

MOTORGLIDING

APRIL 1973



YEAR AROUND UTILIZATION & INCREASED ECONOMY

IF YOU WANT MORE ENJOYMENT FOR LESS COST

FLY A **POWERED** SAILPLANE



SFS 31

RF 5 B

Type	Span	L/D	Cost	Delivery	Seats	HP	Engine	Rt. Sink
RF-4D	37 ft	20	\$11,360	6 month	Single	36	VW	4.0 ft/sec
SFS-31	49 ft	29	12,800	6 month	Single	36	VW	2.8 ft/sec
RF-5	46 ft	22	17,040	6 month	Dual	68	VW	4.6 ft/sec
RF-5B	57 ft	26	17,700	6 month	Dual	68	VW/Frank	2.8 ft/sec

Standard equipment includes: Airspeed indicator(s), Altimeter(s), Variometer(s), Magnetic compass, Gear warning light and horn, Safety harness(s), Seat cushion(s), Tail antenna, Cabin vent(s), Recording tachometer, Oil pressure gauge, Battery, Oil temp. gauge, Ammeter, Starter (elec.), Exhaust silencer(s).

MOTORGLIDING

Elena Klein, Editor

Vol. 3, No. 4 Published by The Soaring Society of America, Inc. April 1973

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Front cover: Jack Lambie's RF-4D, by George Uveges

Rear cover: Nelson *Hummingbird*

Material for *MOTORGLIDING* should be mailed to Elena Klein, 326 Elwood Street, Redwood City, Calif. 94062. Subscription to *MOTORGLIDING* is \$5.00 (\$6.00 outside of U.S.) for 12 issues, beginning with the current issue. Subscriptions and advertising material should be submitted to the Soaring Society of America, P.O. Box 66071, Los Angeles, California 90066. Make all checks payable to The Soaring Society of America, Inc.

Back issues are available at \$0.50 each. All of 1971 are available except for July, September, and December; only April and May of 1972 are available. (No issues were published between May, 1972, and January, 1973.) All of 1973 are available.

ADVERTISING RATES, CONDITIONS, AND SIZES

Display ads: \$10 for $\frac{1}{4}$ page; \$15 for $\frac{1}{2}$ page and \$25 for full page. Prices are for full-size, photo-ready copy. Extra charges for make-up, \$3.00 to \$5.00; reductions, \$2.00; and photos, \$2.50. Sizes: $\frac{1}{4}$ -page, 3-3/8 x 4-5/8; $\frac{1}{2}$ -page, 7 x 4-5/8, or 3-3/8 x 9-1/2; full page, 7 x 9-1/2. Classified ads: 50¢ per line (40 characters) or portion thereof.

Circulation of the March 1973 *MOTORGLIDING* was 1062

By the time you receive this issue, four issues of the revived *MOTORGLIDING* will have been mailed to over a thousand subscribers. It would seem that our newsletter is viable and has a future. But some very real problems remain. The biggest problem to the little old birdwatcher is the geographical separation of the editor from the business office (SSA) and from the printer. After the copy leaves Redwood City the editor has no further control, practically speaking, over the actual production of the magazine. This is no one's fault. The SSA Publications Director, B. S. Smith, has done his best to facilitate things and to provide encouragement and good communications. The fact remains that an editor ought to be in close contact with publisher (SSA) and printer if the publication is to fittingly reflect the editor's influence. So I am prepared to relinquish the editor's chair to anyone who is acceptable to the Publications Director.

The other problem is indigenous to the newsletter phenomenon, the problem of contributions of suitable material. There are about sixty motorgliders in the U.S. If each motorglider owner or prospective owner/builder/designer sent us his adventures, or designs, or homebuilding experience, or technical information this problem would solve itself. We have the promise of a regular columnist, a cartoonist, and a German translator, fortunately, and hope to present them in our next issue. If you are modest or can't type or even can't spell just trust the editor to put your material into acceptable shape for the printer. That's the easiest part of editing.

Bill Mouton's SF-27M, by George Uveges



Tasso is the kind of correspondent that encourages birdwatchers. Can you other SLS owners write as copiously about *your* motorgliders? The *Kraehe* sounds good for all the reasons Tasso lists. I'd say the first three are most important to the largest number of SLS aficionados.—Ed.

April 2, 1973

Dear Ed:

First: thank you for the first copy of *your* *MOTORGLIDING*. Second: I mailed you the invitation to fly my motorglider *Kraehe* at Hemet the weekend of 11 March to inform you about the goings-on. George Uveges was there and things went rather smooth on Saturday. On Sunday I got drenched like never before trying to save myself and the *Kraehe* getting back to San Diego; even the birds walked on foot that day....

...I might add something about myself, too; I'm an oldtimer, born 1910 in Germany; helped people glue gliders together since the age of 17 until I finally sat in one myself in 1934 to fly the Silver "C" in two weeks (three weekends, to be correct) and got International No. 33 which makes mine probably the lowest number alive in the USA (Jack O'Meara was No. 12; Dick du Pont, No. 32; Peter Riedel, No. 7, left the USA for South Africa; Karl Baur, No. 25, immigrated with me in 1953 but died a few years ago).

I flew the Wasserkuppe competition 1934, was president of the Akaflieg Stuttgart 1935, got various degrees in aeronautical engineering and ended up as engineering development test pilot at a research institute helping as an instructor at a test-pilot school on the side. That all ended with the end of the war—except that the British occupation troops dug me up to serve as a gliding instructor at a recreational gliding school and to run the technical end of that school for a year.

From then on I taught at an engineering school until the U.S. Air Force got me over in 1953 at first to Cape Canaveral (now Kennedy), later to Holloman in New Mexico. In 1956 I joined Convair in San Diego on the Atlas Program and various programs of space technology.

I acquired the *Kraehe* because I cannot afford anything more expensive. I took up motorgliding again because I am convinced that sooner or later it will take hold in America, too; and then the desert will be populated

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EXPERIENCE WITH A HOMEBUILT POWERED SAILPLANE

By Arnold Skopil

Some excellent articles on powered sailplanes have been written in the past. Almost any possible approach to the problem of self-launching has been tried or investigated. In spite of years of commercial development, more or less well-known shortcomings on available equipment still exist. For one, two retractable wheels and a steerable tailwheel are a must because independence is the basic idea of a powered sailplane. I do not think supports of any kind on the wings are practical. I have enjoyed the practicality of two wheels for too long. With two wheels, you can taxi like a powered plane. They also come in mighty handy while assembling or disassembling the plane and for storage. (I am pulling my plane on a dolly on three swivel wheels. This enables me to angle it into an extended T-hangar without any help.) I have seen a photograph of an AS-K14 being towed to the takeoff site by a Mercedes with two men assisting at the wingtips. This is certainly not my idea of operating a powered sailplane. The real powered sailplane arrives at the takeoff site by its own power. It is also flown to the soaring or contest site, and does not arrive on a trailer.

Now let's have a look at the powerplant. On the *Bergfalke* at first, the engine (Nelson H-59) was installed to retract into the second seat. At that time (1957) I did not know anything about a *Hummingbird* except that it existed. A sheet of aircraft plywood was hard to come by, and glide ratios of 1:29 were considered tops. There were and still are no tow facilities here, and I really wanted to fly. Only discouraging comments were whispered around my project.

Many spectators turned out for the first flight. Perhaps to witness a crash. I was airborne after about 300 ft. and climbing into the sky at 600 ft./min. This was a lot better than anyone expected. Everything was satisfactory for the time. I was getting up there without towing and a 5½ hr. soaring flight was soon booked on a little 500 ft. slope close to the airport (Hoquiam, Washington). Before long people in the area were calling me the guy with the oversized chainsaw on his plane. So far there were no complaints about noise pollution, but I am always glad to shut it off as soon as possible. Usually I run the engine 5 min. This is tolerable, but for longer flights with the engine running, I do

have to protect my ears or arrive deaf at the destination.

Several tries to start the engine in flight with a pull-starter proved to be too distracting and inconvenient. This pointed to the need of an electric starter. Outboard motor parts were used. It took two tries to find the best reduction for starting. A compression relief valve was also needed. The landing gear proved a little tippy with the wheels lowered. They now drop down and slide out. I can sit on a wing about six feet from the fuselage without tipping the plane. So far there have never been any landing gear troubles. Calculations proved that the cg travel would allow retracting the engine behind the second seat, but minor changes inside the fuselage were necessary. The motor mount was later changed again to accommodate a larger diameter prop. However, there seems to be no big gain. The opening of the rear part of the canopy gave way to sliding doors for covering the engine.

During a visit to Germany I talked to Mr. Obermeier, a long-time builder of powered gliders, about my project. He then installed a Hirth engine in his SF-27, similar to my installation, and later sold royalties to Scheibe. The lining up of the prop on this plane with the help of a mirror is awkward. (The Nelson engine will always stop the prop automatically in the wanted position because of its compression.)

While the development of the SF-27 went on, I was flying. Many flights power on/off were made across the Cascades to Wenatchee to make use of the better soaring conditions there. In 1964 a Diamond Goal flight was made to Kellogg, Idaho. A needle installed on the barograph was recording the engine time. I did not claim the flight thinking it would be so much fun to fly it again at a time when the regulations concerning such flights were more certain. The plane was also flown to Sun Valley, Idaho. (Power on/off, 550 mi.) A contest was to start there in a few days. I had no ground transportation so Louis Stur was kind enough to loan me his jeep. Al Wilson arrived with the BKB flying-wing sailplane. While I was soaring, he was making tows. He later gave up soaring with it. This proved to me that the successful building of a powered Horten flying wing, which I had previously planned, would have been quite risky. I was just about to learn some more no-nos.

I did not enter the contest but was flying the tasks for my own satisfaction. On the free distance day someone else was using



Skopil's powered *Bergfalke*, by Linn Emrich

the jeep and I was stuck with no transportation at the Sun Valley village, some 12 miles away from the contest site. Walking down the highway, I finally got a ride. At the airport everybody was on his way. It was after noon when I started mixing gas, smoking the barograph and trying to find a witness to sign me off. A Gold Distance was planned. Everything went rush rush.

Contest director Ed Butts told me to head Northeast. An unfamiliar map was put into my lap and with a roaring engine I went down the grass strip, staying close to the airport while climbing, so the engine cut-off time could be observed. Thermaling went easy at first. I knew the area a little from the practice days. Somehow some contest spirit must have gotten into my bloodstream; an inner voice was telling me 'speed, speed, make up for the lost time,' and I felt I was not doing so bad for a cross-country novice. Speeding toward Mt. Borah (12,662 ft.) at a glide angle right into the rocks below the summit, I made a steep turn and was there lift! I left the area at 14,600 feet in a strong tailwind. The view was terrific but I had to make up time! While trying to get

the map folded into some readable shape I suddenly hit the canopy with my head and it was no little jar. The altimeter was unwinding and I had sweat so much for that precious altitude. The map showed several high mountain ranges with valleys between. Trying to find some lift above the next pile of rocks, I knew something had changed! Gliding across the valley on course, I suddenly found myself in 200 ft./min. of smooth lift. Everything was quiet. Too inexperienced to make use of the situation I lost the lift. After all, what are 200 ft./min. good for. Cannot make any time with that, I thought, and set course for the next good-looking cumulus cloud. It was a mean one. I was not even very close yet and did it shake the plane like I had never experienced it before. Everything seemed to have gone wild! I forgot about making up time for a while. I wanted to get out of this, no matter what the cost.

Out of it, on course again, and breathing a little easier, I knew I had blown a chance to climb to high altitude and make Diamond Distance. I had no parachute. Shook up a little and disappointed I felt like look-

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THE ABANDONED RANCH

By Jack Lambie

The buff and tan desert glowed yellow and gold in the low sun. The little Fournier motorglider hummed along, skimming the bare ground. Up over the low, rounded hills and across the bare flats the VW engine sent its quiet chatter. Then just ahead and to the left I saw a group of buildings alone in the roadless, parched, yellow loneliness. The ground tilted as I moved the stick gently and swung over to circle the grey, weathered structures. A rusted-through water tank, a barn with dusty hay bales showing past the broken sides, a house and a couple other sheds surrounded by a tumbleweed-clogged barbed wire fence completed the scene.

It was late. I had come from the Antique Aircraft Show at Watsonville, California and also had gone to the Otto Lilienthal Hang Glider Meet at Tracy. One old biplane had collapsed its gear on the main runway intersection, adding to the general delay, so I had a 4:30 P.M. takeoff. My incurable penchant for soaring in thermals with hawks and exploring interesting valleys and roads doesn't make for fast time. Now south of Coalinga, heading toward Taft, my shadow was zipping over the west side of the Great Central Valley. I had to really get going if I was going to make Flabob Airport, near Riverside, before dark as my plane has no lights.

But the place was so alone and intriguing. I dropped the gear, swung out in a wide circle and eased lower over the sandy, pebbly surface. Just as I was about to touch I thought, "This is insane risking my beloved airplane on an off-airport landing for no reason at all." I pulled up the gear and made another circle of the ranch. Then without impulse, but for no reason either, I moved the gear down again and made a slow approach and carefully touched the stony ground. The ship bounced gently to a stop with full spoilers and brakes on. I looked at my watch. Six-fifteen P.M. "OK, I'll give myself fifteen minutes to explore. I should be able to make up that time with a couple hundred RPM."

I climbed over an imposing monument to wire fence and tumbleweed and ran to the house. Some workshoes on the porch. A few pots and pans in the kitchen. Beds and bedding. Tables and chairs. Papers scattered and a thick layer of fine dust on the floor gave silent testimony to abandonment. I hurried through the house and out to the barns. Time

was passing. I checked my watch. Ten more minutes to go. The tool shed had some anvils, old tires, and other more unique bits, pieces, and parts of machinery and tools that must have seemed indispensable at one time but now had been left behind as junk. The dust-covered hay was dry and stale. Years old, probably.

I walked back to the house. More slowly now. The kitchen calendar said 1958—fourteen years ago. The months had rainfall measurements marked in tenths and hundredths of inches. The year totalled less than two inches. I sat on the porch. The wind blew gently as a late dust devil whirled in the yard. A meadowlark sang. I sat unmindful of the time now. The gentle breeze and bird song were the only sound. "Why not stay here?" The thought of the starry night and watching the pink sunrise were tantalizing. Just me, the ranch, and my plane sitting under the unblemished sky. I settled back listening to the bird and luxuriated in the warm rustling wind. The bird seemed to be making a special effort, as if to welcome another creature to the empty place. What time and effort must have gone into trying to make the ranch pay in this most desolate of deserts? This area south of Coalinga to Taft is one of the most dessicated in the world. In a rain shadow of the coast ranges it is as dry as the Mojave or Sonora deserts. Its small size of 150 miles by 30 miles, makes it even more forgotten as a place. Why did anyone try to live here? How old was the place? I really didn't care, for it was mine now, for this moment in time.

I sat still longer looking at the furry ants jerking across the ground next to the unpainted and evenly-weathered steps. I wouldn't make it back tonight. The sun was too low and the plane licensed only for daytime flying. I couldn't really stay here because friends at Flabob would wonder why I was not back. I should get to a phone before dark. I strolled around the ranch again, quietly and with respect for the countless hours of toil that must have gone into wresting this place from the emptiness if even for a generation. The plane sat with the canopy open patiently waiting for me. I went to the tail and walked it around facing away from the fence, climbed in and fastened the cover. A brief pull on the starter lever and the little Volkswagen hummed. Full throttle, and the "peoples-car" engine urged the 600-lb., sleek sailplane forward with its full 39 horsepower. Being careful not to hit the wing wheels on any rocks or bunches of brush I bounced across the field.

Although it has phenomenal performance with such a small engine, it does it with clean design not massive horsepower, so the acceleration is slow and steady. The high-aspect-ratio wing won't fly until it's good and ready. Many of the homebuilts and antiques with three times the horsepower leap into the air with practically no run and climb rapidly only to top out at 90 or 100 mph whereas my little ship will keep on with its slow acceleration right up to 118 mph on less than three gallons per hour. On takeoff I just steer gently and wait. After about 400 feet of running across the ground of a slightly rolling, uphill grade it felt ready to fly so I eased it into the air only to settle again for a brief bounce and then lift off. Up with the gear and a gentle turn while the speed builds smoothly to 80 mph. One last circle of the ranch and I headed south again. I looked back at the place. It seemed so unbelievable that I had just been there. It disappeared as I climbed higher to rise above the hills ahead.

Taft slid by 3000 feet below and the 7000-foot ridge ahead slanted steeply so I climbed at 80 mph until it passed below. The high ground was covered with pines and mesquite. Passing South of Mt. Pinos I edged into a valley with an airstrip called O'Connor. My chart said "Private Restricted," but the sun was slipping below the horizon.

I landed uphill toward the pine trees and rolled to a stop. The wind was cold at the 5300-foot airfield and especially so after the warm, snug cockpit. I climbed over the fence to one of the cabins and knocked. No answer. The only friendly sight was a forlorn little Bower's Flybaby crumbling away at the edge of the runway. Fierce dogs behind the fences didn't bother me because I have found if you act as if you own the place they're OK. Nobody seemed to be around so I resigned myself to sleeping under the wing. Then a big, new station wagon drove up with a large grey-haired man calmly peering at me as I climbed back over the fence.

"Hi," I smiled, "I'm going to have to stay here for the night because my plane doesn't have lights and I can't make it in time to get home before dark."

"Well, come on over to my house if you want to make a call."

At the far end of the runway across the dirt road was his big double trailer. I called to report my situation and confirm that I would be back in the morning. The man had a yard of many acres with tens of thousands of dollars worth of road maintenance equipment.

His name was Lou Scott and he was semi-retired, having lived up in these mountains for fifteen years running his construction and road maintenance business.

We had a cup of coffee together and talked of flying. He had flown for many years and had adventures enough to fill a book—funny, tragic and frightening. Our relationship grew from one of guarded helpfulness to friendship and soon his wife was preparing a steak dinner with fresh asparagus while Lou told of the time his plane flipped upside down in some soft sand. He hammered the leading edges into some semblance of roundness, bolted on some new struts, cut off the bent portion of the tail and straightened the propeller.

"I tried a runup and taxi test just to see if the thing would work at all but it picked up speed fast and I was in the air before I knew it, so I kept right on going, leaving my long-suffering wife to gather up the tools and drive back to L.A. alone. She laughed at that time, too, so many years before." Another time he was with a bunch of friends flying an old Cessna "Bamboo Bomber." They came in from the desert with the Santa Ana Wind and down into the L.A. basin, which was overcast. "The only thing to do was to head out to sea and drop down through the clouds. After coming down, watching the altimeter unwind, we finally came out of the clouds way out over the ocean. I turned around and headed back, but it took us an hour of flying against the wind to get back to land again. Me and the other guys were sure glad to get back on the ground after that day."

Another time he told of going on a search mission for one of his very close friends who had disappeared. The fellow had a North American T-6 but didn't know how to fly it as well as he thought. Lou went searching and flew directly to the spot. He just had a hunch. The ship was smashed against the mountain, broken and scattered. It had spun in from low altitude and the pilot and his Forest Service observer were dead.

We talked on and on about the airplanes of bygone days. The times after the WW II when everyone had a BT-13 or something to fly. He offered the bed in their guest room and I accepted with heartfelt thanks. It was icy cold outside.

In the bright clear morning we had breakfast and drove out to the plane. Lou insisted I put some more gas in the ship and donated two gallons from his tractor. A downhill

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PROVINCIAL MOTORGLIDING AND
SOARING ASSOCIATION

The above association is a non-profit organization duly incorporated with the Ontario authorities under letters patent No. 255085 and is operated by Mr. L. Haunsberger and myself. The objectives of this Association are defined along the same lines as most soaring clubs in Canada, with the exception that we intend to use all the possible advantages offered by motorgliders.

In addition to the above Association, Mr. Haunsberger and myself started a second venture which, although operated by the same people, is actually separate, both in purpose and in legal responsibility. This second undertaking is a direct result of the first. On account of our contacts with the factory during the purchasing negotiations of our RF-5B *Sperber*, we have obtained the exclusive Canadian rights of representation and sales of all products of Sportavia-Putzer GMBH & Co. of West Germany. The range of products presently available include the RF-5B *Sperber*, RF-25C *Falke*, and the SFS-31 *Milan*. Applications for dealers' franchises will be considered. We have great confidence in Sportavia's products and definitely hope that this second undertaking will be a profit-making organization.

For a number of years now, we were strongly convinced that the future of soaring must be sought in the direction of self-launching, self-retrieving development. The inconvenience of launching by car, winch or aerotow, the necessity of retrieve crew and trailer, is only too well-known to everybody longingly looking out of his office window at the beautifully developing cloudstreets on Thursday 10:30 A.M. Sure you could leave work, they know you well and don't mind, but can you get a tow pilot and a retrieve crew? Not on your life.

Let us present the considerations which led to the forming of our Association and induced us to risk a considerable sum of money in the firm belief that our assumptions are correct. These considerations at the same time should be regarded as a policy statement of our Association and will function as broad guidelines for our operations, obviously reflecting our attitudes.

We believe that the motorglider is a significantly more versatile flying apparatus than either pure gliders or powered aircraft; therefore, it will appeal to a wider spectrum of aviation enthusiasts. Once its potential

is recognized, its commercial success seems to be assured. We envision the application of motorgliders in the future along the following pattern:

TRAINING:

Motorgliders can be used *ab initio* for both power pilot and glider pilot instruction either in separate courses or in conjunction with one another, thus providing a tool of instruction more suitable to produce pilots with greater understanding of and wider experience in matters of aviation.

Requiring only the instructor and one student in order to constitute a class, motorglider training offers a flexibility for appointment and economy of operation which cannot be matched by conventional methods. The ratio of utilization will improve for this reason, resulting in further economy for clubs or profit for commercial operators.

Systematic training for cross country capability can be offered to beginner glider pilots at a fraction of cost presently possible.

The motorglider can be an invaluable tool and training facility for the serious competition glider pilot. Reducing the problems of launch and retrieve he will have more opportunity for training at a lower cost and under a greater variety of weather conditions. Properly instrumented, he may take a look-out pilot along and practice thermalling by instruments in preparation for cloud flying in contests organized by more fortunate countries than ours. By judicious application of partial power, he can simulate the performance of his competition sailplane in order to practice long final glides to the finishing line. Truly the possibilities for competition training are unlimited.

PLEASURE SOARING:

Luftwanderung (airwandering) as the Germans aptly define the concept, is one of the most delightful aspects offered by motorgliders to the non-competing soaring pilot. You can go to places of your choice with a motorglider, sampling this thermal or that, investigating bits of lift or any cloud that might produce lift.

EXPLORATION AND SITE EVALUATION:

We are not aware if any wave flying was ever done in the Province of Ontario, but we have observed on various occasions very dis-

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EXPERIENCE...(continued from page 4)

ing for some plain good old thermals. There weren't any—only this rough super stuff. I had a hard time gaining some altitude. An overcast was pushing in ahead of me and I was getting lower. There were some more high mountains on course and I did not know exactly where I was. I knew I had made Gold Distance; altitude was in doubt, so I decided to land rather than start the engine and nullify the badge flight. It proved to be a mistake. Gliding out over some farmland on the edge of some town (Bozeman, Montana), I picked a field for my first off-airport landing. Coming in too high, and too fast for high altitude (5,500 ft.—usually I land at sea level) the plane touched down in high grass and kept on rolling. For some reason I glanced inside the cockpit, then out again. There was a fence! It was too late to do anything; 10 more feet and whamm! I tried to get out of the plane and realized that the top barbed wire had pushed between the canopy and fuselage stopping just a little short of my chest. A little more speed and it could have cut my throat. I had hit the best barbed wire fence in Montana, on a state government farm. Angle iron in concrete foundation and the wire nicely tightened with turnbuckles. I needn't pay for the damage; the fence was bent only slightly. The distance between the fence posts was clearly marked on the D tube. One wing broke where the aileron starts. Coming in diagonally I tried, of course, to take out the corner. Don't try it with a sailplane—take a tank! So then I was chased away from the first house where I asked to use the telephone. The lady thought I was a drifter. I sure was.

The Gold Distance was not claimed. I have idealistic feelings about badge flying with a powered sailplane. It just did not turn out the way I would have liked it. No trailer should be used for retrieve.

My work for the coming winter was cut out. I was back in the air the following spring and have spent hundreds of hours of unassisted soaring since.

The experience shows clearly that any flight with a powered sailplane must be a *planned* goal flight. If the goal cannot be reached for some reason, one should start the engine and fly home or to the next airport, and try again some other time. There is no need to take unnecessary risks with such expensive equipment by landing off airports except for records.

Many designers think that only a small engine is needed for a powered sailplane. On the contrary, a powered sailplane should have all the power one can possibly build into it. The rate-of-climb is important at higher altitudes—for contacting a wave, for example. You do not get up there with a little putt-putt in time to make use of some condition to be explored. It might have deteriorated if the climb takes too long. The plane must also have a reasonable cruising speed to make it home the same day, let's say after 200 miles of soaring. You might have to fight considerable headwinds on your way back over some high mountain ranges. Presently-used two-cycle engines do lose quite a bit of power at higher altitudes and higher temperatures.

Summing up: the proper engine and a really good powered sailplane can be built with today's technology, but is not on the market yet. The propeller still is the most efficient propulsion device for the speeds we want to fly. There may be some gain with jet engines for high altitude work, but only a few people will be able to afford such a plane.

Take a *Hummingbird*-type plane, bring its glide ratio up to today's standards, put a two-wheel or tricycle landing gear on it and it will be hard to beat.

Considering today's technical know-how, the future of this sport looks very bright indeed.

NATIONAL SOARING MUSEUM SYMPOSIUM

The National Soaring Museum Symposium scheduled a meeting of FAA and SSA officials to review airworthiness regulations for sailplanes and powered sailplanes on Friday afternoon, May 11, at 1:30. Ernest Schweizer expressed the hope that "some of you will bring your powered sailplane to Harris Hill to demonstrate the state of the art."

CLASSIFIED ADS

SKYSURFER Magazine, 20 page journal. Devoted exclusively to the man-prominent flight sports. Covering foot-launched, ultralight aircraft activity from simple kites to sophisticated man-powered types. It presents historical, technical and general information. Box 375, Marlboro, Mass. 01752. \$6.00/year.

ABANDONED...(continued from page 6)

takeoff was indicated but it would also be downwind judging from the windsock snapping at the middle of the runway. I elected not to make the slightly downwind, crosswind run because the Fournier is a tricky item to keep going straight on its single wheel in such conditions. We towed the little plane to the bottom of the hill, turned it around, and then noticed that the wind was a tailwind at this end too. Plainly there was some kind of wind shift at the middle of the field. Lou went back to get some more gasoline—he thought I should have still more—while I started the motor. A crew from the road department stopped and gathered around to watch the flight attempt. I poured in the two gallons from a red can with the engine idling to warm it up. The temperature gauge started to rise at last so I pulled the canopy closed, tightened the seat- and shoulder-belts and opened the throttle.

The ship gathered speed surprisingly slow. I had the feeling I was going to simply drive it all the way to the end of the runway. Thirty-five mph showed on the airspeed eventually. Then 45 mph, so I eased into the air. I snapped the gear up and flew along the runway waiting to pick up speed. At sixty the steep part of the hill was approaching with its pine trees and the speed just wouldn't get past sixty so I went into a carefully coordinated turn. As the ship swung away from the hills the ground seemed to drop away and the motorglider zoomed higher and higher. A fast pass at 125 mph and I headed off toward home. The mountains were high here so I threaded through the passes. Two red-headed, full grown California Condors were slope soaring in the early morning pre-thermal air. I glided back and forth with them. They were playful. One would half-close its wings, dive and then swoop up on the other again and again. I thought the lift was surprisingly good but after about 15 minutes they landed on the rocks at the mountaintop. The rapid beating of such immense wings when they make the landing stop is fantastic. The awesome birds never fail to inspire me with their dramatic appearance, like and yet so unlike any other bird.

On over the Cucamonga wilderness and then a long glide to Flabob. I thought of the old aviator Lou Scott. He hadn't flown in six years, he had said. His physical had lapsed. He lived by the high mountain airport and was a friend to pilots though. I thought of the

abandoned ranch still sitting out there in the hot, bare dryness of the desert. I had been to those places and added some wonder, and experience to my own life.

What more can one say. A story is supposed to have a crisis. It is supposed to build and build until that moment in which the problem is solved in an exciting or meaningful way related to the unique character of the protagonist. But flying trips in the motorglider are a series of small problems and solutions, rich adventures and experiences that don't stop and start according to a preconceived plot. Instead they evolve slowly or quickly, printed into the conscious and unconscious, to be shuffled and remembered and placed in juxtaposition with the rest of life's experiences in the days and years ahead. An adventure story of the classic style? I don't know, maybe someday it will be, now it is simply one of the enticing experiences of many little pieces that make up our profound existence. I am happy with it and I think my plane is happy with it too.

NEWS NOTES FROM

Sailplane & Gliding, April-May 1973

FALKE MOST POPULAR

Scheibe Segelflugzeugbau has no doubt the largest slice of the motorglider market. Up to the end of last year, 360 *Falkes* of the types A, B and C have been built at their works. Another 90 Bs and Cs have been produced under licence by Sportavia-Putzer and a further 30 by Slingsby Sailplanes, making a total of 480 *Falkes* in all, while orders are continuing to arrive.

The 1973 *Falke* SF-25C series uses the Sportavia Limbach 60-HP SL 1700EA engine, which has a different carburetter from that on the Volkswagen engine, so that carburetter heating will be incorporated as standard. The Scheibe works have delivered 50 machines of this type so far and Sportavia-Putzer 20. A modification kit for carburetter heating can also be provided for the SF-25B.

TANDEM FALKE

The 1973 series is in production, eight have been sold and seven were under construction or nearly finished at the end of last year, making a total of 15 for 1972.

The fitting of a two-position Hoffmann propeller as well as carburetter heating is an optional extra.

Scheibe's premises are undergoing a face-lift and their main workshop has been enlarged to cover an area of 300m².

NEWS RELEASE FROM CAPRONI

At the XXX^o Salon de l'Aeronautique et de l'Espace the Caproni Vizzola Company will show the A-21 *Calif*, two seat high-performance glider.

The A-21 is considered now as the best two seater glider in the world and has successfully competed with the best single-place gliders in many international contests and its L/D ratio comes in close to the production single-place sailplane with the highest performance in the world.

The A-21 *Calif* is sold in the United States by the Caproni Vizzola representative Mr. Hugo Taskovich in Palo Alto, California.

In May, 1972, the A-21 has proved its outstanding performance in the Trans-U.S. race, the Smirnoff Sailplane Derby, from Los Angeles to Baltimore having as a pilot the American champion, A. J. Smith.

In August, 1972, E. Makula from Poland, with H. Taskovich as copilot, established the following new world records for the multi-place glider class (records homologated by the FAI):

8/1/72: 300-km speed triangle, 113.70 km/h

8/4/72: 500-km speed triangle, 101.18 km/h

8/6/72: 100-km speed triangle, 130.72 km/h

8/8/72: Out-and-Return Flight, 718 km

In 1972 the A-21 has always been shown in flight demonstrations together with the powered version A-21J *Calif* at the TRANSPORT exposition in Washington.

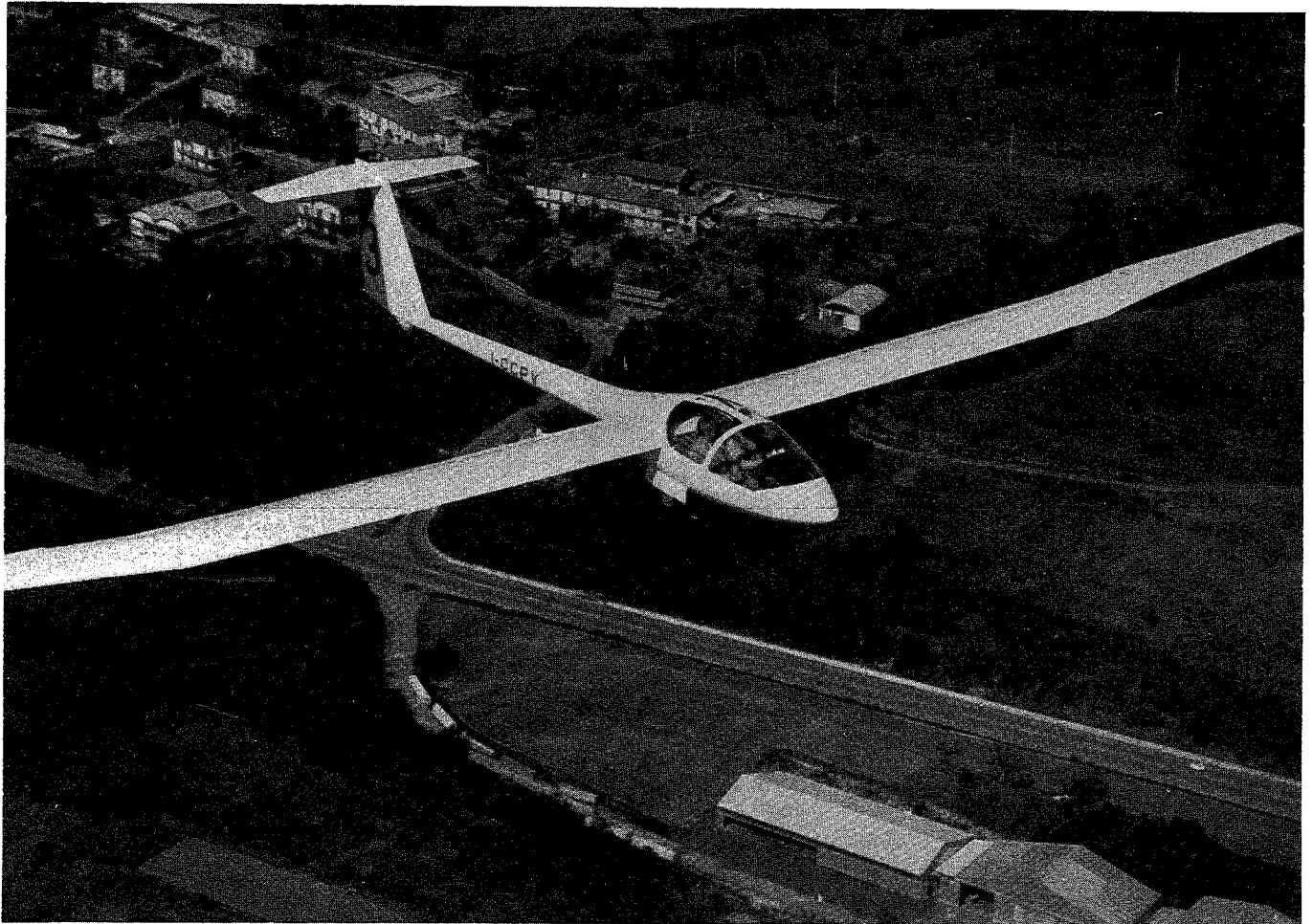
The A-21 *Calif* is now R.A.I. certificated (Registro Aeronautico Italiano) and in course of certification by FAA.

The Caproni A-21 glider has already been bought by the Italian Air Forces, by the Italian Aero Club and has been ordered by Aero Clubs all over the world.

The A-21J *Calif* will soon be manufactured under license in the United States where a very tight program of tests on the engine and on the aircraft is under way.

The Caproni A-21 *Calif* with two Wankel engines and an inducted turbo-fan propeller—program *Sirius II*—in cooperation with R.F.B., Rhein Flugzeugbau, Dusseldorf, Germany, has also made progress and production of this aircraft should start within the year.

Caproni A-21J *Calif*



tinctive lenticulars at three different locations within a hundred miles of the City of Toronto. Certainly they were not of the calibre of the Bishop Wave, but they probably produced good lift up to 8- to 10,000 ft. Alas, neither towplane nor retrieving crew were available at the time.

Along the Canadian Rocky Mountain Range, there must be literally hundreds of excellent wave sites certainly rivalling and perhaps exceeding the ones found in the U.S.A. In order to find, explore and evaluate these sites by conventional sailplanes, decades of time, enormous amounts of work and money would be necessary. We cannot imagine a more suitable and inexpensive way than a motor-glider to do this work in a fraction of time.

We formed the "Provincial Motorgliding and Soaring Association" with the aim of gaining experience in operating this type of craft with an open mind in assessing its potential and possible limitations. Our base of operations is a private strip less than 50 miles east of downtown Toronto near Lake Ontario. You are invited to visit us, have a good look at the machine, ask your questions and, if you feel inclined (and weather permitting) take an introductory flight. Whether you are for or against motorgliders, we welcome you to enjoy a unique experience.

For further information please contact: E. Balint, R.R. No. 2 Blackstock, Ontario; or L. A. Haunsberger, R.R. No. 2 Bowmanville, Ontario.

MORE THAN 4,000 HOURS TRAINING

Motor Glider Committee Report

The Motor Glider Committee organized the Symposium at Lasham in September to enable motor glider operators to exchange experiences gained over the last two years.

Ann Welch, the Chairman, reported that it was evident from the discussions that motor gliding has made a great contribution to the effectiveness of glider pilot training. Also the *Falke* has proved itself as a safe and serviceable aircraft in club operations.

More than 4,000 hours' training has been completed in Britain with the standard *Falke*.

Sailplane & Gliding, April-May 1973

with motorgliders as with dune buggies today. Right now I am a little discouraged though—I may be 10 years too early and for me it will be too late when it finally arrives....

Cordially,
Tasso Proppe
1786 Eldora St.
Lemon Grove, Ca. 92045
(714) 463-1570

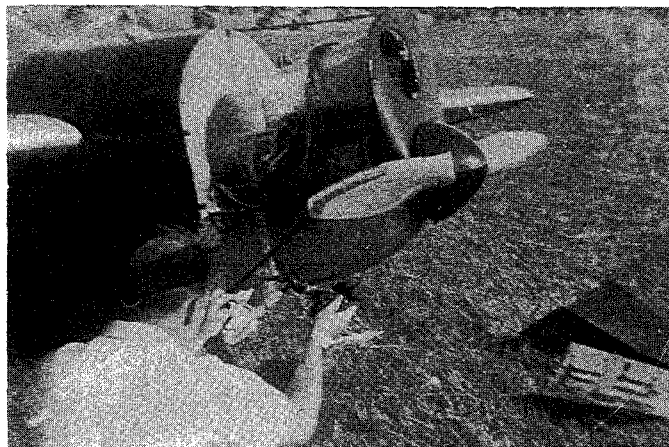
(The following letter may be of interest to those who are shopping for props. It was forwarded from the head office.—Ed.)

March 20, 1973

Dear Ed:

...I learned to fly back in 1931 in a Drigge Skylark, Biplane, engine inverted 4 cyl Rover, 75-HP. One of the finest airplanes that one could ever ask for. The airplane and engine were made in Lansing, Michigan. The design at last is in California and is now known as Phillips.

Have done some flying back in early 1930's in Leonard two-place glider. Private Pilot No. 22501. NAA Certificate No. 8208, May 20, 1932. Have designed two mid-wing airplanes, first one Model PR and the second one, in 1938, Model VX. In 1964 designed propellers for Ken Flaglor's *Cherokee* Sailplane with two 10-HP West Bend engines. Top speed 72 mph. I am very busy on propellers at present time...



Sincerely yours,
Kermit R. Troyer
P.R.A. 10576
Rt. 4, Box 29
White Cloud, Mich. 49349

March 17, 1973

Dear Ed:

During the past three years, my entire spare time has been devoted toward designing and building a new glider. This is an open class glass and metal ship, aimed at the SSA-sponsored design competitions. Many times I've felt the need and desirability of a motorglider. Converting the GA-II Chiricahua as shown in the enclosed three-view would be quite easy. Unfortunately, a devoted effort at completing the GA-III cancels any further effort at modifying the GA-II. Perhaps a *MOTORGLIDING* reader would like to carry this project through.

Using Hovey's techniques brought out in early issues of *MOTORGLIDING* I think 2 McCulloch go-cart engines of 12 to 15 horsepower each, developed into a small nacelle will offer 200 to 300 foot-per-minute rate-of-climb. The pods or nacelles can be quickly installed or removed simply by removing the lower 9/16"-diameter wing-spar hinge pin. A small window exists at each side of the cockpit just under the wing leading edge through which starter ropes and throttle controls could pass. Quite a challenge for someone!

Respectfully yours,
George Applebay
9412 Gutierrez Rd. NE
Albuquerque, N.M. 87111

April 1, 1973

Dear Ed:

How about a follow-up article on the *Swallow* SLS which appeared in the March 1972 issue of *MOTORGLIDING*? Performance data and also if it is going into production.

Sincerely,
Edward Murphy
4606 Roxbury Rd.
Corona Del Mar, Ca 92625

P.S. Good luck in your new position.

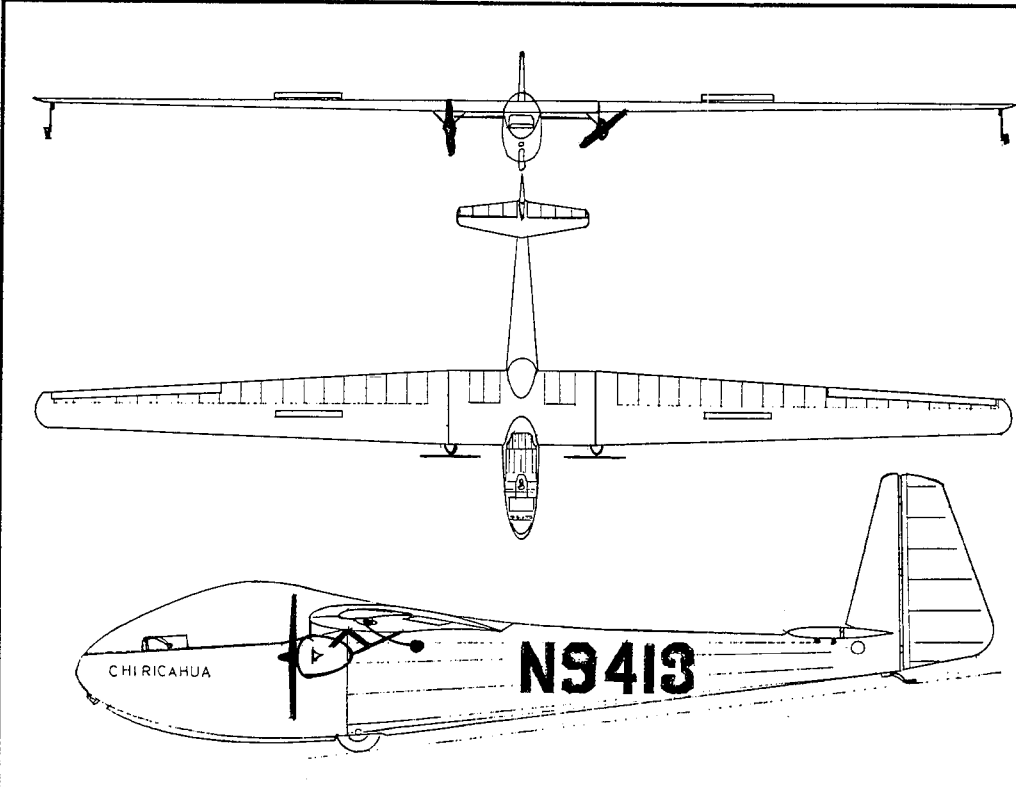
(Good idea. Is there anybody out there who can write a follow-up on the *Swallow*?—Ed)
April 1, 1973

Dear Ed:

I appreciate the news about *MOTORGLIDING*. I told my friends in Germany, whom I had presented with a subscription, that they can expect copies soon. They are having another big Motorglider meet at Burg Feuerstein this summer. I was there last summer and had the pleasure to fly some of theirs.

I am currently working on the design of a two-place ultralight motorglider and also on a cheap, ultralight hang glider.

Happy soaring,
A. T. Lundgren
R.R. 1, Box 291
Kapaa, Hawaii 96746

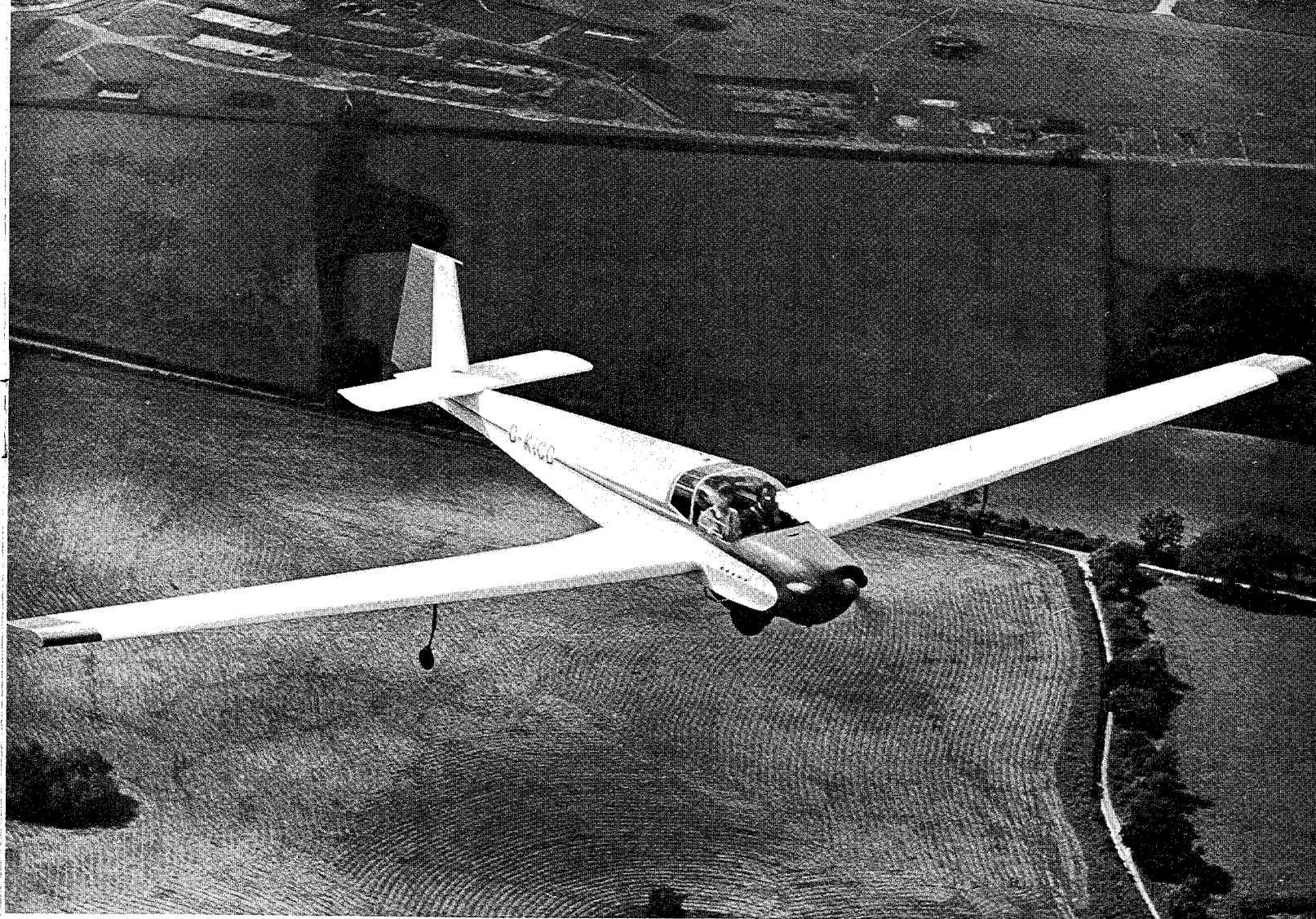


SPECIFICATIONS

SPAN	49' 2" (15M)
LENGTH	22' 1"
WING AREA	148.2 FT ²
VERTICAL FIN	63" HIGH
HORIZONTAL TAIL	96" SPAN
CENTER SECTION	108" SPAN
EMPTY WT.	590 Lbs
GROSS WT.	810 "
USEFUL LOAD	220 "
AIRFOIL - GOTTINGEN	549
WING INCIDENCE	3°
WASH OUT AT TIPS	2°
TOW SPEED MAX	70 MPH
MAX SPEED	120 "
STALL SPEED	34 "

1 PASSENGER-LAND OPERATION ONLY
WOOD STRUCTURE -
1/8" PLYWOOD COVERING 50%
CECONITE TYPE 101 50%
CANOPY HINGES FORWARD
FRICTION TYPE BRAKE
ADJUSTABLE RUDDER PEDALS
ENCLOSED TRAILER

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AMATEUR BUILT SAIL PLANE
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9412 GUTIERREZ RD. N.E.
ALBUQUERQUE N.MEX.



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For information on the SF25B and the SF27M single-place high performance powered sailplane with fully retractable engine and propeller contact:

GRAHAM THOMSON LTD.

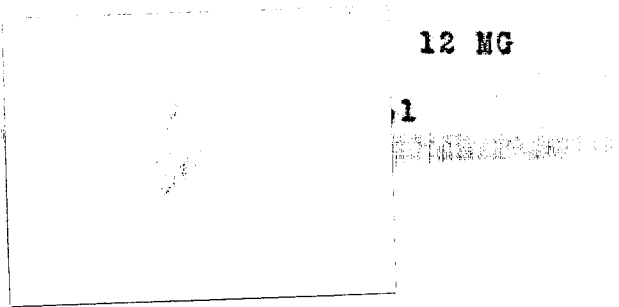
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