

# FUN WITH THE HUMMINGBIRD

By TED NELSON

I have had a great deal of pleasure out of sitting down with friends and relating experiences and pleasant events I have had since developing the auxiliary powered "Hummingbird" sailplane. It occurred to me that some of the readers of "Soaring" may also enjoy them.

The first test hops of any ship are always exciting and thrilling and this one was no exception and will be long remembered by the entire crew at the plant. We arranged to go to a local airport in the afternoon and had all the employees knock off work to come out and see the test. Practically all had their cameras and everyone still talks of the various pictures taken. The tests that day consisted of a number of ground runs, short hops and a low run around the airport pattern and a landing. The tests were all successful and most gratifying and that certainly makes it more significant in my memory.

We then undertook the slow and tedious job of running our airflight tests to determine the stability characteristics and gliding performance. We flew over 50 hours of various flights to check the sinking speed at all airspeeds and to make sure the ship would meet all the C.A.A. requirements for stability and control response. These flights were very interesting to me because I would do the precision flying and Harry Perl (designer and engineer of the project) would direct me as to what was necessary and he would then record all the data during the flight. We would take off over San Francisco Bay and climb to approximately 10,000 f.a.s. before retracting the engine. The rate of climb would be recorded all the way up and other data would be accumulated during the glide back down. When within 1,000 feet of the ground, quite often we would again fire up the engine and recomb to our previous altitude for additional tests. We are most fortunate here in that the air over the Bay is very stable and

the temps are such that "standard air" prevails very often, thus making it possible to obtain very accurate flight data. The self-contained power plant made the flight work much simpler and impressed me with another one of the many advantages of the powered sailplane.

I received quite a thrill out of the first soaring flights which were made at the Shafter Meet last year in June. We attended only 2 days and soared approximately 4 hours the first day. The second day we took off at noon and planned to fly to Oakland and expected to use power and thermal. We arrived at Fresno (100 miles) after using power about half way, whereupon we abandoned the hope of flying to Oakland because of heavy head winds. Our car and trailer arrived shortly after landing and we proceeded home by ground.

Several weeks later, we again returned to Bakersfield for some more thermal flying. We left Oakland early in the morning and arrived at a small airport approximately 30 miles from Shafter Field where we assembled the Hummingbird. Harry and I took off and after using the engine less than 3 minutes, we retracted it and soared to Shafter and remained in the air for approximately 3 hours and landed at the field for supper. The following day we flew in the forenoon and then loaded the ship onto the trailer and drove over to Bishop for several days of enjoyable flying with Bob Symons. Bob and I took off before noon and climbed to approximately 10,000 f.a.s. and proceeded over the White Mts. where we encountered lift caused by the wind going over the mountains. The engine was then retracted and we proceed to ridge soar to over 16,000 f.a.s. for over 1½ hours and went up the valley for over 30 miles. This flight was most interesting and pleasant because it was the highest I have piloted a glider and it was an opportunity to creek myself under conditions where oxygen was



Ted Nelson and Harry Perl in the Hummingbird over Warm Springs, Calif. The photo on front cover, taken a few seconds after this one, shows the engine retracted.