank, execute a smooth fast 90 degree turn, level the wings again exiting the turn with the nose down 2-5 degrees and no loss of speed. You know you have done it properly if it acts like it is on rails! If it starts to climb, the turn was messed up or it was going too fast on the downwind leg. Get the spoilers out fast, or crow or execute a fast 360 degree turn to kill off the excess speed and get back into the landing pattern. If it exits the turn nose high in a stall, the turn was done too tight or the airspeed was too low on the downwind leg. Forget the landing and start worrying about getting down in one piece.

The Base Leg

This is where you can breathe a little if you survived the turn off the downwind leg. A smooth base leg confirms that most of what we wanted to accomplish in the last 20-30

seconds went well. If the base leg is long enough (typically 10 seconds or so and determined by the cross wind distance to the landing pattern entry point that started this whole thing) it should be fairly uneventful. It is not even affected by the wind very much. Best of all it is the place to make landing pattern adjustments to correct for any mistakes up to this point. The most important correction available during the base leg is the adjustment to the total landing pattern time. If the downwind leg was too long, immediately turn onto final approach and fly a “V” type pattern to save 5-7 seconds. If the downwind leg was too short, fly on by the normal point to turn onto final approach, stretch the base leg 5-10 seconds over normal and get back on schedule. The base leg is usually slightly slower than the downwind leg and the airplane loses 1/3 to 1/2 of its altitude. If there is a strong wind, the base leg can produce an illusion that can get you into big trouble. What counts is the flight path direction, not the direction the airplane is pointed. In strong winds the airplane may have to be pointed at you in order to fly the base leg at right angles to the wind. If you don’t compensate this way the



wind will blow you so far that you could double the length of the final approach if you get back at all!

The turn onto Final

The base leg ends with another smooth, fast, high banked turn onto final approach although not quite as spectacular as the turn that started the leg. The trim hasn't changed and only a little speed is lost, so the airplane should corner smoothly, roll out quickly and enter the final approach with decent speed and an altitude of 10-15 ft. Its nose should be pointed at the spot. It is now about 10 second away from landing. All in all it has been a pretty good leg.

The Final Approach

The final approach gets busy again but not in the way most pilots believe. A strange thing happened as we rolled out of the turn onto final. We lost control of the time of the landing!!! I know, this is when most pilots start to control the time of arrival! and I am saying the game is already over! Here is why. First of all our goal is to land at one of three times 2:59 3:00 or 3:01 assuming a three minute time. Landing anywhere

in this three second period will net a score within one point of perfect and that is good enough, Remember? The airplane is moving at about 15 ft per second so it will travel 45 ft during the three second target period. That is the full diameter of the 25 ft landing circle! Hence, touching down any where in the circle will give us a great flight score! Second of all, when we rolled out of the turn we were some distance away from the spot and closing at some speed and about 10 seconds away from landing. There is almost nothing you can do to speed up the rest of the flight(save diving into the ground) and there is almost nothing you can do to slow it down (save breaking out of the pattern and going around to try it again). If you can not control it and if it will come out alright even if you don't control it, then stop worrying about it. Focus entirely on a smooth approach ending as close to the spot as possible. **FORGET THE TIME.** This is a very important concept because it allows us to stop worrying about somethings and to focus more single mindedly on what is left.

Getting close to the spot is largely a matter of being solidly in control of the airplane for the next 10 seconds. The

nose should never come above the horizontal - remember we are supposed to be coming down. The down trim inserted prior to entering the landing pattern should cover this. Usually the nose will be too low rolling out of the turn onto final and you will have to flatten the glide a little. If you have to pick the nose up too much you probably messed up on one of the previous legs or on the entry conditions. You can easily be lulled to sleep on this because stretching the glide on a calm day is easy and even pretty. If you try it in wind the airplane will jump up in altitude, its ground speed will fall way off and you will find yourself 10 ft. straight up over the spot with no way to recover. Keep the wings level and the fuselage pointed at the spot. Set the crab angle if it is not coming straight up wind. When you get it crabbing into the wind with the nose low and sideslipping directly toward the spot you know you are in control. With 10-15 ft. to go it is time to think about setting it down.

A common phenomena encountered on the final approach is the boundary layer lying next to the ground. In affect the air next to the ground



sticks to the earth and doesn't move with the wind. As you move up from the surface the air in the boundary picks up speed until it is moving at the true wind speed. The way this affects you is that as you start your approach high it looks like the wind will cause you to land short so you stretch the glide then as you get close to touchdown, the airplane shoots forward and you land long wondering why the wind stopped just when you were landing. The truth is the wind kept on blowing, you just dropped into the boundary layer. The depth of the boundary layer depends on the kind of wind that is blowing and how strong, but you can usually see its effects below about 3 feet. Knowledge of the boundary layers existence can keep you out of trouble and can even save you on occasion. If you are running late or perhaps falling short of the spot in a high wind, just dive into the boundary, hug those grass tops and you will be surprised how far forward you can go. **THIS IS NOT FOR THE FAINT AT HEART!**

Touchdown

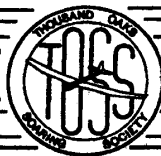
We expect the airplane to slide and from experience we know much - remember you recorded it on each practice

light. So pop the spoilers, drop the flaps or ease in the down elevator and set it down 2 to 5 feet short and let it slide up to the spot. I like to dive the airplane gently after completing the turn onto final to get some speed and get down close to the ground - a foot or so_ for most of the flight across the landing circle. The I can set it down with elevator without going into a dive. I use the same procedure with spoilers except I start 2-3 ft and as I come up on the spot I ease out the spoilers while adding up elevator. The airplane will lose speed and rotate to a stall and flop down on the spot with little or no slide. This is much prettier than spearing the landing and, for me, gives consistently higher scores. The airplane has to be in perfect trim. If it has a tendency to wander off course or to climb or dive you will be fighting it the whole way in. If it is warp free and correctly trimmed, it will follow the groove all the way to the spot.

Defining Your Personal Landing Pattern

So much for theory!
How do we tailor this process to your needs? It is really pretty straight forward but it may take several flights. Initially just shoot a few landings without

concern for timing. Try to fly a clean rectangular pattern and have someone time the airplane from the entry point to touchdown. Have them note the entry conditions including altitude, cross wind distance, speed and trim for each test flight. Try different cross wind distances and entry point altitudes as well as different down wind leg lengths until you find a combination you are comfortable with. Be sure to try increasing the entry point cross wind distance to something that seems too large because there is a natural tendency to make it too short. When you find a combination that feels good, fly it a few more times to pin it down, recording the results each time. Average the results over the flights and decide on the entry conditions you want to use. Your timer can tell you how long your pattern is from entry to touchdown (say 25 seconds). Now you know that, if you hit the entry point with 25 seconds to go, you will have a comfortable natural feeling landing pattern. Some pilots count down to the entry point and then don't want to hear any times thereafter. Their pattern is so consistent they don't need it. Your timer can also give you the times of the turns onto the base leg and final approach legs and now you are ready to



practice. You have a combination you like and all you have to do is fly the same approach every time. If you find something you don't like or a place where you feel rushed, don't hesitate to adjust the pattern. It should be right for you and your airplane.

Frank

SOUTHERN CALIFORNIA SOARING CLUBS
RESULTS OF TPG (SC)2 CONTEST OF 12/02/90
CONTEST DIRECTOR - GARY ANDERSON

PLACE	NAME	CLUB	CLASS	SCORE	NORMAL	TROPHY
1	SHELBY, RICH	ISS	EXPERT	2932.0	1000.0	E - 1
2	CLERX, BEN	HSS	EXPERT	2926.0	998.0	E - 2
3	REAGAN, MIKE	TOSS	EXPERT	2911.0	992.8	E - 3
4	MORAN, MYLES	TOSS	EXPERT	2896.0	987.7	E - 4
5	RITTER, GEORGE	DUST	EXPERT	2874.0	980.2	E - 5
6	LARSEN, ORLA	DUST	SPORTSMAN	2869.0	978.5	S - 1
7	MARTIN, TONY	HSS	EXPERT	2858.0	974.8	
8	JOY, GEORGE	HSS	EXPERT	2851.0	972.4	
9	GERBIN, ROBERT	HSS	EXPERT	2835.0	966.9	
10	WEISMAN, EDGAR	TOSS	SPORTSMAN	2815.0	960.1	S - 2
11	DOUGLAS, IAN	SWSA	EXPERT	2776.0	946.8	
12	HOLLEY, MARY	SWSA	EXPERT	2775.0	946.5	
13	ZINK, DON	HSS	EXPERT	2767.0	943.7	
14	FINK, DAN	SULA	EXPERT	2759.0	941.0	
15	SLIFF, BOB	HSS	EXPERT	2744.0	935.9	
16	ROWELL, WAYNE	HSS	SPORTSMAN	2730.0	931.1	S - 3
17	ANDERSON, BOB	TPG	SPORTSMAN	2728.0	930.4	
18	JOY, BRYAN	HSS	SPORTSMAN	2714.0	925.6	
19	JENKINS, HARVEY	ISS	EXPERT	2705.0	922.6	
20	VAN GUNDY, DON	TPG	SPORTSMAN	2688.0	916.8	
21	PETTEN, MICHAEL	ISS	SPORTSMAN	2680.0	914.1	
22	FINK, STEVEN	SULA	SPORTSMAN	2643.0	901.4	
23	CHASTELER, FRANK	HSS	EXPERT	2640.0	900.4	
23	RODRIGUEZ, JOE	ISS	SPORTSMAN	2640.0	900.4	
25	GATES, MATT	HSS	SPORTSMAN	2611.0	890.5	
26	RITTER, CHRIS	DUST	SPORTSMAN	2610.0	890.2	
27	TILLMAN, NORM	NCC	EXPERT	2593.0	884.4	
28	PARSONS, JIM	HSS	SPORTSMAN	2583.0	881.0	
29	SANDRONI, HUGO	SULA	EXPERT	2553.0	870.7	
30	RAYMOND, KEN	NCC	EXPERT	2552.0	870.4	
31	CHASTELER, TOM	HSS	EXPERT	2523.0	860.5	
32	CONDON, SCOTT	TPG	SPORTSMAN	2513.0	857.1	
33	BUZOLICH, NICK	HSS	SPORTSMAN	2456.0	837.7	
34	HENDRY, STEVE	HSS	EXPERT	2454.0	837.0	
35	THOMAS, ROSS	HSS	EXPERT	2448.0	834.9	
36	MERRIFIELD, HAP	TPG	SPORTSMAN	2434.0	830.2	
37	CONWAY, PATRICK	NCC	SPORTSMAN	2369.0	808.0	
38	HATCH, JOEY	DUST	EXPERT	2336.0	796.7	
39	CONDON, STEVE	TPG	SPORTSMAN	2266.0	772.9	
40	LISCOMB, BILL	TPG	SPORTSMAN	2238.0	763.3	
41	KUTCH, NORM	HSS	SPORTSMAN	2234.0	761.9	
42	LONG, DICK	SULA	SPORTSMAN	2027.0	691.3	
43	NEHRING, CURT	HSS	SPORTSMAN	1949.0	664.7	
44	BLEDSOE, RICH	TPG	EXPERT	985.0	335.9	
45	MERENDA, KEN	DUST	SPORTSMAN	980.0	334.2	
46	GARNER, RICH	HSS	EXPERT	0.0	0.0	

ORLA LARSEN ADVANCES TO EXPERT

SOUTHERN CALIFORNIA SOARING CLUBS
Annual Standings - 1990

FINAL

Name	Class	Club	Score	Contests
1 MARTIN, T	EXPERT	HSS	6927.3	7
2 WUTTS, J	EXPERT	TOSS	6645.1	7
3 SHELBLY, R	EXPERT	ISS	6607.5	7
4 PERKINS, D	EXPERT	PSS	6781.3	7
5 MORAN, M	EXPERT	TOSS	6718.9	7
6 JOY, G	EXPERT	HSS	6675.0	7
7 FINK, D	EXPERT	SULA	6690.5	7
8 SLIFF, B	EXPERT	HSS	6646.4	7
9 BRATRUUD, R	EXPERT	HSS	6551.6	7
10 HOLLEY, M	EXPERT	SMSA	6521.5	7
11 CHASTELER, F	EXPERT	HSS	6499.7	7
12 STILES, J	EXPERT	HSS	6436.7	7
13 RITTER, G	EXPERT	DUST	6419.9	7
14 WEISMAN, E	EXPERT	TOSS	6394.5	7
15 SANDRONI, H	EXPERT	SULA	6355.4	7
16 DOUGLAS, I	EXPERT	SMSA	6328.3	7
17 LARSEN, O	EXPERT	DUST	6246.1	7
18 JENKINS, H	EXPERT	ISS	6240.6	7
19 BLEDSOE, R	EXPERT	TPG	6192.7	7
20 HENDRY, S	EXPERT	HSS	6145.2	7
21 VICKERS, D	EXPERT	SULA	6134.8	7
22 PETTEN, M	EXPERT	ISS	6121.9	7
23 RODRIGUEZ, J	EXPERT	ISS	6078.6	7
24 LONG, D	EXPERT	SULA	6057.2	7
25 CHASTELER, T	EXPERT	SULA	6028.3	7
26 BONAMAND, T	EXPERT	SULA	6009.0	7
27 FINK, S	EXPERT	HSS	6000.4	7
28 THOMAS, R	EXPERT	DUST	5955.0	7
29 RITTER, C	EXPERT	ISS	5794.4	7
30 OTTON, M	EXPERT	DUST	5658.2	7
31 HATCH, J	EXPERT	TOSS	5602.7	6
32 REAGAN, M	EXPERT	NCC	5375.4	6
33 RAYMOND, K	EXPERT	HSS	5328.8	7
34 JOY, B	EXPERT	HSS	5424.4	7
35 CROWN, A	EXPERT	HSS	5379.0	7
36 ZINK, D	EXPERT	HSS	5356.4	7
37 PARSONS, J	EXPERT	HSS	5181.6	6
38 RICHARDSON, P	EXPERT	SULA	5089.7	6
39 EDBERG, D	EXPERT	ISS	5059.2	6
40 HIGGINBOTHAM, M	EXPERT	TPG	5043.3	6
41 ANDERSON, G	EXPERT	SULA	4944.9	6
42 STOKER, P	EXPERT	PSS	4927.6	7
43 BUTOVICH, D	EXPERT	HSS	4711.9	7
44 GARNER, R	EXPERT	NCC	4672.4	6
45 DOIG, A	EXPERT	NCC	4568.5	5
46 MEINBERG, K	EXPERT	TPG	4180.8	5
47 VAN GUNDY, D	EXPERT	SMSA	4175.6	6
48 BITTBERGER, J	EXPERT	NCC	4011.4	5
49 TILLMAN, N	EXPERT	TOSS	3945.3	4
50 HENDRICKSON, E	EXPERT	TOSS	3763.1	4
51 GOLDSMITH, B	EXPERT	ISS	3723.5	4
52 BILLMAN, T	EXPERT	PSS	3623.5	4
53 MATSUMOTO, B	EXPERT	PSS		4

SOUTHERN CALIFORNIA SOARING CLUBS
Annual Standings

Name	Class	Club	Score	Contests
54 FINKENBINER, K	EXPERT	NCC	3514.6	5
55 FUCHALSKI, M	EXPERT	SULA	3378.0	5
56 DUNCAN, W	EXPERT	HSS	3315.7	5
57 BROWN, G	EXPERT	ISS	3507.3	5
58 RAIHER, M	EXPERT	PSS	3509.1	4
59 WILLS, A	EXPERT	SULA	3078.2	5
60 COLLINS, T	EXPERT	SULA	3071.1	5
61 CLIFTON, B	EXPERT	SMSA	3070.9	4
62 GERMANE, B	EXPERT	HSS	3054.1	4
63 CHASTAIN, B	EXPERT	HSS	2904.1	3
64 CLERK, B	EXPERT	HSS	2975.1	4
65 NEHRING, C	EXPERT	HSS	2771.0	3
66 GERBIN, R	EXPERT	HSS	2745.2	3
67 GUSTIN, R	EXPERT	DUST	2745.2	3
68 BLODOD, E	EXPERT	NONE	2731.5	3
69 NOREMBERG, L	EXPERT	NONE	2584.5	3
70 DUSEN, P	EXPERT	SMSA	2501.5	3
71 KUTCH, N	EXPERT	SMSA	2476.3	3
72 HALL, D	EXPERT	DUST	2451.9	4
73 SADORF, S	EXPERT	ISS	2433.7	3
74 BRUCE, J	EXPERT	SULA	2345.5	3
75 SHELBLY, C	EXPERT	ISS	2292.1	3
76 SCHULLER, M	EXPERT	DUST	2113.4	2
77 INGEBRITSON, G	EXPERT	SMSA	2064.2	2
78 SCHMEMMER, K	EXPERT	NCC	1909.4	2
79 MACKENZIE, S	EXPERT	HSS	1906.0	2
80 GATES, M	EXPERT	HSS	1879.7	2
81 WHITE, L	EXPERT	HSS	1868.3	2
82 STREN, J	EXPERT	HSS	1845.8	2
83 LUPPERGER, J	EXPERT	NCC	1812.9	2
84 CLARK, D	EXPERT	HSS	1797.3	2
85 BURNS, R	EXPERT	PSS	1795.3	2
86 PETERSEN, L	EXPERT	SMSA	1790.1	2
87 SMITH, M	EXPERT	HSS	1789.1	2
88 GLASS, R	EXPERT	PSS	1773.5	2
89 RITSCHKE, G	EXPERT	HSS	1750.5	2
90 STARK, T	EXPERT	PSS	1715.9	2
91 WERENDA, K	EXPERT	DUST	1678.1	5
92 STAFFORD, I	EXPERT	NCC	1670.1	2
93 LASATER, J	EXPERT	HSS	1636.4	2
94 RITCHIE, T	EXPERT	PSS	1630.8	2
95 GIBBS, D	EXPERT	HSS	1606.4	2
96 LEAL, M	EXPERT	TOSS	1601.4	2
97 POWELL, R	EXPERT	DUST	1590.1	2
98 DANRICH, D	EXPERT	HSS	1585.9	2
99 LUEKEN, J	EXPERT	NCC	1540.9	2
100 DURHAM, J	EXPERT	HSS	1331.3	2
101 SCHNEIDER, S	EXPERT	TPG	1518.1	2
102 STOWALL, L	EXPERT	HSS	1476.4	2
103 CRAWFORD, K	EXPERT	DUST	1468.8	2
104 CONNAVY, P	EXPERT	NCC	1465.7	2
105 PANTZAR, D	EXPERT	HSS	1442.5	2
106 WILKENS, D	EXPERT	ISS	1434.5	2

SOUTHERN CALIFORNIA SOARING CLUBS
Annual Standings

Name	Class	Club	Score	Contests
107 CONRAD, M	SPORTSMAN	HSS	1349.3	2
108 RIMMELT, C	SPORTSMAN	ISS	1163.2	2
109 CROOK, J	SPORTSMAN	ISS	1160.4	2
110 AVESON, B	SPORTSMAN	SMSA	1079.6	2
111 MCDOLGAN, D	SPORTSMAN	SMSA	1079.9	2
112 ROBERTS, R	EXPERT	SMSA	1000.0	1
113 ROBERTS, G	EXPERT	SMSA	980.0	1
114 LOWERY, R	EXPERT	SMSA	945.2	2
115 TATUM, D	EXPERT	SMSA	944.7	1
116 HOLDER, E	EXPERT	SMSA	943.1	1
117 KINDRICK, K	EXPERT	SMSA	938.3	1
118 THOMAS, J	EXPERT	SMSA	936.9	1
119 BARNHART, J	EXPERT	SMSA	947.1	1
120 JOLLY, L	EXPERT	SMSA	943.2	1
121 WAGNER, G	EXPERT	SMSA	941.1	1
122 RENAUD, T	EXPERT	SMSA	937.2	1
123 PROVIN, K	EXPERT	SMSA	931.1	1
124 ROWELL, W	EXPERT	SMSA	930.4	1
125 ANDERSON, B	EXPERT	SMSA	923.6	1
126 SNEEDEN, J	EXPERT	SMSA	922.8	1
127 ENGER, L	EXPERT	SMSA	909.4	1
128 BRANDT, D	EXPERT	SMSA	905.4	1
129 DREWRY, B	EXPERT	SMSA	904.7	1
130 MERRICK, P	EXPERT	SMSA	901.2	1
131 GILMAN, R	EXPERT	SMSA	899.7	1
132 MEECEK, D	EXPERT	SMSA	898.7	1
133 SMITH, M	EXPERT	SMSA	898.6	1
134 OLDENBERG, E	EXPERT	SMSA	897.6	1
135 STROUP, M	EXPERT	SMSA	894.8	1
136 GRISWOLD, C	EXPERT	SMSA	893.8	1
137 GRAHAM, H	EXPERT	SMSA	893.3	1
138 BOKTIN, V	EXPERT	SMSA	888.4	1
139 COLLETT, M	EXPERT	SMSA	870.5	1
140 WHITE, J	EXPERT	SMSA	857.1	1
141 CONDON, S	EXPERT	SMSA	854.9	1
142 FOXGORD, C	EXPERT	SMSA	838.0	1
143 NEMLOVE, J	EXPERT	SMSA	837.7	1
144 LABARRE, R	EXPERT	SMSA	837.7	1
145 BUZOLICH, N	EXPERT	SMSA	836.6	1
146 THACKER, B	EXPERT	SMSA	831.3	1
147 DAGREVE, P	EXPERT	SMSA	830.2	1
148 MERRIFIELD, H	EXPERT	SMSA	821.5	1
149 FARLESS, D	EXPERT	SMSA	790.8	1
150 COOPER, R	EXPERT	SMSA	786.5	1
151 SAGE, F	EXPERT	SMSA	783.9	1
152 LITNER, G	EXPERT	SMSA	782.1	1
153 LEPLA, F	EXPERT	SMSA	781.3	1
154 SILVA, M	EXPERT	SMSA	781.0	1
155 VAN GUNDY, S	EXPERT	SMSA	776.4	1
156 WALDEN, M	EXPERT	SMSA	774.8	1
157 SCHUSTER, C	EXPERT	SMSA	774.0	1
158 FORD, G	EXPERT	SMSA	772.9	1
159 CONDON, S	EXPERT	SMSA	772.9	1

SOUTHERN CALIFORNIA SOARING CLUBS
Annual Standings

Name	Class	Club	Score	Contests
160 SMET, B	SPORTSMAN	TOBS	766.5	1
161 BARCON, D	SPORTSMAN	SMSA	766.4	1
162 LISCOMB, B	SPORTSMAN	TPG	765.3	1
163 SHERMAN, M	SPORTSMAN	NCC	762.8	1
164 SPLITZER, G	SPORTSMAN	PSS	754.8	1
165 LEVDE, H	SPORTSMAN	PSS	754.4	1
166 OLSEN, R	SPORTSMAN	SMSA	712.1	1
167 MEYJA, J	SPORTSMAN	DUST	710.0	1
168 BAUDER, K	SPORTSMAN	ISS	694.8	1
169 SIMMER, R	SPORTSMAN	TPG	675.0	1
170 GRAHAM, H	SPORTSMAN	TPG	665.7	1
171 SMITH, J	EXPERT	SMSA	663.3	1
172 AVESON, D	EXPERT	SMSA	661.7	1
173 ANDREWS, R	EXPERT	SMSA	630.1	1
174 STUMERS, L	EXPERT	ISS	642.5	1
175 ANDREWS, R	EXPERT	SMSA	641.7	1
176 MEIER, J	EXPERT	SMSA	636.2	1
177 HALLFORD, P	EXPERT	SMSA	621.7	1
178 CHAMBERLIN, R	EXPERT	SMSA	617.7	1
179 HARTIGUM, R	EXPERT	SMSA	606.9	1
180 QUAYLE, J	EXPERT	SMSA	590.7	1
181 LAIR, D	EXPERT	SMSA	590.1	1
182 BUSSING, J	EXPERT	SMSA	556.3	1
183 KENNER, J	EXPERT	SMSA	535.9	1
184 PETRE, B	EXPERT	SMSA	513.6	1
185 STEPHEN, J	EXPERT	SMSA	507.9	1
186 JAMES, D	EXPERT	SMSA	465.1	1
187 NORRERN, D	EXPERT	SMSA	230.5	1
188 PEETERS, B	EXPERT	SMSA	211.1	1
189 KOSHPULOS, G	EXPERT	SMSA	0.0	1
189 LINDLEY, C	EXPERT	SMSA	0.0	1
189 STAHLHEBER, F	EXPERT	SMSA	0.0	1
189 WAGNER, H	EXPERT	SMSA	0.0	1

TEAM STANDINGS

FINAL

1 - HSS - 38,588.9
2 - SULA - 36,661.6
3 - ISS - 35,815.8
4 - TOSS - 34,241.6
5 - DUST - 30,259.9
6 - SVPSA - 27,437.8
7 - PSS - 26,862.8
8 - NCC - 24,429.2
9 - TPG - 20,158.2

10-EDSF - 11
11-NRCS -

January 1991

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
Fun Fly Day. Practice, Help new fliers FUN Red wood School 6	7	8	9	10	11	TOSS CONTEST PARAMOUNT RANCH OOPS 12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	TOSS Meeting MEETING 30	31		

February 1991

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
TOSS FUN FLY DAY Practice and help new fliers FUN 3	4	5	6	7	8	9
TOSS CONTEST PARAMOUNT RANCH OOPS <i>Redwood</i> 10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	TOSS Meeting MEETING 27	28		

T.O.S.S. Calendar of events. Please contact officers for car pool information