

R.C. Channel Chatter

by Maynard Hill

A deep look into the growing sport of R/C Soaring.



Brant Culbertson, San Jose, California Wavemaster sparkplug, launches an original design for the high blue. Brant with the transmitter, sunglasses and funny hat. Club-mate Paul Cremmins releases it to the winch's pull.

LSF Soaring Tournament Biggest Ever in U.S.

Livermore, California, 31 August 1970— at 0900 hours, 29 August, Ken Willard made the first launch at what was to be the biggest and most challenging radio controlled model sailplane contest ever held in this country... the League of Silent Flight 1970 R/C Soaring Tournament. The second flight ROG'd at 0902 and the pace continued at one launch every two minutes for the next two days, eight hours a day. A total of more than 500 flights were recorded in six competition rounds.

Eighty-five pilots, with well over 100 sailplanes, signed in at Alice and Ted Nelson's "Hummingbird Haven" Gliderport east of Livermore, California. The pit area extended some 300 yards along the runway downwind of the flight line and was usually three or four sailplanes wide.

Les Anderson, with a Graupner "Cirrus" collected 4,394 out of 6,000 points possible to place first overall. Ken Willard, flying his original 8-foot span "Maxi-Sailer," and Roger Hebner, Graupner "Cirrus," each totaled 4,378 to tie for second overall.

The LSF Tournament incorporated three performance categories: Precision, Distance and Duration. Two flight tasks... one each contest day, 29 and 30 August... were flown under each category.

First round each morning was a Precision Task: on Saturday a one (1) minute flight terminating in a spot landing, and on Sunday a five (5) minute precision time with a prototype runway landing.

The second competition event was Distance. Saturday's task challenged pilots to fly for maximum possible laps over a closed course within 10 minutes. The Sunday round was an "LSF Speed Task"... clocked time for two laps on a closed course.

Duration was the final event each day... 10 minute maximum with bonus points for landing accuracy.

Competitors flew in either Open or Sportsman Class with the latter restricted to pilots who had flown in no more than three (3) prior R/C sailplane contests during 1970. At final count, 35 fliers were registered in Open and 50 in Sportsman Class.

Each contestant received a distinctive, commemorative transmitter plaque. Tournament Overall winners also received a one year subscription to the Soaring Society of America's "Soaring" magazine.

Tournament Meteorologist Harry Perl called for nearly perfect weather varying from a cool early morning marine air mass to afternoon clearing and correspondingly higher temperatures. Lift patterns were as predicted. Some less fortunate pilots seemed to find and follow invisible corridors of "down" air. Often at the same time, high scoring fliers were in near vertical dives trying to dump altitude gained from "killer thermals" within their allotted flight time.

Pilots signed in from as far as New York, Hawaii and Texas as well as all major West Coast points. Southern California was represented by the largest single out-of-area

contingent with 14 pilots on the flight line to vie for the 21 trophies. The Harbor Soaring Society was the guest club with the largest attendance. B.S. Smith, President, Soaring Society of America, was one of many interested spectators.

Five leading companies in the hobby industry, each of which was selected on the basis of product relativity to R/C sailplanes and soaring, underwrote the LSF Tournament. Co-sponsors of the meet were Du-Bro Products, Kraft Systems, Inc., Midwest Products Co., Orbit Electronics, Inc., and Top Flite Models, Inc.

Processing of flight point data was by computer, courtesy of General Electric's Computer Time-Sharing Service. Flight line scores were fed directly to Phil Simpson, Scoremaster, over a land line field phone. Raw scores were entered into the computer by way of a portable terminal located at the contest site. Input data was then transmitted by telephone to Los Angeles... approximately 500 miles south of "Hummingbird Haven"... processed by the Mark II computer, and furnished as a printed output to officials at tournament headquarters. Results of individual tasks and cumulative standings were posted within minutes after the close of each round.

At sign-in, each contestant received a Competition Package which included all pertinent information about the tournament, its schedule of events, general and specific flight task rules and scoring tables. Due to the variety of tasks flown, the data package approach was taken so as to pro-

vide pilots with better and more complete information than possible at the morning briefings.

Competition Event Directors, field services, scoring, timing and all other contest work parties were manned by members of the host clubs, The North Bay and The South Bay Soaring Societies. The tournament was CD'd by Bob Andris, LSF President.

The competing sailplanes provided the most representative spread ever assembled on one field at any one time. Most imported and domestic kits were seen as were many of the more popular magazine designs. At least one-fourth of the total were originals and these varied from simple, slab-sided "quickies" to magnificent and exciting 12-foot thermal hunters. Size and weight ranged from the famous *Nelson Ka-6* to the Willoughby "*Toki-Doki*" and the Lorber "*Gaggler*." The very new, Canyon Plastics all styrofoam semi-scale *Schweizer 1-26* made its competition debut. A beautifully built and finished, classic design "*Zeus*"... guided by a reed system... placed well up in overall standings.

Both flaps and spoilers were in evidence... flaps being the more popular. Several fliers utilized these systems to control landing approaches with significant success. Frank Colver's fabulous "*Santana*" incorporated both spoilers and spoiler-like differential ailerons.

Saturday and Sunday mornings started early for competitors with breakfast/morning-bull-sessions starting at 0630 hours. After a leisurely meal, cars were quickly loaded for the short, two mile drive to "Hummingbird Haven" in time for the 0830 Pilots' Briefing and 0900 launch schedule.

The contest was big and it was smooth. A few minor hitches developed and were quickly resolved. As with any winch-launched sailplane meet, logistics were staggering. Organization and planning were evident throughout the two day affair and no single noticeable detail was left to chance.

Flight line equipment included four elec-

Le Gray blows the Spot Landing. His 12 foot span "Gypsy Gull" is in too high to dump and too low to go around. Precision time coupled with a spot landing is a tough event to master, particularly with a soarer's float.



And the Winners are... in back, left to right: Chris Maunty, "Butch" Schroder, Stan Powell, Bruce Estes, Jeff Walters and Joe Corr. Center row: Dan Wakerly, Paul Forrette, Tony Hebner. Front row center: Les Anderson, Tournament Champion. Tied for 2nd Overall, Ken Willard, left, and Roger Hebner, right. The Hebner's needed a truck to take home the well earned hardware.

tric and one gasoline powered winches. Redundant back-up units were immediately available to replace faltering on-line gear. Gerry Wolfram's crew kept equipment running and clear in a most professional fashion to the extent of replacing 2,000 feet of towline by cartridge drums when expedient to do so. Spare tow rings were in each line crew member's pocket. Malcolm Wiseman's radio transmitter impound system served to provide two days and over 500 flights without a single incident of interference. Glenn Froehlich's timers were available and often waiting for fliers to arrive at the launch areas. Once spent lines were cleared of ground snags, retrieval personnel utilized Honda motor-bikes for quick return of tow lines.

Good sportsmanship was obvious as was an overall good spirit and air of camaraderie throughout the tournament. Em-

phasis was on fun and to a man, all hands allowed as how the LSF 1970 R/C Soaring Tournament was not only the biggest soaring contest, but also the best organized and most enjoyable event ever attended. As one fifty-year old "youngster" put it, "Man, this is like one of the big pre-World War II contests." And to anyone who has that background for reference, that means "great."

Le Gray
P.O. Box 187
Sunnyvale, California 94088

PLACE	NAME	SCORE
1	Anderson, Les	4394
2	Hebner, Robert	4378
2	Willard, Ken	4378
4	Andris, Bob	4232
5	Estes, Bruce	4016
6	Colver, Frank	4009

Fuel for the Fire

From Lee Messick, a highly experienced thermal soarer from Dover, Delaware, we received the following opinion.

Dear Maynard,

Concerning Competition Newsletter Mid Sept. 1970, I was appalled at the article on Page 20 concerning status of R/C gliders as an AMA event category.

I disagree emphatically with the statement that only one organized body has this experience (League of Silent Flight, Ed.). There is another body—organized—with experience—that I feel could write as good a set of rules—maybe better!

The East Coast Soaring Society was the only group I know of that tested both FAI and a set of rules drafted by this organization.

But I still do not think that the ECSS or the League of Silent Flight has the right independently or together to dictate rules for R/C Soaring throughout the country.

The general consensus of the glider people in our club, which is a member of the ECSS, about this article was very negative.

I would like to say I have not been impressed myself with what the League of Silent Flight has done—for example, their Lev-



The Malibu makes ready for an 11-3/4 hour hop, 189 mile Closed Course World FAI Record. Bob Boucher is all business on the slopes in Hawaii.

el I we accomplish on most every flight. The ECSS held a series of four contests—the 1st at Wilmington—the 2nd, DCRC—the 3rd at Lakehurst, N.J.—the 4th at Dover. We tried different classes and towline lengths and found this to be a huge chore with up to 40 entrants per class. The ECSS pretty much agrees that 10 minutes is plenty long enough for a Max. The spot landing FAI rule is ridiculous. Most of the competition people feel a much larger area is desired for spot landings. We found people diving at such a small spot at the risk of equipment and safety.

I hope the contest board uses good judgment when they write the provisional rules for AMA glider competition. I think there are more opinions available outside of these two organizations that are worth hearing.

Richard Sarpolus is the President of ECSS. It might be worth your time to contact him in this matter.

I would hope with your position as a journalist for major magazines that you could be instrumental in getting a better view from a large cross section of the country or at least let glider people that do not receive the newsletter know what is going on.

Lee Messick

It is worth noting that the ECSS sent a proposal to AMA suggesting changes in the FAI Provisional Rules. AMA has forwarded these to the FAI and they will be on the agenda in Paris. That is a positive constructive action. Perhaps soon the ECSS will change its name to National Soaring Society or American Radio Control Soaring Association (ARCSA). Such a name would be more appropriate.

Comparison

by Henry Heard

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(Mr. Henry Heard wishes to be heard. He wishes that the South Bay Soaring Society receive credit for the ideas expressed in this editorial.)

I have read about the GREAT DCRC Soaring Meets for many years in various Magazines and by word of mouth. It was very illuminating to read about the 3rd Annual Soaring meet, as covered by Maynard Hill's article. I have just finished working on a soaring meet or Tournament. Here we have some of the best Toy Aircraft builders in the east and all they can

think of is to fly for duration. The best quote of the day, "Who on earth could find anything more thrilling than a Max?" What's a Max? To fly for only 6 or 16 minutes and then to gripe about landing in one piece or place, rather than a country mile. If they can't plan on landing their toy in an area of 1500 sq. feet they had better turn in their radio and go back to flying on a wire.

The Tournament that I attended, pilot and worker, had over 85 fliers or pilots, ranging in age from 12 to over 60. Flight categories were: Precision, Distance, Duration. We feel that if a pilot can control his aircraft properly, then he or she must be able to land the aircraft within a given area or not receive Max points. Controlled crashes, parts falling off or damaged, were not given Max points. Aircraft which didn't remain upright on the landing rollout didn't receive Max points. The events were speed, and distance. Bases for both were laps around pylons placed about 175 meters apart. Decision events were for one and five minutes and you lost points for being under, over, or missing runway. Here we have a Tournament for not only the expert but one for the not so expert, but with a little more between the ears in order to plan his flight to garner the best flight and still land within the control area.

I am very tired to see or hear pilots spend all their time trying to get the aircraft model out of the toy class, then refute this claim by flying the model like a toy. To only see how long one can stay in the air with a radio on board is comparable to the old duration days, where pilots sat in a plane over one area for about six weeks. We have reached a point where we no longer have to prove reliability, and durability of our models or radios. Let's design a set of rules that will define tasks, and classes, planes and pilots. Pattern the rules along the type used for full size soarers. Rules which will use the ability and skill of the pilot, variable camber to obtain speed or thermaling effect. Not to see how long one may stay over one spot using radar, sound equipment and other special equipment.

Remember SAFETY. One accident with a full size aircraft and our flying will be restricted to flying on wires.

Well Mr. Heard, here is how it really is. To some people, flying gliders around poles on a hillside is to thermal soaring as grapes are to wine. Grapes are sweet but raw. Wine is an exquisite product of skill, experience, knowledge and artistic taste.

My personal reaction (and I suspect that of many other soarers) to your comment is "You do your thing and I'll do mine." You can even call your radio controlled airplanes tops if you think of them as such. I don't! I think of them as sophisticated machines that have stimulated my curiosity and that have given me a valuable practical education in physics, aerodynamics, weather, materials and structures, and a few other fields. It's been a vastly enjoyable education that I would have missed were it not for the hobby. I'd go so far as to wager that my professional salary would be at least 25% lower than it is, were it not for this extra education. What's really important, is that I'm not a special case in this respect. There are plenty of model-

ers who are working more creatively in both technical and non-technical jobs simply because their curiosities or philosophies have been stimulated by their hobby activity. In my books, a *Delta Dart* is not a toy airplane. Those plastic gadgets with wings and a friction flywheel that roll across the floor making sparks, those are toys. But those things we fly around poles or in thermals are radio controlled Soaring Gliders. The ones that have engines and do loops are Radio Controlled Airplanes.

All "Pole Soaring" is not sour grapes!

Bob Boucher, owner of Astro Flight Inc. which makes the popular "*Malibu*" Slope Soaring glider, did a fantastic piece of flying around two poles on a Hawaiian mountain on August 30, 1970. He launched at 7:45 AM and landed 7:04 PM. In between he covered 189 miles in closed course distance around two pylons 100 meters apart. Official observers were on hand. Net result is that the old World Record for this category (127 miles) held by Winfred Kaiser of Germany toppled into Bob's bailiwick. Terrific!

Bob has made at least four previous tries for this record in California, his home state. He suffered some real disappointments with winds that stopped after as much as 7 hours of effort. When his wife Suzanne answered the phone at 1:30 AM one morning in June, she was told she'd won a contest. The prize was a trip for two to Hawaii! Bob and Suzanne had spent their first Honeymoon in Hawaii, and here now was a second one. The "*Malibu*" collapses into a pretty small package which Bob took along just in case the wind was blowing. Photos here show the scene on the one day that wasn't exactly a honeymoon. It was long hard work, but it was a joyful day for him and Suzanne. Great going Bob. Congratulations.

After we received this information, the FAI office announced that a Frenchman, Mr. Raymond Brogly had flown his "*La Madeleine*" glider for a closed course distance of 200.2 miles on September 9, 1970. If this is validated, it means Bob's record stood at the top only 10 days. Records can be taken away, but the fact that Bob established and held a World Record cannot. The real thrill is having done it, not in holding on to it, so surely Bob is still feeling joyous over the occasion.

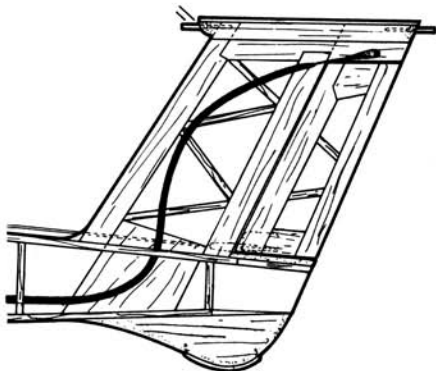
Bob Boucher in flowered shirt in background, looks a bit tired at 3 PM. Larry Nitta calling. Members of Kapiulani R/C Club in Hawaii.



Lil T Elevators

J.D.: How do I add elevators to my Midwest Lil 'T'?

ANSWER: It's not hard as you may think, though these T-tail gliders do add problems sometimes. This method is simple and it is further illustrated on a section of Midwest's plans shown here. Gold-N-Rod flexible cable (for steerable nosegears) with the Gold-N-Rod pink outer tubing is used for the pushrod for the elevator. Cut part R5 into two pieces to allow passing of the tubing. Glue in the fin ribs, butting them against the tubing to keep it from flexing. R4 is notched slightly at the top to allow the tubing to come out at an angle. Build the stab as shown on the plans but completely sheet the bottom with 1/16" very soft (and light) balsa. Now cut off 3/8" of the trailing edge of the stab with a straight edge; this should give you about 1/8" thickness at the trailing edge. Now hinge on a



piece of 1/2"x1/8" trailing edge stock (triangular) the full span of the stab for the elevator.

To further save weight in the rear, unwind all but 5 strands of the cable, then solder on a Du-Bro solder Link. I found that in order to keep the trim from being readjusted it is best to glue on the stab permanently. Glue is also lighter than the rubber bands. Concentrate on keeping weight in the tail to a minimum or excess lead will have to be added to the nose.

You'll find this elevator sufficient to trim the Lil 'T' for a powered ascent and retrim for the glide just by using the trim lever on the transmitter. By using the control stick, they are quite effective and will enable the glider to dive out of a thermal easily.

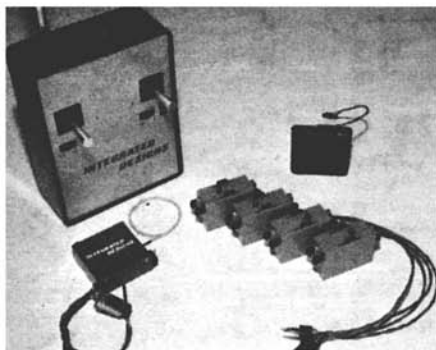
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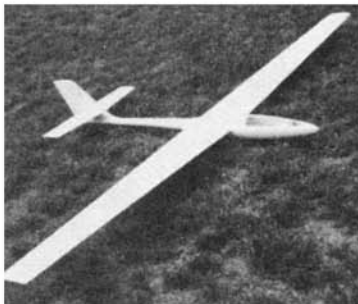
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