

SEPTEMBER-
OCTOBER
1954

Soaring

THE 21ST NATIONAL CONTEST
SPECIAL ISSUE



Staff Photo

Lyle Maxey in the new M-K-P.



Staff Photo

Don Mitchell's "Nimbus."

The scene at Elsinore Glider Port, general parking area on the day before the start of the 21st National Soaring Contest.



Staff Photo



21st NATIONAL STORY

A FACTUAL ACCOUNT COMPILED
BY THE EDITOR FROM DAILY
BULLETINS PUBLISHED DURING THE CONTEST

A Prayer for the
21st NATIONAL
SOARING
CONTEST

ALMIGHTY GOD,

who art the Creator of the heavens, the firmament, the earth. We look to Thee for Thy blessing for this valley of Elsinore at this eventful season. Give to those who soar into the heavens, wisdom, gliding skill, aeronautical knowledge, and thermal conditions to make this contest a great success. Keep us all free from danger, mishap, and any other adversity. Grant to those who are actively participating the spirit of sportsmanship, competition, and success. May they have great joy as they mount up with wings as eagles, and may we all through absolute faith in Thee, climb up into the open spaces of Thy love, and may the thermal of faith so lift us above ourselves that we too will be enriched through this gliding experience. Bless every glider pilot, those who prepare and keep safe the machines, officials who have made this possible, and may our locality richly enjoy this contest of fun, fellowship and faith. This we pray in Thy great Name. Amen.

Rev. Charles Richmond, Vicar of
St. Andrews By-the-Lake

This invocation, certainly the best ever heard at a gliding contest, was pronounced by Rev. Charles Richmond, Vicar of St. Andrews' Episcopal Church, during the ceremonies marking the opening, on July 27th, of the 21st National Soaring Contest at Elsinore, California. With such a blessing how could the contest be anything other than the success it was! To the strains of "Off We Go Into the Wild Blue Yonder" played by March Air Force Band, the contest was underway.

A weak flow of moist unstable air had come from the Southeast and there were forecasts of thunderstorms over Arizona. Weak to moderate lift to about 10,000 feet under cumulus clouds was expected locally with less to the East. In consequence of such conditions, a 100 kilometre triangular speed task East to Hemet, South to Radec and Northwest back to Elsinore was set the contestants.

Much to the surprise of everyone,

this task proved to be more difficult than was anticipated and no one completed the course. Paul Bikle in his Schweizer 1-23 and Emil Lehecka in the "Whatsit" fell about 10 miles short of completing the task, but, because the speed factor could not be applied, the scores at the end of the first day's flying did not influence the final outcome.

At the start of the second day's flying the weather looked none too promising, with a low inversion and a moist Southeast airstream aloft. Scattered cumulus were forecast for California, and thunderstorms in Arizona. However, to confound the forecasters,

the pilot cared to choose, in other words, an "open" day. Dick Johnson flying the RJ-5 took the lead, which he held thereafter, with a 321 mile flight to Mesa, Arizona. Lyle Maxey in his new ship flew 283 miles into Nevada and Paul Bikle made Wickenburg, Arizona, for 245 miles. Ray Parker in the "Tinymite" made a nice 221 mile goal flight to Las Vegas, Nevada. (This machine is really something now and you will be interested to know that Dr. Gus Raspet and Ray Parker have written the full story of the transformation of this ship to its present condition, and this story, complete with graphs and pictures, will

The winning Johnson/RJ-5 combination with crewman Eric Craik attaching towrope.



Staff Photo

this turned out to be the day which provided the longest flight of the contest. The shortcomings of the arrangements made for this contest were obvious now when it took over two hours to launch the forty sailplanes, instead of the one hour one would normally expect for such a job. This lack of launching facilities—aircraft and accessories—would appear to handicap competitors unduly as well as to introduce a luck factor into the final scores. The latter, of course, is debatable, and it can be argued that the luck element will cancel itself out over a prolonged period of flying such as this.

The task set for the second day was a distance flight to whichever point

appear in the next issue of SOARING.)

Thursday the 29th was another open day with mediocre soaring weather. Johnson again made easily the longest flight—to Boulder 215 miles. Paul Bikle replaced Lyle Maxey in No. 2 position with a 66 mile hop to Indio, and Maxey took Bikle's spot in third position with 20 miles to Hemet. Ray Parker did not fly and remained in fourth position.

Friday the 30th, maintained the upper level high over the Southwestern U. S. and conditions had deteriorated slightly from the previous day. The contest committee declared yet another open day and Johnson, arriving back midway through the launching

programme, had little choice but to go to bed. He was becoming slightly the worse for lack of sleep by this time. Ray Parker on the other hand was fresh from the rest he had had while Johnson was flying to Boulder, and he took advantage by flying 170 odd miles to Needles, California, to displace Bikle at the top of the ladder but still behind Johnson. Bikle was now in third position with a 47 mile flight, and Maxey was in fourth place with a 65 mile hop to Thermal, California—obviously this place was not well named because it didn't produce for Maxey. Bill Hoverman made 110 miles to Desert City, California, and Bill Ivans 120 miles to Johannesburg, California.

Those three open days in a row do not, in this humble opinion, contribute one iota to deciding a champion. They only wear out pilots, crews and equipment needlessly, and introduce hazards into competitive flying. Pilots and crews who are fatigued through lack of sleep and with a sense of urgency about getting back in time for the next day's flying, take unnecessary chances which can lead to accidents. The only thing those open days are good for is to enhance the reputation of the site from which the flights are made. The contest is not held for that purpose, however.

This writer also fails to appreciate why the rules allow competitors to disregard one task flight and one open flight when tallying the final scores. In no other sport does this occur, except perhaps in model contests. It would appear that a contest of this duration could be arranged so that all flights would count, and so arranged that pilots would make good distances, while at the same time having sufficient rest days and task days to make the contest a pleasure for all concerned, instead of a chore.

Saturday the 31st of July was by far the poorest day so far, and a Silver "C" distance and back at speed was

Paul Bikle and his crew. Note Junior going to town with the yo-yo.



Staff Photo

the task, with Banning Airport as the turning point. For ships of between 30 and 40 plus to 1 glide ratios one thermal going and one coming back would be all that would be needed—if the thermals went high enough. If you deduct a couple of hundred feet for a circuit at Ryan Field, 18 miles from Elsinore, you can quickly figure



Staff Photo

Mr. and Mrs. Lyle Maxey and their family. The ones being held are twins, boy and girl. He placed third in the M-K-P.

the height which Johnson and Parker made over Elsinore—because 18 miles on the way out was what they made. Bill Ivans and Paul Bikle must have found a second thermal on the way because they both made the turning point but no more. All the others fell into one or the other of two categories—either they didn't get away at all or just got away and no more.

At this point Johnson had 608.9 points, Parker, Bikle and Maxey between 400 and 500 points and Ivans, Hoverman and Wiburg were in the doldrums with between 300 and 400 points.

Sunday, August 1st, was a rest day from the contest flying but a large airshow was staged for the spectators. Also, Lloyd Licher organized the Model Contest early in the morning. (See separate report in this issue.) Pop Krohne, 65 years old, and Ross Briegleb, 15 years old, the oldest and youngest competitors, took off on double tow to show that there is no specific age at which one should commence or quit this business. Ross's father, Gus, was towed off in a powered aircraft with a dead engine and showed that he could soar it by staying airborne and gaining altitude. Perhaps he should have competed with this ship instead of acting as chief tow pilot! This airshow which included acrobatics, paper cutting, 'bomb' dropping and spot landings, etc., was climaxed by a nine-plane snake dance led by Herman Stiglmeier in the Pratt Reid.

World Height Record Holder Bill Ivans who placed fifth.

Monday 2nd of August, the contest committee again decided it should be another open day, although the weather forecast mentioned heavy alto-cumulus with a high temperature in the low 90's, compared to highs of 106 and 107 during the previous week. (John Aldrich, the official meteorologist says on this day "Am even more convinced that forecasts of surface winds in this area are not possi-



Staff Photo

ble, as there is a continual struggle between sea breeze currents from south and north during the afternoon".) Thunderstorms were forecast for the area and this forecast must have been accurate.

Thermals at Elsinore, although weak, went to sufficient altitude to give competitors a good start from the area. However, when the pilots reached Banning at the mouth of the pass, a thunderstorm was in progress, and no fewer than twelve ships, including Parker and Maxey, landed at Banning Airport. Bikle and Ivans both made 46 miles to Cabazon and Dick Johnson made his way through to his home town, Palm Springs. The meteorological reception he got there was most un-homelike and he landed somewhere near Palm Springs, 54 miles from Elsinore, for the best flight of the day.



Staff Photo

Parker's "Tinymite" showing clean lines and mirror-like finish.

Next day, Tuesday 3rd, the contest committee decided on a race to Banning and return. The weather was again poor and most of the take offs were around 2 p.m. After some 2 1/2 hours Johnson appeared back at Elsinore for an average speed of about 25 miles per hour—slow by any standard, and especially so for the RJ-5/Johnson combination. Meanwhile, Parker was still airborne, having been the last to take off. Phone calls kept coming in as another, and yet another, pilot set down at Banning. (Wonder what the attraction was there?) Just when the observers were wondering if, perhaps, Parker had delayed his take-off too long, the "Tinymite" crossed the finishing line with an elapsed time of 2 hours, 8 minutes.

AWARDS

HIGHEST POINT SCORE IN EACH CLASS

Class I	
1st Place, Dick Johnson	Plaque by Volmar Jenson Production Models, Burbank, California
2nd Place, Ray Parker	Trophy by Helms Athletic Foundation \$100 Cash by Lear Aviation Co.
3rd Place, Lyle Maxey	Trophy by Helms Athletic Foundation \$50 Cash by G. M. Giannini & Co., Inc.
Class II	
1st Place, Hal Hutchinson	Plaque by Liveoak Inn, Corona, California Oxygen Equipment by Bob Blaine
Class III	
1st Place, Don Stevens	Plaque by Charles Schneider Signal Mfg. Co., Los Angeles, California

HANDICAP AWARDS

(Highest Adjusted Point Score as Modified By Handicap Factor)

1st Place, Dick Johnson	Trophy by Insurance Finance Corp. \$250 Oxygen Equipment Set by Wilbur Zep Oxygen Co., El Segundo, California
2nd Place, Ray Parker	Trophy by Insurance Finance Corp. Clock Radio by Bill Johnson Instrument Service, Burbank, California \$10.00 Membership to OAPA
3rd Place, Lyle Maxey	Trophy by Insurance Finance Corp. Altimeter by Bill Johnson Instrument Service, Burbank, California

TWO-PLACE AWARDS

(Highest Point Score)

1st Place, Bill Beuby	Trophy by Pomona Timers Association Serricin Plastic-sheet by Serricin Corp., Burbank, California
-----------------------	--

CLUB CHAMPION

(Highest Point Score by Club Owned Gliber)

1st Place, Association Glider Clubs of San Diego, Calif.	Trophy by Douglas Aircraft Co.
--	--------------------------------

JUNIOR NATIONAL SOARING CHAMPION

1st Place, Ross Briegleb	Trophy by Elsinore Soaring Contest Committee Nylon Parachute by Al Smith of Irving Airchute Co., Burbank, California
--------------------------	---

WOMEN'S NATIONAL SOARING CHAMPION

1st Place, Betty Loufek	Trophy by Ninety-Nines, Inc. Hide-a-way Bed by Signal Mfg. Co., Los Angeles, California
-------------------------	--

LARRISA STROUKOFF AWARDS

(Best Goal or Goal and Return)

Single-Place	
1st Place, Ray Parker	\$75.00
2nd Place, Dick Johnson	50.00
Two-Place	
1st Place, Shumeier	\$75.00
2nd Place, Bill Beuby	50.00

DISTANCE AND RETURN AWARDS

1st Place, Ray Parker	\$100 by Ted Nelson Specialty Corp., San Leandro, Calif.
-----------------------	--

GOAL PRIZE AWARD

Hemet California, John Bock	\$50.00 by Santa Monica, Calif.
-----------------------------	---------------------------------

NATIONAL SOARING CHAMPION

1st Place, Richard Johnson	Richard DuPont Memorial Trophy (Perpetual Trophy) Trophy by Helms Athletic Foundation. \$10.00 Membership in AOPA by AOPA
----------------------------	--

OTHER AWARDS

FOR MOST OUTSTANDING CONTRIBUTION TO MOTORLESS FLIGHT

Ted Nelson Warren E. Eaton Memorial Trophy

FOR LONGEST FLIGHT FROM OTHER THAN AERO-TOW LAUNCH IN THE PERIOD BETWEEN THE 20th AND 21st NATIONAL SOARING CONTEST

Paul Bikle Lewin Barringer Trophy

Sportsmanship

Fred Jukich \$25.00 and Plaque

Joe Robertson \$25.00 and Plaque

Jim Planck \$25.00 and Plaque

Appreciation

Hal Smith Plaque

Special

Paul Bikle (California Champion) Texas "FLAG"

Design Competition

(Best designed improvement of standard glider)

Ray Parker (Tiny Mite) Trophy by Northrup Recreation Club

(Best intermediate type glider)

Schweizer Aircraft Corp. (Schweizer 1-26) Trophy by Northrup Recreation Club

(Best designed high performance sail plane)

Harry Perl (Penetrator) Trophy by Northrup Recreation Club

(Sweepstakes)

Schweizer Aircraft Corp. (Schweizer 1-26) Trophy by Northrup Recreation Club

EDITORIAL AWARDS

Best Glider Club News Bulletin "Spirals" of Texas Soaring Association

Best Book Devoted to Soaring "On Being a Bird" by P. A. Wills

Best Newspaper Reporting of Glider Activity Marvin Miles of "L. A. Times"

Best Non-technical Magazine Article
Devoted to Soaring "True" Magazine, April, 1954

Best Technical Article Devoted to Soaring "Design of Sailplanes" by Bruce Carmichael

FINAL PLACINGS

Open Place	Open Score	Handicap Place	Handicap Score
1. Johnson	929.7	1. Johnson	929.7
2. Parker	772.9	2. Parker	772.9
3. Maxey	667.4	3. Maxey	667.4
4. Bikle	623.1	4. Bikle	623.1
5. Ivans	585.6	5. Ivans	585.6
6. Hoverman	472.8	6. Stevens	478.1
7. Wiberg	425.3	7. Hoverman	472.8
8. See	321.4	8. Wiberg	425.3
9. Hutchinson	319.8	9. Bowers	401.5
10. Thompson	300.7	10. Hutchinson	383.5
11. Reed	291.8	11. Thompson	360.8
12. Beuby	275.4	12. Reed	349.7
13. Lambros	267.3	13. Beuby	332.0
14. Stevens	265.5	14. See	321.4
15. Sawyer	250.2	15. Schurmeier	280.1
16. Schurmeier	232.8	16. AGCSC	271.9
17. ACCSD	229.6	17. Lambros	267.3
18. Bowers	222.6	18. Heideman	258.3
19. Heideman	215.4	19. Sawyer	250.2
20. Ziler	210.8	20. Bock	248.9
21. Lehecka	180.8	21. Ziler	240.0
22. Jackson	172.2	22. Lehecka	217.1
23. Butts	147.3	23. Jackson	172.2
24. Bock	138.2	24. Boulder Club	168.9
25. Sherman	130.8	25. Sherman	157.9
26. Boulder Club	118.7	26. Butts	147.3
27. Cascade Club	115.1	27. Cascade Club	137.8
28. Loufek	110.9	28. Loufek	133.2
29. Clark	84.2	29. Clark	107.1
30. Swierkowski	69.2	30. Schenbeck	92.6
31. Briegleb	49.2	31. Briegleb	87.0
32. Krohne	49.1	32. Swierkowski	84.3
33. Moore	40.1	33. Krohne	56.6
34. Gehrlein	34.7	34. Moore	47.8
35. Saufnauer	26.1	35. Saufnauer	47.0
36. Schenbeck	24.9	36. Gehrlein	34.7

This gave him an average speed of 31 mph, and 175 in folding money in his pocket.

Of the others, Ivans, Hoverman and Schurmeier did best.

At this point Johnson held 100 points lead over Parker, and Ivans Bikle and Maxey, in that order, were fighting it out for third place and were too close behind Parker for comfort—Parker's comfort, that is. So when the committee decided for yet another open day anything could have happened.

The weather had improved somewhat, and Johnson made sure of his 4th National Championship by going to Blythe, California. Parker ended what chances he still had of catching up on Johnson by putting down at Twenty Nine Palms. Bikle made his goal to Desert Hot Springs and Bill Ivans a few miles more to A Thousand Palms. However, Bikle's goal points



Staff Photo

Anna Saudek and Bill Beuby who flew the SCSA P-R into first place in the two-seater class.

offset Ivan's extra distance points and they were still neck and neck.

(Somewhere around this time we learned the results of a gliding skirmish going on over in England. It appears that one of SOARING'S correspondents made contact with one of our overseas correspondents to learn that Pierre of France had now become World Gliding Champion. The word "gliding" is used advisedly to distinguish it from the better known sport, Soaring, with which most of our readers are familiar—at least, during contests. Since not one of those taking part from the U. S. has been able to write a report for this edition we cannot tell you anything further, and 32

(Continued on Page 29)

ELSINORE WEATHER CONDITIONS

By JOHN H. ALDRICH
U. S. Weather Bureau

(Official meteorologist for the 21st
National Soaring Contests.)

Fully to appreciate the problems confronting contestants at America's 21st National, one should know of the topography of the area in a half-circle of a 300 mile radius centering at the launching site in the Elsinore Valley, and at the same time be reminded of the atmospheric conditions produced by reason of this topography and which is peculiar to this area.

The several well known thoroughly tested and proven soaring sites in this country, and the world as for that matter, have in general one or another thing in common, both topographically and meteorologically. Some are best known as combination ridge and thermal sites; some, like Torrey's Pines, are dependent exclusively upon slope currents. Others as in Texas' level country, depend entirely upon thermal upcurrents.

It can hardly be said that the Elsinore site is fully comparable to any other of these better known launching places. On the contrary, the Elsinore site by reason of its geographic situation, produces a variety of conditions that are entirely different. These peculiar conditions of land and air are particularly significant when considered for tournament purposes. If one were to consider the Elsinore site for purely local flying, as actually had been the case previous to the running of the 21st National, one would find nothing very different or out of the ordinary. He would see a wide and almost billiard-table level valley; the bed of an inland sea which had gradually receded and during very recent times becoming entirely devoid of water and likely to join the ranks of Southern California's many famous dry lakes. Days of sunshine (almost 365 out of the year) produce thermals of great intensity and close distribution over this entire valley floor. It is to be remembered, however, that this is a relatively small area, perhaps 3 miles in width and 10 to 15 miles in length.

The complex effects of ocean, moun-

tain and desert have made Elsinore a Mecca for motorless flight, yet they produce a variety of conditions to challenge the most resourceful of sail-plane pilots.

The site of the 21st National is the scene of a grim, evenly-matched struggle between the forces of nature. As the thermals begin to percolate over the valley, cool sea air is drawn through mountain passes to the north and south. The cooling effect brings an end to thermals near the passes, but as the sea breeze pours toward Elsinore, the two opposing currents engage in a constant duel, shifting back and forth across the glider port. The surface wind often changes from six to ten times a day, giving starters and pilots a constant take-off problem, as the changes are impossible to foresee in most cases. But the same forces cause thermals to break out in large numbers and send gliders on their way to distant points over mountains and desert.

The City of Los Angeles has been kind enough to tint the current from the north with products of metropolitan living, and the dull gray haze is easily recognized by the pilots. Here is where the battle is thickest and the thermals are at their best. To the south of this 'smog front' afternoon lift is almost a certainty, and the air is clear except for dust devils. But let the pilot dive into the haze and lift is gone, while visibility becomes one to three miles in the smog. This 'smog front' extends in a line across the valley toward the east or northeast, usually forging southward during the afternoon. It has most characteristics of a real cold front with squally turbulence and lift ahead and cooler smoother air within the haze. Some of the best flights of the contest were made along the 'smog front.' Further south the air is again tinted with a bluish haze where sea air pours through coastal passes.

Moving northeast or east along this convergence line, the pilot finds the



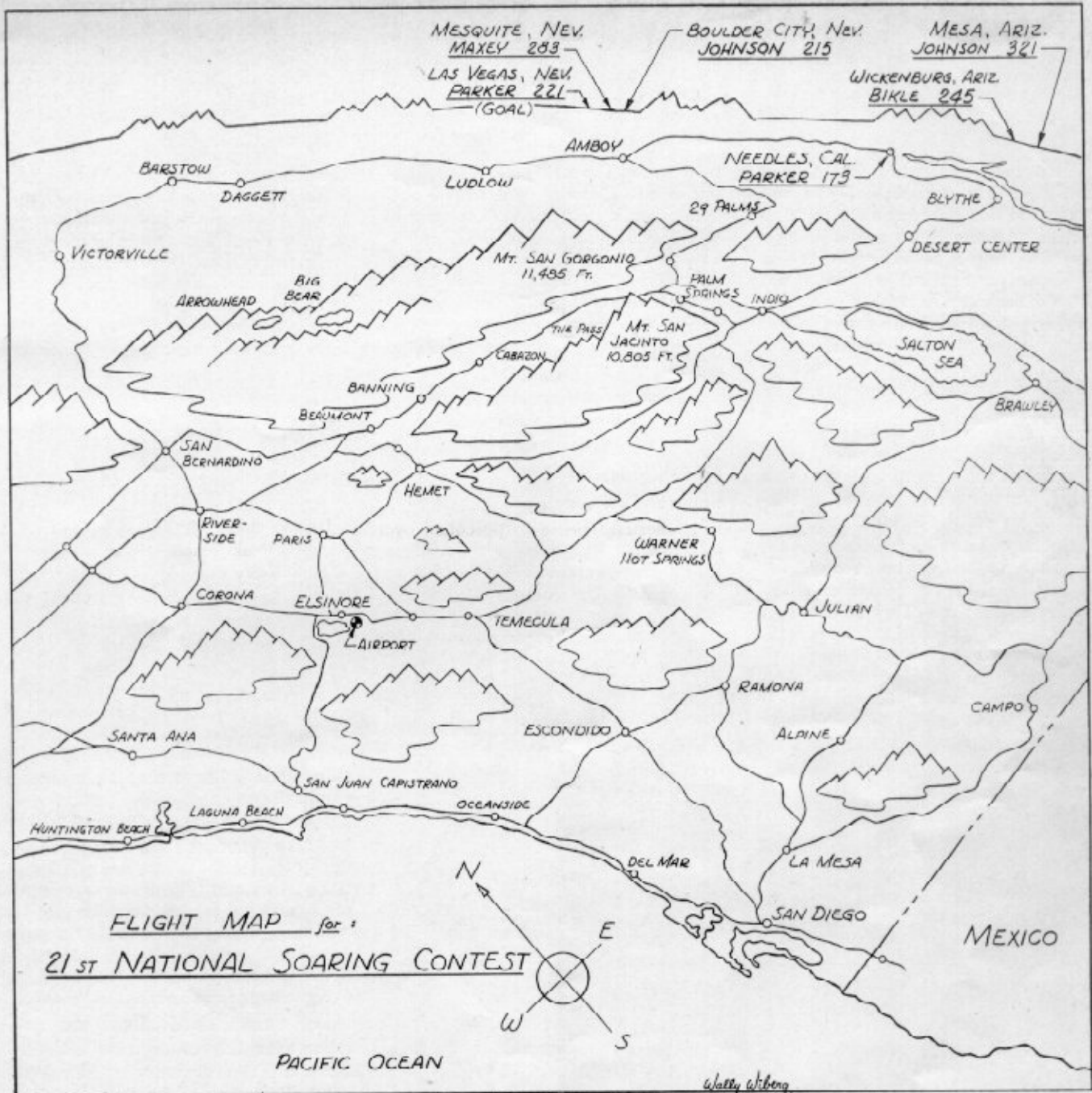
Photo—June Sargent

Meteorologist John Aldrich as he appeared at the pilots' briefing.

higher mountains of the Coast Range, with San Jacinto Peak 40 miles east-north-east rising to 10,831 feet. Twenty miles to the north, San Gorgonio Peak reaches skyward 11,485 feet. Heavy cumulus clouds are common along the higher mountains, and varied opportunity for lift is found over the rugged slopes. Between these peaks is San Gorgonio Pass, where the afternoon sea breeze rushes through to cause eddies and rough air as it passes into the desert to the east. There intense desert heat offers more thermals, complicated at times by the stabilizing effect of the Salton Sea.

In view of the peculiarities common to this launching site in the Elsinore Valley, one sees by referring to the attached map the almost obvious problem confronting the contestants in the 21st National. If straight distance of any consequence was to be attained he must follow generally two trails—the same two, singularly enough, that even the pioneers in their ox wagons followed in the early days when they penetrated this country. First he had to move northeastward over into the Perris valley where his trail forked—one prong proceeding northward through Cajon Pass that would put him over the Mojave Desert; the other eastward through San Gorgonio Pass that let him into the California-Arizona desert, both desert areas being noted for their high and wide thermals.

The prevailing westerlies prompted most pilots to choose the route via Beaumont, Banning, and Cabazon, then through San Gorgonio pass, and once through this pass, the choice of routes straight east in the direction of Blythe, Phoenix, etc., or by veering more to east by north and heading in



the direction of Las Vegas, Boulder, etc. This was the direction most favored, actually only one flight — Ivans' — successfully negotiated Cajon Pass and pressed onward to Victorville in the Mojave.

Any number of the better flyers in this contest were able to maneuver through the pass between the two high peaks — Gorgonio and Jacinto. But there was much more to that operation than would be apparent at first glance. Get-away altitude was generally easily obtained over the Elsinore valley — six to eight thousand feet. Moving over the first low range of hills the pilot found himself over Perris val-

ley, a highly irrigated and intensely cultivated area of green alfalfa and citrus. This carpet of green was, of course, not conducive to thermal generation. A pilot had therefore to 'tip-toe' his way across to the Beaumont-Banning country in order to set himself up for the run through the pass. Here indeed was where the machines with 30/1 or better glide ratios paid their pilots for the trouble of refining one to that degree of efficiency. Here also was where the pilots with machines of less performance substituted soaring skill for mechanical refinement. Here certainly was the place as the observers like to say

"Where we separate the men from the boys." And it goes of course, without saying, that the distance tries in this contest were something of a 'sudden death' proposition, for if a pilot was unable to figure himself out of this 'trap' his journey was short and the resulting retrieve easy. On the other hand, if he could hop this hazard and break into the desert country beyond, he was in a fair way to bringing off an outstanding distance flight, as was demonstrated by Johnson's 330 miles beyond Phoenix, and his, Parker's and Maxey's flights to the Las Vegas-Boulder area in Nevada that netted

(Continued on Page 32)

Miscellaneous Observations On Pilots, Performances, People, Rigs and Operations At the 21st

By E. J. REEVES

That the combination of Johnson and RJ-5 are unbeatable—was not proven to this observer's entire satisfaction. All the same one would be just 'whistling Dixie' if he tried to win a debate on this subject. After all, there is the score board big as a barn staring you square in the face and any way you look at it Sir Richard's name is all the way at the top. In knocking off his 4th National Championship he becomes the first American to turn the trick. That plus the fact that he holds the world's distance record takes him out of the class of 'Johnny come lately' and keeps him from being considered a 'flash-in-the-pan.'

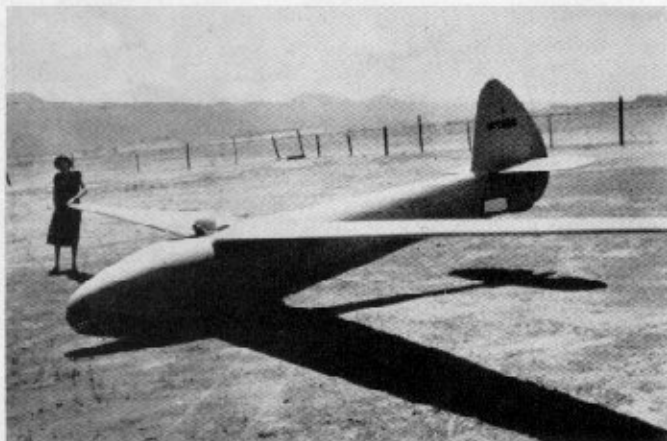
But it did not keep one from reminding oneself, after seeing the Maxey-Kerns-Prue machine and Ray Parker's improved "Tiny Mite"—that there were a couple of machines with well over 30 to 1 and at least approaching the RJ-5's performance. Given the weather to their liking and

retractable. The AR is 23. Wing loading is 6.8. Gross weight is 680 lbs. Wing area is 100 Sq. Ft. The span is 48'. The airfold section is 65 sub 3 518 @ equals 0.7. The ship had had only three test flights before being brought to the contest. Its designers had spent two and one-half years of spare-time work in construction. It is

this observer and caused him to think it might very well go right along with the machines just mentioned—was the Pearl 'Penetrator.' Unfortunately Harry Perl became slightly ill and could not take his machine out. Dr. Sawyer finally got it into the air for the last two days but weak conditions plus his unfamiliarity with the

Frank Kerns, designer and builder of the fuselage section of the M-K-P.

Staff Photo



Ray Parker with Mrs. Parker on the wingtip of the slick "Tiny-Mite."

Staff Photo

just a shade of a break—and these two machines might well give Dick and the RJ-5 some serious trouble.

The Maxey-Prue-Kerns ship was probably the newest and most interesting machine in the competitions. Of all-metal construction, the workmanship is not excelled by builders, professional or amateur, of aircraft anywhere. Maxey and Prue did the wing panels and Kerns the fuselage. Its general appearance and plan-form closely resemble Prue's 215 series. But structurally it is vastly different. The wings are three-piece. Dive breaks are fitted to open from the fuselage. The landing wheel is fully

definitely a high speed performer. Maxey, the pilot member of the team, has so far been the only person to fly this ship. He estimates its stalling speed at 55 MPH. However, my observations of its landing lead me to believe that actually she quits at a much lower speed—probably 40 MPH. (Let the readers—if any—keep in mind that these are observations of one unschooled in aircraft design techniques.) Later, we are sure, the designers of this splendid new sailplane will report fully on the development in the pages of this journal.

Another machine that impressed

ship made it impossible to make a comparison.

It is now pretty well established that all of the four ships mentioned—the RJ-5, the Maxey-Kerns-Prue, 'Tiny Mite' and 'Penetrator' are four of America's top performance sailplanes. Just how the Schweizer's new 1-23 series or the 1-26 fits into this figuring would, we guess, make something to argue around the bunk house.

Don Mitchell's 'Nimbus' was another very interesting new and, in some respects, revolutionary, development. Flown by Dr. Sawyer for a few day of the contest before some trouble with the control linkages developed, it did not show too much. The Doc was at some advantage in that he had had little time to shake the ship down. While we would hardly be in any position to argue such things, we would, all the same, question the sharp leading edges which Don fashions for his wings.

The Schweizer 1-23s in the competitions were generally in good hands and showed well. Bikle and Ivans gave their's good flying and Hoverman improved daily in his. Things were for some reason not to the liking of Larry Gehrlein and after the first

two days he eased out of the competition. Ordinarily Larry is a distance flyer of some note as he proved when he stopped in Texas on his way back from California. Making five tries he racked up the following mileage—163, 252, 226, 263, and 300. Ray Jackson had the Detroit Vulture's 1-23 in the melee but spent more time on TV shows than in competition. The fact that his pretty wife, Grace, was acting as his crew-chief may have had something to do with the demand for his team on the video. 'Pop' and 'Mom' Krohne with their beautiful L-K-Special the 'Comet' were also much in demand as TV and photographic subjects. They really made

standing the fact that he made it available to anyone who wished to take it on a demonstration hop. Any number of 'visiting firemen' took advantage of Clarence's and the Schweizers' generosity—all pronounced the 1-26 a very sweet little ship. By the time of the 22nd it is likely that no less than 50 of these 1-26s will be in the hands of American soaring pilots and likely half that number will be in the 22nd comps.

The suped-up, slicked-up, modified, flattened and otherwise remade 'war-surplus' types—such as LKs, TG-2s, PRs, etc., were on hand in goodly numbers. They are darn fine flying machines and a lot of clever carpenter-

15, son of Gus of the famous Briegleb Soaring School at Adelanto, California, was the youngest contestant. He flew well in his little "Cinema." Betty Loufek was the only feminine contestant but flew it all out just the same. The manner of qualifying as club contenders under the rules set-up, left something to be desired in our opinion. But those competing did well and are due all praise.

The most sensational machine showing at the 21st was, of course, Jukich and Hall's Fauvel flying-wing. These chaps had rushed to completion with this, the first, Fauvel to be built in this country. They arrived at Elsinore only in time for the last week of the contest. Their object was not seriously to compete, in fact no cross-country tries were made with the ship. Jukich did the first flights and immediately offered the machine to other pilots who might be interested in having a go with this new and unusual machine. Other pilots such as Backstrum (designer of the 'flying plank' which has now successfully flown in Texas), Wiberg, Parker and Bowers—perhaps some others—all had nice flights and very much enjoyed the privilege. Mr. Jukich and Mr. Hall were very properly awarded the plaque which had been created



Harry Perl's smooth looking "Penetrator."

Staff Photo

the big time when they appeared on Art Linkletter's show.

Capt. Ed Butts of the USAF had the newest 1-23 in the meet—but Ed must have been flying it like he does the B-36s. On the final day of the contest he asked Dick Johnson to go the tri-course race that day in the new 1-23. Dick had already sewed up everything in the scoring for first place and had not bothered to fetch the RJ-5 back from his flight to Blythe. He took Ed's dandy new 1-23 around the course just like he was supposed to. All of which proved to Ed's entire satisfaction that his rather short flights had been due to something else besides machine.

Geo. Lambros had the 'Orlik' formerly owned by Paul MacCready, in the competitions and the ship looks beautiful—as does Geo's wife and crew-chief. He did not, however, seem to be able to make the 'Orlik' go like young Doc MacCready used to. Wally Wiberg's 'Lil Doggie'—the former 'Screamin Weiner,' child of Irv Culver and Wally Nugent of the Lockheed engineering staff, proved hardly the equal of the newer designs. Clarence See had brought out Schweizers 1-26 prototype and flew it to eighth place in the Class I category. This notwith-

Don Mitchell and his "Nimbus." Note the sharp lines of the leading edge.

Staff Photo



ters have in them something that could not otherwise be had for a good many thousands of dollars. These pilots operated mostly in the Class II category of the competitions and produced results equally as interesting as the I Class. The same can be said for the boys fighting it out in the Class III category, although there were not as many of them. Don Stevens carried off the honors in the III Class with his super ultra version of the 'Bowlus Baby.' Pete Bowers, the old lumber-jack from the Pacific Northwest, pushed Stevens hard, as did Boch in his little primary the Schweizer 1-19. Young Ross Briegleb, age

for this contest and to be awarded for the pilot or team exhibiting the best sportsmanship. While tremendously intrigued with the Fauvel—none of the pilots seemed to be particularly impressed with its possibilities as a contest machine. The trailer apparatus which Jukich and Hall had designed and built to transport the Fauvel was, in itself, something of an engineering feat. These first flights were extensively filmed by TV and newsreel cameramen—no doubt many of you will see something of it at your local movie houses and TV screens.

The contest operations moved well

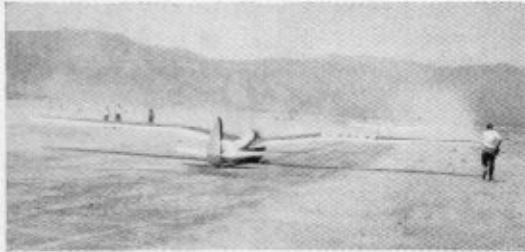
(Continued on Page 27)

SOME OF THOSE



Staff Photo

Don Stevens and his super slick duded up — Bowlus Baby.



Staff Photo

The "Orlik" piloted by George Lambros.



Staff Photo

In the Carsey suite at Lake Elsinore Hotel. A few well known soaring personalities enjoy a hilarious evening.



Staff Photo

A soaring enthusiast at 79. Mr. Raymond Cree, Dick Johnson's crew chief.



Staff Photo

Jim Spurgeon — MC at 21st National and Awards Banquet.



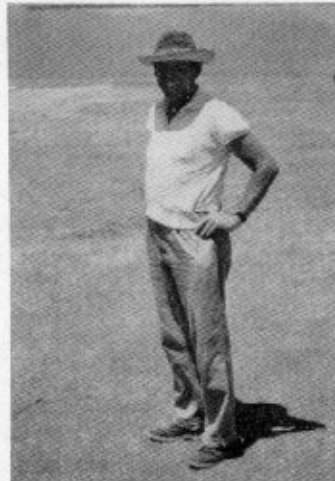
Staff Photo

Captain Ralph S. Barnaby emphasizes a point with Don Mitchell.



Photo—June Bargent

Jon D. Carsey presents award to "Queen of the Meet," Gail Frampton.



Staff Photo

Chief tow-plane pilot, Gus Briegleb.



Staff Photo

(L to A) All Marys — Hudson, Shannon, Shannon and Carsey, with "Valley Sun" publisher, Tom Hudson.

WHO WERE THERE



Staff Photo

Pilots' meeting on the patio of the Lakeview Hotel. Here also were held the technical sessions.



Staff Photo

Gus Briegleb's low ship which did a magnificent job.



Staff Photo

The M-K-P derigged and ready for the road.



Staff Photo

The man who made it possible. Mr. L. K. "Pete" Bonotaux.



Staff Photo

Business Manager, Les Hieberl.



Staff Photo

Fifteen-year-old Ross Briegleb with his pretty girl friend and his "Cinema."



Staff Photo

Mr. and Mrs. Paul Tuntland, Sr., creators of the "Tuntland Memorial Trophy."



Staff Photo

Leigh and June Sargent — she worked in contest headquarters, he photographed.



Staff Photo

Two long-eared hungry looking brahma calves — see what we mean?

MY MOST INTERESTING FLIGHT DURING THE 21st NATIONAL CONTEST

By DICK JOHNSON
(Four Times National Soaring
Champion)



Staff Photo

Dick Johnson (right) discusses Elsinore conditions with TSA members Del Reed and Othmar Schwarzenberger.

The second day of competition at the 21st National Contest was to be an open day and many pilots and their crews huddled excitedly about their maps secretly planning the day's flights. The first day of the contest had been a rather local task so not many of us knew what soaring conditions we could expect if we tried for a long distance flight to the east, over the mountains and into the deserts. I chose Blythe, California, 154 miles east, for a goal.

Takeoff was just before noon, Pacific Daylight Time, and I released in a thermal at 1,000 feet above Elsinore and slowly climbed to 4,000 feet. I expected the most difficult part of the flight would be the first 50 miles, after which I knew the deserts beyond should be easy sailing. I left Elsinore cautiously sacrificing speed to conserve altitude. I worked every weak thermal found for as long as possible and so managed to stay between 2,000 feet and 5,000 feet above the level ground.

After one and a half hours I arrived at the San Jacinto Mountains and surveyed the 10,831 feet peak from quite a distance below its summit. I now had either to fly north a few miles to San Geronio Pass (2,538' ASL) or climb over the San Jacinto Mountains before I could reach the desert. I decided to attempt the latter so I flew R-J-5 into the high pine and granite covered country. By climbing on each thermal found I soon found myself at the 7,000 feet level which was not enough even to see over the lowest ridge in that vicinity. I flew considerably below a forest lookout station and carefully flew past the 1,000 feet sheer granite face of Lily Rock as I searched for lift in Tahquity Valley. At the east

end of this valley the ground rose abruptly and prevented me from gliding to Palm Springs in the desert beyond. However, by flying in close I found a combination of ridge and weak thermal lift. After ten minutes of inching my way up the slopes I noticed I was flying within 100 feet of a pack train of campers on the trail to San Jacinto Peak. They seemed rather unimpressed so I slowly climbed on above them. Finally I had 3,700 feet and since the ground dropped away rapidly beyond the ridge I turned my ship toward the east and was on my way toward Blythe.

It was now 2:00 P.M. and only 50 miles traveled but the desert beyond looked better than I had expected. A fair coverage of modest cumuli lay over Indio and the mountains beyond. I was happy to see these clouds high and not large because this meant there was little chance that thunderstorms would form.

Near Indio I climbed to 12,500 feet in $2\frac{1}{2}$ meters/sec. lift. By going from cloud to cloud rapid progress was made and I arrived at Blythe at 4:30 P.M. Under such conditions I obviously had to abandon my goal and strike out for Phoenix, Arizona.

There were no cumuli over the flat green valley along which the Colorado River flows but 10 miles beyond to the east there were more. I had purposely arrived at Blythe high and could easily negotiate a glide such as this. The lift was not strong but averaged $1\frac{1}{2}$ meter/sec. up to 13,500 feet. For the first time in several days I was uncomfortably cold even though the ventilator was closed.

There were only a few small cumuli in the sky and they did not follow along the highway but instead they

strung themselves out over an arid and extremely desolate path south of Blythe and north of Yuma. They did point almost directly to Phoenix (145 miles beyond) and since I could maintain over 10,000 feet of altitude at all times, I elected to follow on. If the thermals failed I could always negotiate the 20-40 miles to either the highway to the north of the nearly parallel one to the south.

By 6:40 I was still near 13,000 feet and only about 65 miles west of Phoenix. I knew it would be dark by 8:00 P.M. and it would take me more than an hour to make a maximum glide ratio descent from this altitude. I flew through another thermal at 6:50 P.M. but decided to keep going so as to be on the ground by the time darkness would set in.

I kept the airspeed on 50 MPH and arrived over Phoenix at about 7:35 P.M. with 3,000 feet. The sun had set some time ago and the bright neon lights of the city sparkled below. When I flew by the municipal airport I decided it was a little dark to land there with the moderately heavy commercial air traffic. Eight miles farther I came to Tempe Airport and there I should have landed. However, better judgment was displaced by foolishness so I went on with my 2,000 feet of altitude.

The next airport was Falcoln Field 14 miles to the east and I calculated that my best glide ratio should see me there. Visibility was now rather poor and there was no chance of seeing Falcoln Field unless it had lights, so I took up a compass course. When I got down to 1,500 feet I realized that darkness was fast overtaking me and

(Continued on Page 30)

YOU WERE THE ONES WHO MADE THE 21st NATIONAL THE SUCCESS IT WAS

by
E. J. REEVES

The pilots do not a soaring contest make. The greater portion of the material contained in this issue of SOARING tells of the flights, scoring, ships, pilots and crews. All of the prizes and praises seem to go in that same direction—and properly so. But—behind these scenes was a small army of men and women all of whom labored mightily during the entire contest period, some seven weeks prior thereto, and some will continue for days thereafter. We think therefore we, as Editors of this journal, would be remiss in our duties as reporters—that we will not have told the 21st story—unless we mentioned something of these hard working and thoroughly devoted folk.

Number one man and prime mover for the 21st National—the one man without whom a contest would probably not have been organized in California, was as everyone must know—Mr. L. A. 'Pete' Bonataux. Mr. Hal Smith, a grand gentleman and Elsinore businessman, sparked the local community in its effort successfully to bid and finance the event. Mr. and Mrs. Tom Hudson, publishers of the Valley Sun, along with their young son and daughter made every visitor feel glad they came. Les Hiebert, the Contest Business Manager, is one of California's leading young educators. His management of this whole complex affair was superb. The State of California's Aeronautics Commission and our Department of Commerce's Civil Aeronautics Authority had their officials on hand, and their cooperation was magnificent. The California Wing of Civil Air Patrol sent members of their squadrons—including their splendid young Cadet Corps. Mr. Jim Plank who superintended the launching and timing, aided by Mr. Elwood Glassford who after launch-

ing the line, took charge of communications—did a job unequalled by any two men at any contest. Gus Briegleb of Adalanto fame and one of the world's greatest soaring enthusiasts, performed like the master he is in operating the towing. Bill Royce filled a double role, officiating, and at the

This scoreboard told the whole story as computed by the Licher family and their water-cooled slide-rule.

Staff Photo

same time acting as crewman for one of the pilots, Victor Saudek, well known to American soaring, could and did fill any slot if a man was missing—and in addition handled all barographs plus assisting the official scorers—what a man. Mr. John Aldrich of the U. S. Weather Bureau now joins the ranks of Barney Wiggin and Ted Lang, as one of America's greatest soaring meteorologists.

America's grand family of Soaring, the Klemperers, contributed as usual, so very, very much to the great 21st National. The suave and charming Mia acted as Contest Hostess. 'Hollywood starlet like' Flanore directed crew calls and that brilliant and lovable man the Doctor, directed the technical sessions. The Carl Ziler family—he was a stellar performer in the flying, Mrs. Z. created the headquarters and banquet decoration, and

beautiful little blonde daughter, perhaps ten years of age, was the only person present who knew all the words to that famous song 'California Here I Come.' Jim Spurgeon, Mrs. S., son and daughter were a delightful foursome—Jim handled the PA system at the field and MC'd the awards banquet ceremonies. Jack Wolfe, youthful president of SCSA helped organize many events including the Helms Hall function when six of America's soaring greats were nominated to 'Soaring's Hall of Fame.' Lloyd Licher and his charming Mrs. organized the model competitions, also computed and posted the daily scores—given a slide-rule the Lichers are a calculating machine of no mean ability.

The March AFB commander sent members of his staff for each day's flight briefing. No soaring event would be the same without SSA's great immediate past President Jon Carsey and the ever charming Mary. Jon thinks of all those important little things that need doing and not finding

anyone handy to do them—carries out the assignment himself. Ted Nelson, SSA West Coast V.P., and family, added much to the enjoyment—to say nothing of Ted's posting of some of the largest cash prizes. Robert Symons and family—he of the Bishop Wave Workers—flew in for several meetings. Herman Stiglmier and family—he was the organizer of the airshow and glider demonstration exhibit. So very many cute youngsters—Glenn, young son of Vic and Anna Saudek is exactly what a typical American boy of eight should look like—he likes to be called an old 'desert rat.' The kids of Larry and Grace Gherlein and their dog 'Ming Toy'—Paul Bikle's young son showed great skill in his management of a 'Yo Yo' top. All of these, young, old and older—and many more—made the 21st a great event.

(Continued from Page 22)

even now it was almost too dark to land in the cultivated fields below.

At 700 feet I strained to locate the airport which my map showed to be quite close now. No lights anywhere so I now knew the runways must be unlighted and therefore looked for the most likely place. At 400 feet above the ground I saw the welcome outline of several hangars and flew toward them. When over the field I could make out the outline of a black asphalt runway, and was turning the base leg to my pattern when I saw two sets of aircraft lights approach and bob to a landing on the runway. This did not help to ease my peace of mind at all since I was down to 100 feet and committed to land rather soon. I carefully looked for more aircraft lights and was somewhat relieved when no more appeared.

I turned final and opened my airbrakes. The two planes had taxied off the runway and it was so black that I could not see where the far end was. However, I thought it would be prudent to land as near the far end as possible so that if other planes landed after I did they would not land on my unlighted craft. When I estimated I had gone far enough I opened the airbrakes full and soon scraped to a stop on my steel lined skid at 7:57 P.M. The resultant shower of sparks brought quick results in the way of help to push my ship off the runway. Night duster airplanes were using the runway, and none of the loading crews had seen me until they saw the sparks going down the runway. This they thought must be one of their duster planes crashing on a landing, and they quickly drove out fully expecting to find it wrecked there.



**DO YOU WANT TO KNOW—
WHO OWNS SAILPLANES IN
YOUR AREA?**

WHO WANTS TO SELL A SHIP?

Where ships are located along the
route you take on your vacation?

THEN GET THE

"SAILPLANE INVENTORY"

\$1.00

BOX 71 • ELMIRA, N. Y.

THE SCHWEIZER 1-26

by PAUL SCHWEIZER

Since deciding to go ahead with the 1-26 project, we have received deposits up to ship No. 24. We are hopeful that the many others who expressed readiness to place firm orders will be able to do so within the next few months. Our hope is to have 50 firm orders by the time we start production this fall. It will probably take the balance of the year to turn out the kits now on order, so any orders coming in now will probably be for delivery the first part of 1955. Consequently, those who want a 1-26 flying by spring should act now.

The test flying continues and at the present time we have over 60 hours flying on the ship. We have had numerous opportunities to compare the 1-26 with other ships and we are

least one 1-26 can be at the Nationals to compete; as well as to give interested persons an opportunity to try it out.

We now have available, for those interested in building trailers of their own design, a drawing (No. 2405-G), which gives the plans and dimensions of a steel tube type for those who wish to build this type from our drawings. It is our hope that at a later date we can also have a trailer that can be built without welding or special equipment for those limited in this way. These drawings will be available, at no charge, to those who have 1-26's on order.

We received a letter and an interesting poem from a young lady which we thought might interest you.

The prototype Schweizer 1-26 as it appeared at the 21st Nationals.



Staff Photo

confident that we are getting close to our expected performance. To date, 38 different pilots have flown it with generally enthusiastic reactions. Although the ship is very easy to fly, we are limited to permitting only pilots with commercial rating or equivalent to fly it, since it is still experimental. If you qualify we will be glad to have you try it.

We have started construction on another 1-26 prototype to incorporate various improvements and simplifications; as well as to be used for the CAA approved type tests. Some of the changes include flush riveting, which the majority requested—a new wing fuselage intersection for easy construction—revised canopy and seat arrangement, and various other detail changes. We are also constructing an extra fuselage and wing for static tests which will be carried out this summer. It is our hope that at

To fly a sailplane I am sure,
Is next to having wings,
But, concerning the 1-26
I'd like to know several things.
And all these things boil down to one;
How much does this kit cost?
For if it's more than I'm able to pay
I'm utterly, hopelessly, lost.

MISS CAROL REEBEL

The final cost is, of course, a most important factor, but until we have the production design set and complete pricing done, we are not in a position to give any more specific information other than that we are still aiming to stay in the \$1,250 to \$1,500 range. We are taking longer to set a price than originally estimated since we are trying to give the most for the lowest price and this takes time.

We will give you another report in a month or two, but in the meantime if there is any additional information that you wish, let us know.

PHILADELPHIA "OPEN HOUSE"

By ART B. MILLAY

The annual "OPEN HOUSE" at Philadelphia Gliderport was a very enjoyable occasion. All days but one provided soaring weather, and four Pennsylvania State Records were broken during the week, although we didn't catch up with Larry Gehrlein's 130 miles. Al Schmid established a single-place Duration of 6 hours 57 minutes, and a single-place Goal and Return of 42 miles. Al also made a cross-country flight of about 100 miles to Wurtsboro in a Golden "C" attempt aimed at Rochester, N.Y.

Our visitors included Nathan Frank, with his "Wolf"; Del Pierce and Mrs. Pierce with 1-19; Bob Derrick and Jack Perrine with L-K; Ted and Mrs. Pfeiffer with L-K; Mr. and Mrs. Howie Burr and family with 1-24; and Gib Scheffer and Gus Scheurer with families and their 2-22. Many other pilots and friends dropped in without their gliders, including Ralph Barnaby who entertained our club members, guests, and training camp students, with an historical talk and movies on Sunday evening.

Other movies showed during the week included "We Saw It Happen" loaned by Chance Vought; "Eyes of Flight" loaned by Rohm & Haas; and three films rented from the S.S.A. film library.

Members and guests alike enjoyed refreshing swims in the new P.G.C. "Lake" between flights.

Nathan Frank and John Jednacz completed their 5 hour duration legs for Silver "C" badge. That was the final leg for Jed, though Nat still needs his distance. He got a good start one day but the Wolf let him down 20 miles away at Pottstown.

(Continued from Page 26)

seagoing gliders could doubtless open up many new soaring sites, one major disadvantage of the type must be recognized—and that is the fact that it is helpless and at the mercy of the wind when adrift. A safe landing on water at the base of a steep cliff would soon turn to disaster as the wind blew the frail craft through the surf and on to the rocks. Calm lakes with a boat available for immediate retrieving might be alright, but otherwise landing spots would have to be chosen with great care. Ordinary landlocked gliders have enough problems of their own without taking to the water to find others!

The Glider Training Camp, which followed immediately after our Open House will be described elsewhere; however, I wish to mention that Private Pilot licenses were earned on Tuesday by Nathan Frank and Doc McKee. On the same day John Jednacz and Jack Reatch qualified for Commercial Pilot licenses.

(Continued from Page 25)

WHEREAS, The 21st National Soaring Competition has been efficiently and successfully conducted and has been one of the most pleasant of the twenty-one contests held, due to the efforts of Mr. Hal Smith, who has unselfishly devoted his time and energy for the past several months to preparations and, for the past two weeks, all of his time to a large proportion of operations of the competitions at considerable personal sacrifice to himself,

THEREFORE BE IT RESOLVED, That members of the Soaring Society of America, and all participants in the 21st U.S. National Soaring Competitions, do hereby record their feelings of sincere appreciation for the services and kindnesses so generously accorded the pilots, crewmen and observers, by Mr. Hal Smith. We wish him as much success with his every endeavor throughout the years to come.

WHEREAS, To plan and conduct a National Soaring Competition involves a great amount of ingenuity and sacrifice of personal time and effort, and,

WHEREAS, the 21st National Soaring Competition has been efficiently and successfully conducted and has been one of the most pleasant of the twenty-one contests held, due to the efforts of Mr. Pete Bonotaux, who has unselfishly devoted his time and energy for the past several months to preparations, and, for the past two weeks, all of his time to a large proportion of operations of the competitions at considerable personal sacrifice to himself,

THEREFORE BE IT RESOLVED, That members of the Soaring Society of America, and all participants in the 21st U.S. National Soaring Competitions, do hereby record their feelings of sincere appreciation for the services and kindnesses so generously accorded the pilots, crewmen and observers, by Mr. Pete Bonotaux. We wish him as much success with his every endeavor throughout the years to come.

NEW WORLD RECORDS

The following World Records have been homologated by the Federation Aeronautique Internationale.

On 15th May, 1954, JERSY WOJNAR of Poland, flew his single place "JASKOLA" SP1325 around a 100 kilometre triangular course at a speed of 94.716 Km/h to establish a new world record. On the same day WANDA SZEMPLINSKI in a "JASKOLKA" SP1311 flew the same course at a speed of 75.564 Km/h for a new feminine single place record.

Other feminine records have also been made in France. MADAME M. CHOISNET-GOHARD on the 17th April, 1954, flew an "AIR-100" from Beynes-Thiveval, 507.052 kilometres to her goal at Bordeaux-Leognan, and on 30th May, 1954, MADAME FRANCINE ABADIE and MADAME JOSIANE CHARPENTIER flew their two place "CASTEL 25" S-138 from La Ferte Alais to Blois and return, a distance of 250.411 Kilometres.

BERTRAND DAUVIN and HENRI COUSTON on the 6th-8th of April, 1954, raised the world duration record for two place sailplanes by flying a "KRANICH III" over the Romanin Les Alpillles for 57 hours, 10 minutes.

(Continued from Page 7)

almost 300 miles of distance. A goodly number went through to the Blythe, Needles, Desert Center, etc., area—netting over 150 miles. But, alas, many a good man and machine became very well acquainted in the vicinity of the fine airport at Banning, situated just to the west of the mouth to the pass, one hapless chap landing at this place on six different days.

It is our considered opinion that these different and difficult obstacles which were placed in the path of those who would compete in the 21st—were all on the credit side of tournament soaring in America, proper challenges indeed for combatants in a tourney of this character, leaving, methinks, nothing whatever to question as to who really is the Champion in America for 1954.

It is doubted by this writer if there exists a site elsewhere in the world providing such perfect conditions for testing the mettle of soaring men and their machines. And lastly it should be said to the credit of our American breed of men and machines—that all of the nine days of flying during this 21st National were accomplished without a single injury to a pilot or a scratch on a ship.

CLASSIFIED ADVERTISING

Rates for classified advertisements are 10¢ per word per issue, payable with the copy, which should be sent to The Editor, Soaring, 3106 Fairmount, Dallas, Texas.

FOR SALE, BG-6, Completely rebuilt in 1953. Licensed until June '55, Trailer, Parachute, 300' Towrope; also all parts needed, including all blueprints to build BG-6 Wings, excepting spars and turn-buckles. \$700.00 takes all. Going in Service. For details write Don Crosby, 6569 Odell St., St. Louis 9, Mo.

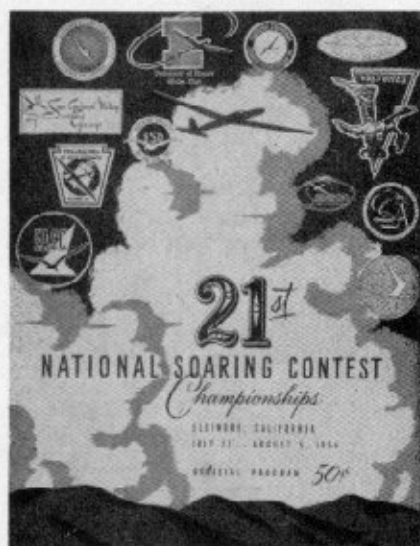
WANTED: Vertical Stabilizer for a TG-4A, LK. Benjamin P. Kennedy, Rt. 5, Moultrie, Georgia.

LK-10A for sale. Recovered 6/54 and in excellent condition. Schweizer blown bunny nose, trailer, radio shock mount and submerged 123.3 antenna, good complete instrument group front. \$1,250 as is. R. H. Ball, Alplaus, N. Y.

FOR SALE: Schweizer TG-2s, 1-19s, 2-22s, parts for TG-1s, Winches, Instruments. Some in excellent condition, others require repair. Steinhauser, Mundelein, Illinois.

WANTED: Right wing and inboard aileron for TG-2. Penn Yan Flying Club, Penn Yan, N. Y.

EXPERT GLIDER BUILDER recently arrived from Germany offers his services at moderate terms to Gliding Clubs and Soaring Societies. After 30 years' experience plans to open a work shop and build all types of American, German and Swiss sailplanes. Will also produce all kinds of airplane and model plane material. I. CHODAN, 438 East 6th Street, New York 3, New York.



This beautiful official programme of the 21st National Contest is available from Elsinore Gliderport, Elsinore, California.

Price — 50¢

HAVE YOU SEEN THE BEAUTIFUL SOARING STAMPS?



Get them to add that intriguing touch to your correspondence

or

to any item that will be seen by your friends and acquaintances.

The world's greatest sailplanes on beautifully engraved and colored stamps.

42 for \$1.00

SOARING SOCIETY OF AMERICA

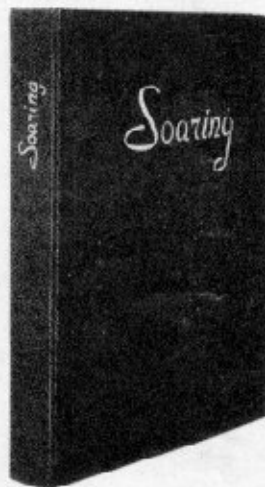
BOX 71 • ELMIRA, N. Y.

TO PRESERVE YOUR COPIES

OF

Soaring

and make them look even better on your book shelves



Lettered in Gold

This two-year BINDER is really a gem.

\$3.00 Postpaid

SOARING SOCIETY of AMERICA

BOX 71 • ELMIRA, N. Y.

Airtex Products

announces

a complete line of textile items for Sailplanes!

FABRIC SHOT?

Recover Your Sailplane With

AIRTEX RE-COVER ENVELOPES

Made of the finest Grade "A" aircraft fabric. Pre-cut and pre-sewed—no waste—perfect fit! Complete instructions for recovering and finishing included. Anyone can now do an expert recovering job by using the famous Airtex Re-cover Envelopes which are now made available for all popular makes of sailplanes. Our years of experience as leaders in the manufacture of re-cover envelopes for powered aircraft, is your assurance of the finest quality workmanship and materials.

Economical, too! Here's an example:

L-K RE-COVER ENVELOPE SET (for all surfaces), \$114.00.

Other makes in proportion. Write for prices.

STEARMAN RE-COVER ENVELOPE SET (for all surfaces), \$184.50.

Protect Your Canopy!

HEAT REFLECTIVE CANOPY COVERS

Models for all ships. Made of aluminized vinyl coated fabric, developed by the Air Force for the protection of jet plane canopies. Napped under-surface prevents scratches. Snug, form-fitting. Retards aging of plexiglas and reduces cockpit temperature.

Schweizer 1-19, 1-23, 1-26, 2-22, \$8.25.

L-K and TG, \$14.00.

Stearman COCKPIT COVER, \$8.75.

TRAILER COVERS

Heavy duty covers for standard trailers. We can also duplicate your special covers. Prices on request.

SAFETY BELTS

(New Manufacture)

3" Air Force type (cotton), \$ 6.90.

3" Air Force type (nylon), \$12.75.

SHOULDER HARNESS

(For above belts)

Cotton, \$5.40. Nylon, \$6.50.

BUCKET SEAT CUSHIONS

for real comfort on long flights
Latex-foam rubber filled. Cool, heavy-duty, canvas covered.

SEAT CUSHION, 4" thick, \$7.50.

SEAT AND BACKREST combination, \$11.75.

C.O.D. orders accepted. We pay postage on pre-paid orders.

Airtex Products

20 UNION STREET
MORRISVILLE, PENNSYLVANIA