

MOTORGLIDING

DECEMBER 1976-JANUARY 1977
50 CENTS



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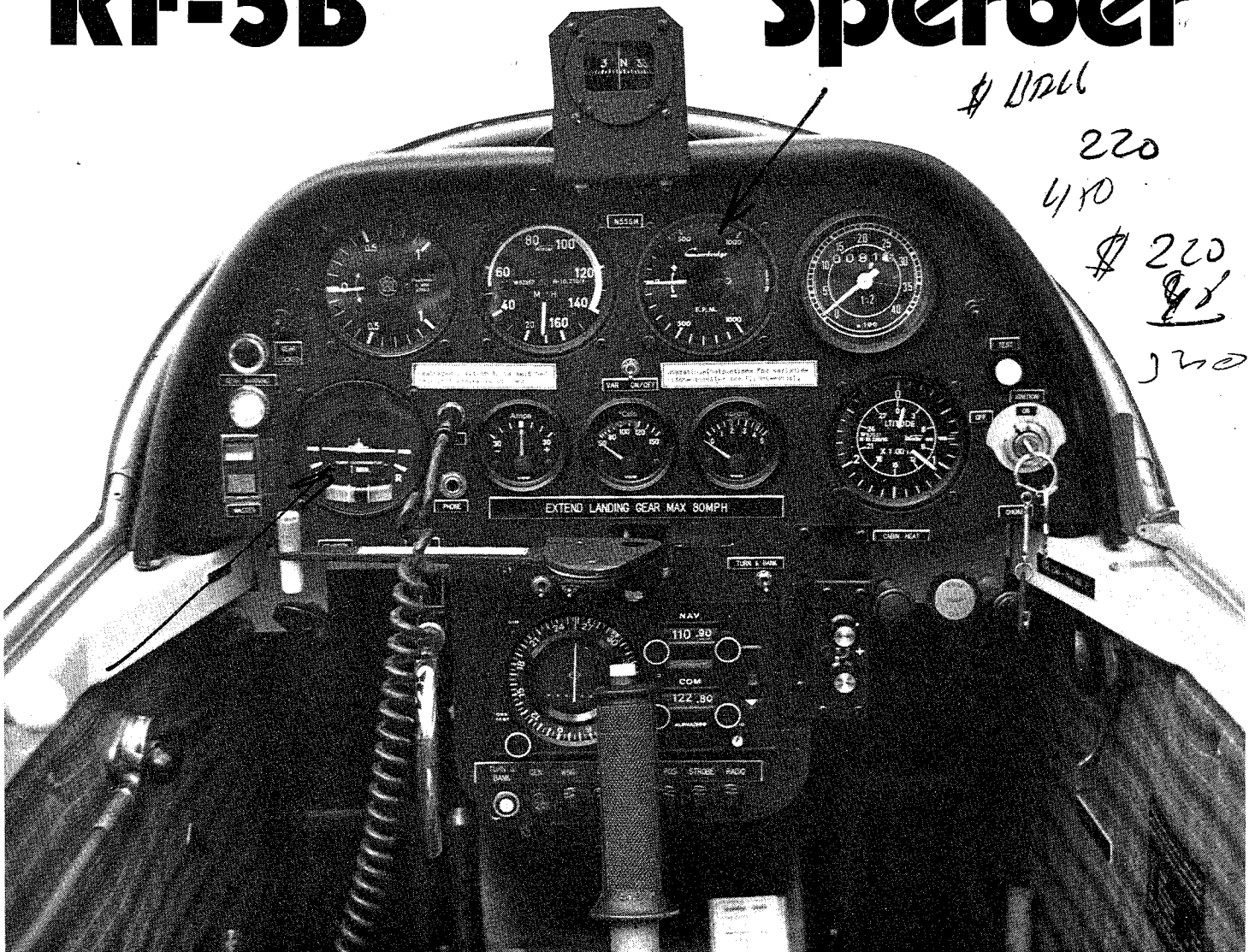
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MOTORGLIDING

Donald P. Monroe, Editor

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Cover: A pair of RF-5B *Sperbers*, by George Uveges

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Circulation of the October-November 1976 issue was 1300. This issue was mailed in June 1977.

FLYING THE *CLOUDSTER*

by Tasso Proppe

People who have read my utterings on motorgliding will know, by now, that I am so personally interested in encouraging the development of ultra-low-cost soaring machines that I am somewhat prejudiced against any aircraft that appears to be more expensive than I could afford. The amount of engineering and engineering development that went into the Ryson ST 100 *Cloudster* probably puts it in that category. Guesses as to what it might cost in production quantities by the awe-struck admirers of this piece of engineering perfection are that it will, at best, cost as much as its European counterpart imports.

With full knowledge of my personal prejudices, the creators of the *Cloudster* invited me to fly it anyway. So, under the supervision of its test pilot, Ray Cote, I went on a 1-1/2 hour excursion from Ramona going east towards the Laguna mountains and the desert country beyond, just cavorting around.



Don Monroe

This is not a test report. I wouldn't be able to give you any figures. You will find them neatly compiled already in specification information — and it would take me much more time and recording gear to go through a flight test program to confirm them.

The ship is called a motorglider, and I wanted to see how much it would satisfy my definition for such a vehicle. That definition, of course, differs from most other people's.

Well, then, let's see . . .
One hundred horses pull a lot of

weight. We are off in no time and in a climb rate that exceeds anything you could dream of for a lightplane. The altimeter winds up fast to 7000 feet. The weather, that day, actually was not conducive to soaring. There was an inversion at 6500 to 7000 feet ASL (the mountain tops are 6000); one very little cloud broke through the soup at a distance, but it too dissipated when we tried to reach it. There could be a shearline between the smoggy haze we came from and the desert air, but that would be right over the mountain crest.

Ray Cote suggests I level off and go for it. The *Cloudster* prop is shifted to cruise, the flaps 2 degrees negative (reflex configuration), and the thing travels 120 mph indicated. (From the *Crow*, I am used to the highway traffic passing me underneath.) The airplane is trimmed for power-off soaring; so, during powered flight, when the rotating prop wash requires a constant right rudder pressure — or, you let the right wing hang down a little with the ball slightly displaced to the right to keep on course.

Ray thinks I am an expert on shearlines because I wrote an article once for *Motorgliding* on a motorglider-peculiar flight between Hemet and Elsinore when the shearline was too poor for anyone else to fly it. I needed seven engine re-lights and 32% engine time to do it. That was my entire shearline experience.

So, we cut the engine anyway; that is, you pull the mixture control lever to "fuel stop" and the nose up to 50 mph until the engine quits milling and you are flying a glider. There is something else to be done yet; propeller on feathering and flaps to "soaring".

It is truly a sailplane, now. The well-balanced controls become light (they were rather stiff at 120 mph cruise) and allow a pleasant feel for the airplane, the air, and the speed. We are heading towards a desert valley between the mountains and I would have sworn we wouldn't make it over the ridge in front of us. The best gliding angle (L/D) I have ever flown was the *Weihe* (probably 28 - 30) and that was a long time ago. My *Crow* was L/D 18. That's what my soaring instincts are geared to. To my amazement, we clear that ridge with plenty of altitude to spare, and as we proceed over the valley,

the air exhibits an ever so slight turbulence which alerts one to the variometer indication, and sure enough, there is lift. Whether that is shear or just a moderate thermal below the inversion, I don't know. Anyway, I cannot pass this by, it is exactly what I wanted to know.

How does she soar?

Well, you feel its weight. In centering the thermal, I cannot throw it around the way I'm used to, and, when I finally maneuver into the desired location the diameter I fly turns out to be rather large. From general engineering mathematics, a high wing loading is the prime factor that determines that. But on a first flight, not familiar with the machine yet, I am always a little hesitant (call it lack of self-confidence) to go to extremes. It turns out, it's me who is part of the problem.

At an indicated airspeed of a little over 60 mph, I measure the time for a full circle to be some 30 seconds. Back home on the slide rule that comes out to be a 900 feet diameter and bank angle corresponding to speed and time is 26 degrees. That is certainly not a "normal" thermaling turn. Working the mathematics backwards, a 45° bank angle at 62 mph would result in a 560 feet diameter and a full circle time of 20 seconds. A 45° bank angle, however, requires 42% more lift which in turn requires more angle of attack (closer to stall) or some 20% more speed with a commensurate degradation of gliding angle. This airplane can take that easily. The degradation is hardly noticeable.

I have measured some thermals, however, the useful lift area of which came out to be only about 400 feet diameter (at some 800 feet ASL). The *Cloudster* couldn't negotiate them, but neither could anyone of the "glass slippers." In the slow-flying *Crow*, this was a "natural," picking up dust devils close to the ground.

Well, we gained 600 feet in this thermal, hit the inversion level with the usual frustration of losing it at the top. Ray suggests trying the ship's stall characteristics — at the same time trying to relocate the dissipated thermal. It's alright with me; but I discover soon that my instincts prevent me from executing a complete stall. Whenever I approach

the condition of losing lateral control in the turn, I automatically release pressure on the stick, thereby mushing along with increased sink but never out of control. So, we try that later in straight and level flight, using a little inertia to pull the nose up higher. Yes — with the stick all the way back, she dips the left wing, and, since I am used to reacting with plenty of rudder to keep her straight, she drops the nose and flips over to the right, and, of course, readily recovers after about a 90° swing to the right.

There is not enough wind to try to ridge soar the Cuyamaca range. That's a pity. I would have liked to see how far away in front of the ridge you get doing your figure eight turns. The visibility for this kind of business is — let's say — normal for a sailplane — far better than typical airplanes. I am spoiled, though. With an engine up front, even if below my line of vision, I always have the irate feeling that this motor is occupying my seat, enjoying the best view and seeing nothing! We have to head back home.

Engine restart is as simple and reliable as I had it in the *Crow* — but done with an electric starter like an automobile. You have to shove the prop pitch control forward (remember it was on feathering) before you press the starter button. You know, I'm a pessimist. This is a character trait that develops over the decades of aeronautical adventures. Would you believe the designers of the ST 100 are too? They have provided two batteries, one for normal systems use, and the other kept separated to keep it available for engine start only to make sure you have enough poop to get the mill going again (see my treatise on *Motor-gliding Safety*, August 19, 1973 *Motor-gliding*). However, I am told that as still further security the engine can, if necessary, be started by windmilling the propeller in a shallow dive with a small loss of altitude.

Getting back to Ramona airport was an interesting experience. We had shut the engine down way out by Cuyamaca Peak and when we arrived at the Ramona pattern we still had a lot of surplus altitude for leisurely maneuvering around and joining in the traffic, all still with feathered

prop. Ray takes over and practically on top of the runway, pulls the flaps, speeds up to 85 mph (he tells me to do it, but I don't have the guts) and puts her down on the numbers with the tail high enough to scare me. No spoilers, it's just the flaps at near 90° that do that. I don't think it has to be done that way. We used to drive the Ju 88 down in that manner, but we used the extreme flap positions not *before*, just *during* flare-out. So, there we are -

A beautiful machine, absolutely soarable with a built-in motorglider independence and reliability for engine airborne restart. An engineering masterpiece by anybody's standards. My honest compliments, mixed with a little envy. A job well done. If anybody hands me enough money, I would consider buying one.

Well . . . Lad, Mr. Ryan, and Jerry: After you have undeniably proven your talent and expertise, specifically in re-

gard to a soaring machine, please come up with something for the High School students to replace their preoccupation with the ecology-harmful dunebuggies and other off-road recreation.

Soaring, an equally independent but primitive open air machine, would attract a lot of youngsters (and some oldsters like me) to a sport that does not aim at world records but would provide an unequalled recreational experience, and pave the way for more future soaring enthusiasts.

Thank you ever so much!



Don Monroe

FOREIGN SCENE

by S.O. Jenko, Dipl. Ing. ETH
AMTECH SERVICES

Fournier RF-9

The well known French light airplane designer, Rene Fournier, added another bird to his RF flock, the RF-9. The April 1977 German *Aerokurier* carried a brief description of it.

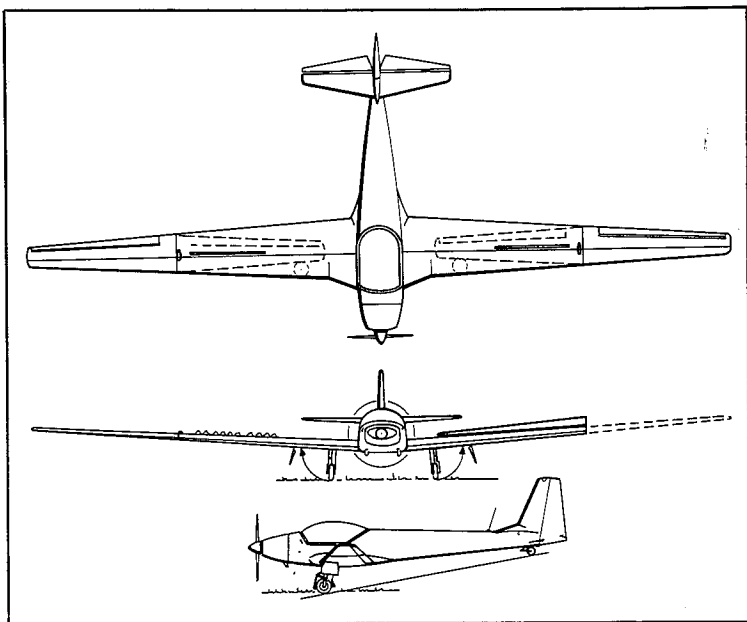
The RF-9 is a two place, side-by-side auxiliary-powered sailplane. The general appearance looks familiar: wing and tail surfaces appear to be similar to those of the RF-5B *Sperber* and the fuselage with retractable wheels resembles the Schleicher AS-K 16.

The power is provided by a Limbach SL 1700 E Engine of 68 hp with a Hoffmann feathering propeller.

The wooden wing features the NACA 64-618 laminar airfoil with flaps and Morelli type dive brakes. The outer wing panels with ailerons fold for hangar storage (similar to the RF-5B).

Some Technical Data:

Wing span	55.7 ft (17 m)
Wing area	194 sq. ft
Aspect ratio	16
Empty weight	1100 lb
Gross weight	1540 lb
Wing loading	7.95 psf
Rate of climb	512 fpm
Min. sink	2.5 fpm
	at 49.7 mph
Glide ratio	
Flap angle 0°	28
5°	30
12°	31



Auxiliary-Powered Sailplane C-10

"Foreign Scene" of Dec. 1975 - Jan. 1976 *Motorgliding* carried a description of the Kuffner WK-1 auxiliary-powered sailplane project. Apparently we were not alone to point out the similarity of its boom-mounted propeller with the power package of the auxiliary-powered sailplane C-10 by H. Wuenschel - designed in 1940, at the Technical School of Chemnitz (Germany).

A somewhat irritated reader of *Aerokurier's* article about the Kuffner project wrote a letter to the editor stating the known facts. Some technical data which were not readily available were also given.

The 3-view sketch of this unique auxiliary-powered sailplane appeared in Jan. 1974 *Motorgliding* (p. 5).

Some Technical Data:

Wing span	41 ft
Wing area	129 sq. ft
Aspect ratio	13.02
Empty weight	231 lb
Gross weight	600 lb
Wing loading	5.1 psf
Rate of climb	237 fpm
Min. sink	2.8 fps
Best glide ratio	22
Engine: Kroeber M4	18 hp

This writer still remembers vividly the article in the German *Flugsport*, about 36 years ago, describing the C-10 auxiliary-powered sailplane and its power drive, showing in "clinical detail" the unique features. Not only were there sleepless nights but a lot of talk was going on for some time afterwards.....

How about the purists, you may ask. First, they weren't invented yet at that time; second, while there was no soaring during the war (although the birds did it anyway!) the idea always was to get airborne under its own power — even with a witch's broomstick, if it would work!

But even now, decades later, it is pleasant to reminisce about the exciting C-10.

Heintz Auxiliary-Powered Sailplane

While we receive now and then a few letters from the readers of *Motorgliding*, one Canadian reader told us that he read an article about a new Canadian auxiliary-powered sailplane designed by Heintz. He is known for his light powered aircraft designs and is living in Canada now. His new APS is supposed to be an all metal two-place.

So, we wrote an inquiry a few months ago. The response arrived promptly, informing us that the project was dropped because of insufficient interest....It would have been a further development of his present powered plane, the Heintz *Mono Z*, featuring a 36-ft wing span....

And, to our surprise we also learned that he is an engineer by profession, a graduate of the Swiss Federal Institute of Technology, one of the two universities this writer received engineering degrees from.

It should be noted that within the past year or two we received several inquiries, including one from Australia, about plans for a two-place, preferably all-metal auxiliary-powered sailplane suitable for homebuilding.

Japanese Auxiliary-Powered Sailplane NP-100A

Finally, the Japanese have joined the crowd of trying to produce another light powered aircraft instead of an auxiliary-powered sailplane. The July 1976 issue of the French *Aviasport* and the June 1976 issue of the Polish *Skrzydłata Polska* carried articles about this new design. However, in view of *Motorgliding's* irregularity, the May issue of *Soaring* already published an article about it. You may read there about this ducted fan design.

THE KERESTESI MG-1

by Charles A. Kerestesi

About four years ago, Elena Klein, then editor of *Motorgliding*, wrote and asked if I would write a story for *Motorgliding* about the motorglider I was building. I always felt that I should not write about it until it was finished. Too many projects are started and not completed and I did not want mine to be one of them.

I know from my own experience that I enjoy reading about other projects and without articles the magazine would not be published. So I decided to try and write about my project, even though it is not yet finished. If things go right I should complete it this year. It is about ninety percent done.

I have been at it for about twelve years; I guess I am not dedicated enough to put more of my time on it. Then too, I have had other problems like two total hip replacements in the past two years.

My interest in gliders began in 1941 and after twenty years or so of driving long distances to fly gliders and always having to have people to help you, I decided that there must be an easier way. At times I saw pictures of motorgliders like Wolf Hirth's ship and the Nelson *Hummingbird* so I decided that was the way to do it. The *Hummingbird* was too expensive for my modest means and no other ship was available so I decided to build my own. I also belong to the E.A.A., having designed and constructed a mid-wing monoplane so I decided to do the same with a motorglider.

After World War II using the G.I. Bill I went to Aeronautical University and got a degree after two years which helps a little in the design part of it. I had some experience in the building part as I was building a *Wolf* sailplane until the war put a stop to it.

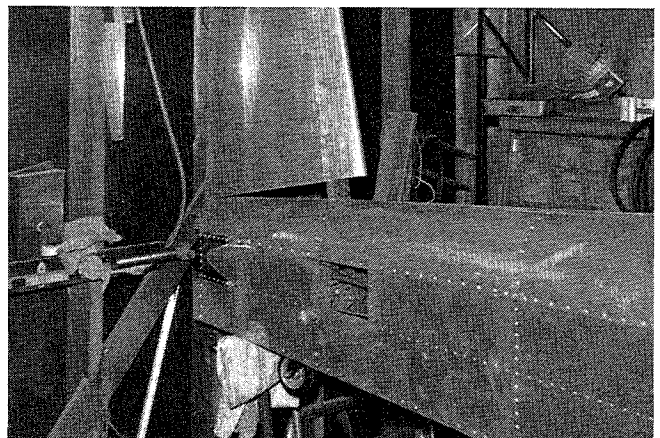
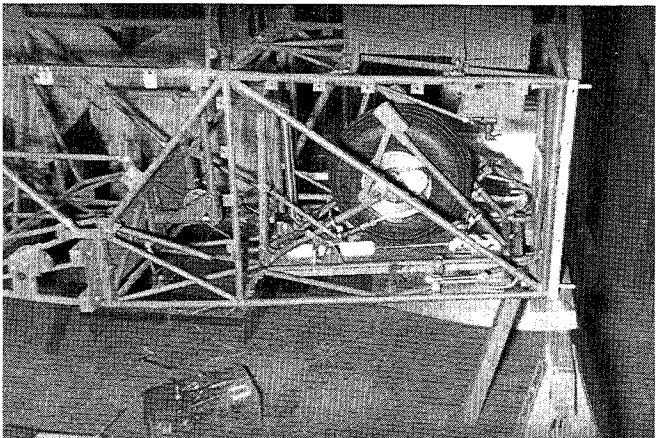
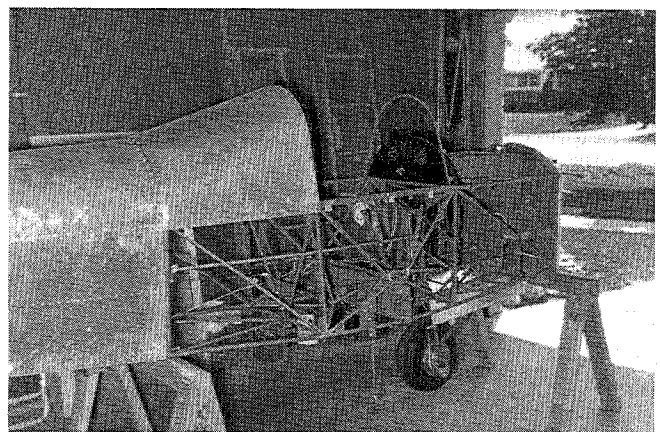
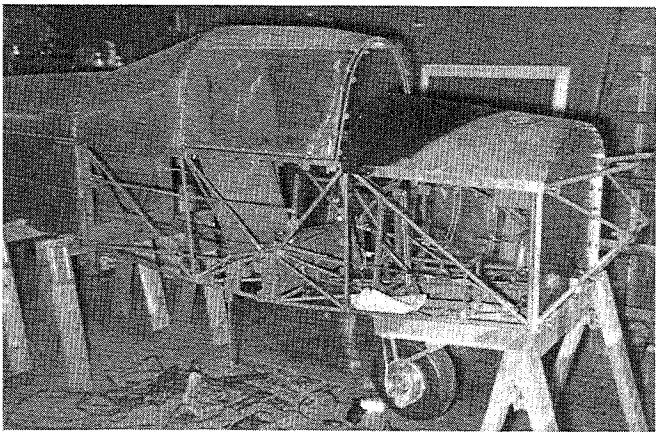
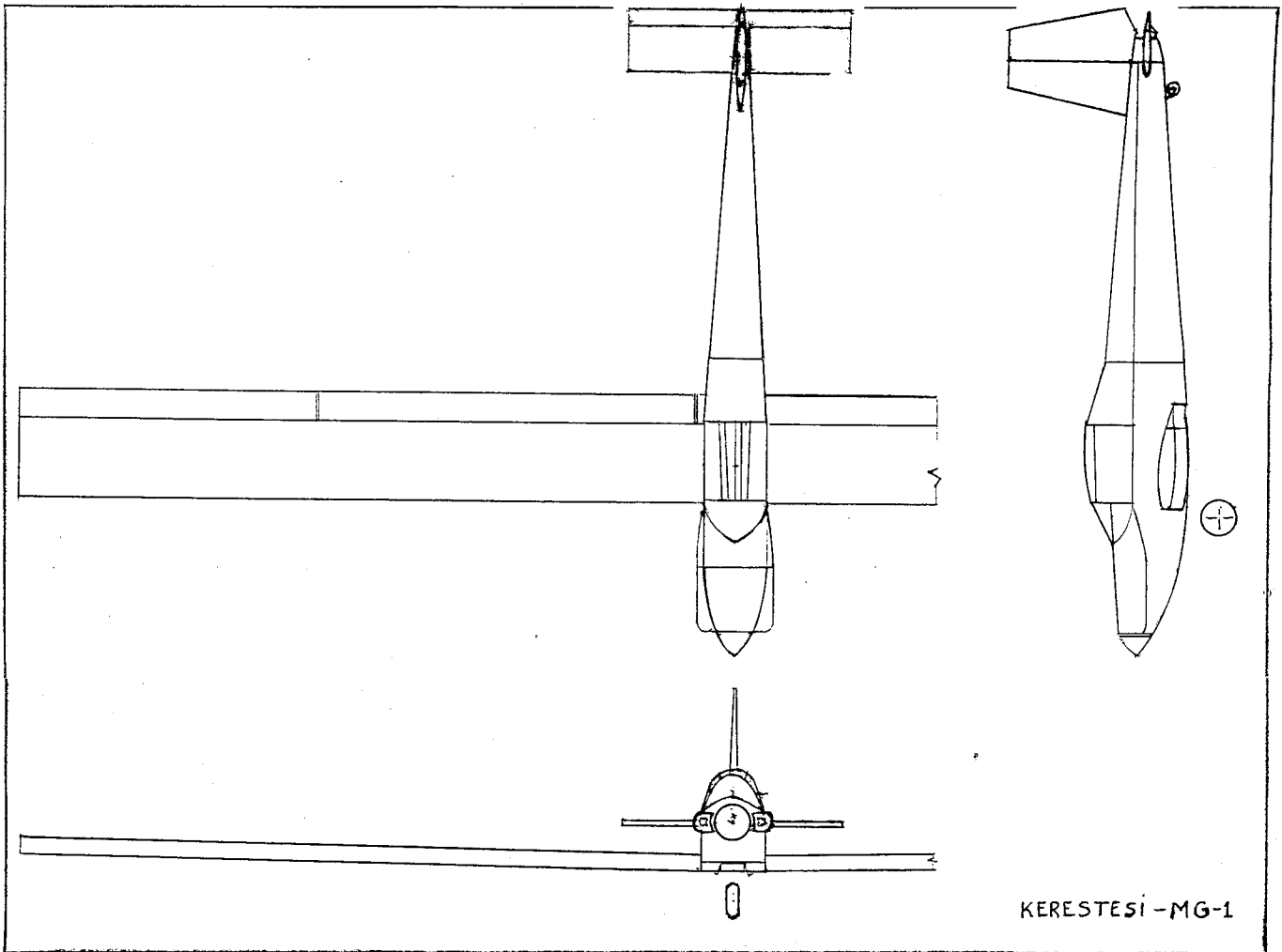
After studying all the various configurations, I decided on one with a retracting engine — a *la* Nelson. After going through the preliminary design and most of the stress analysis, I thought best to see how much a Nelson engine would cost, so I sent for the prices. After receiving the price of one and recovering from the shock, I decided there

has to be a cheaper way. I remembered seeing an article on the original RF-4 in one of my magazines and after looking it up I decided that that would be the next best way to do it. So I had to start all over again. Remember that this was in the middle sixties and very few engines were available. Today there are many to choose from, real cheap.

The first design was to be of wood, steel tubing and fabric. I never really cared for fabric as it is so messy doing it and then too, it may have to be recovered again. So I decided to go to all-metal construction which also helps if it has to be left tied down outside. Then too, my craftsmanship is limited so I had to make it so I could do it without special tooling and machining, hence the ship is not as efficient and good looking as it should be. I stayed away from compound curves since I had no way to form the sheets. This meant a steel tube section to be used in the forward section for the pilot and engine. The wing was also of rectangular planform to eliminate making all those forming blocks needed for tapered wings. A good friend, Art Johnson, helped me by welding up the steel tube section and engine mount and other parts. My wife helped me rivet the aft section of the fuselage. The wing I riveted by myself. The following are the specifications:

Airfoil	NACA 64 ₂ - 415
Aspect Ratio	13.5
Wing Area	150 ft ²
Span	45 ft.
Length	20 ft. - 9½ in.
Wing Chord	40 in.
Gross Wt. (Est)	750 lb.
Empty Wt. (Est)	500 lb.
Engine	VW - 40
Propeller	Hegy (wood)
Load Factor	+ 5.15
Load Factor	- 3.15
V glide (N.E.)	122
V level (power on) (N.E.)	80
V stall	40
Fuel capacity	4 U.S. gal.

To finish up the article are a few more things. The landing gear is retractable, a single 5 x 5 wheel and tire with a hydraulic brake. It retracts up between the pilot's feet and is manually



operated like a Mooney.

The tail surfaces are all-metal; I used a stabilator setup. The rudder is cable operated and the stabilator uses cable and push-pull tubes. All horns are out of the airstream.

The wing is all metal and has a single spar at 35% chord with rear spar carrying the flaps and ailerons. Each half of the wing is in two parts; the in-board section is twelve feet long and carries the flaps operated from the in-board end. The ailerons are on the outer nine and one-half feet and are operated by push-pull tubes; the horns are not exposed. The wings are supported at the outboard end on short outriggers with wheels when on the ground.

The fuselage is all-metal except that the forward six feet is steel tube and the aft part riveted aluminum. The sides and bottoms are flat and the top is circular. The skins on the steel tube section are attached with P.K. screws into nut-plates. The windshield and

canopy are two parts; the canopy is hinged on the right side. I used flat sheets of Plexiglass to stay away from formed sections, maybe later if things work out I will make a formed unit. Right now I just want to finish the ship. The engine cowling will be something I can put together without too much work for the time being; later I will try something better.

From what I have written you can see that I was not trying for a super ship. All I wanted was something at the time I started — a ship I could get into the air without all the fuss and problem of a true sailplane. If it has a L/D of 20 I will be glad. I know that now there are much better designs available like the *Eaglet* and others, but when I started there were not many to choose from. Then too, I wanted to design a ship that I could build without needing too much outside help, and I feel that I have done that.

LETTERS

Editor:

I am enclosing a drawing of what my own project looks like. I hope to have it flying in a year or so, hopefully before the onset of winter (next year). If enough people would indicate the right kind of interest, I would do my best to get prints out as soon as possible after successful flight tests will have shown the soundness of the concept and the design.

I have had to do the design calculations twice; in fact, I am still working on the second set, because, when I started out on this project, the maximum all-up weight allowed here in Canada was 1200 pounds, while now it is near two-thousand pounds. So I am redesigning the wing, tail, etc. for an all-up weight of 1400 pounds. It is a lot of work, though I love doing it, and I have to do just about everything myself.

I am laying out the engine installation and compartment in such a way that a builder could either put a VW engine in it, or, if he wishes, could drop any decent big enough and good enough motorcycle engine in the engine compartment and

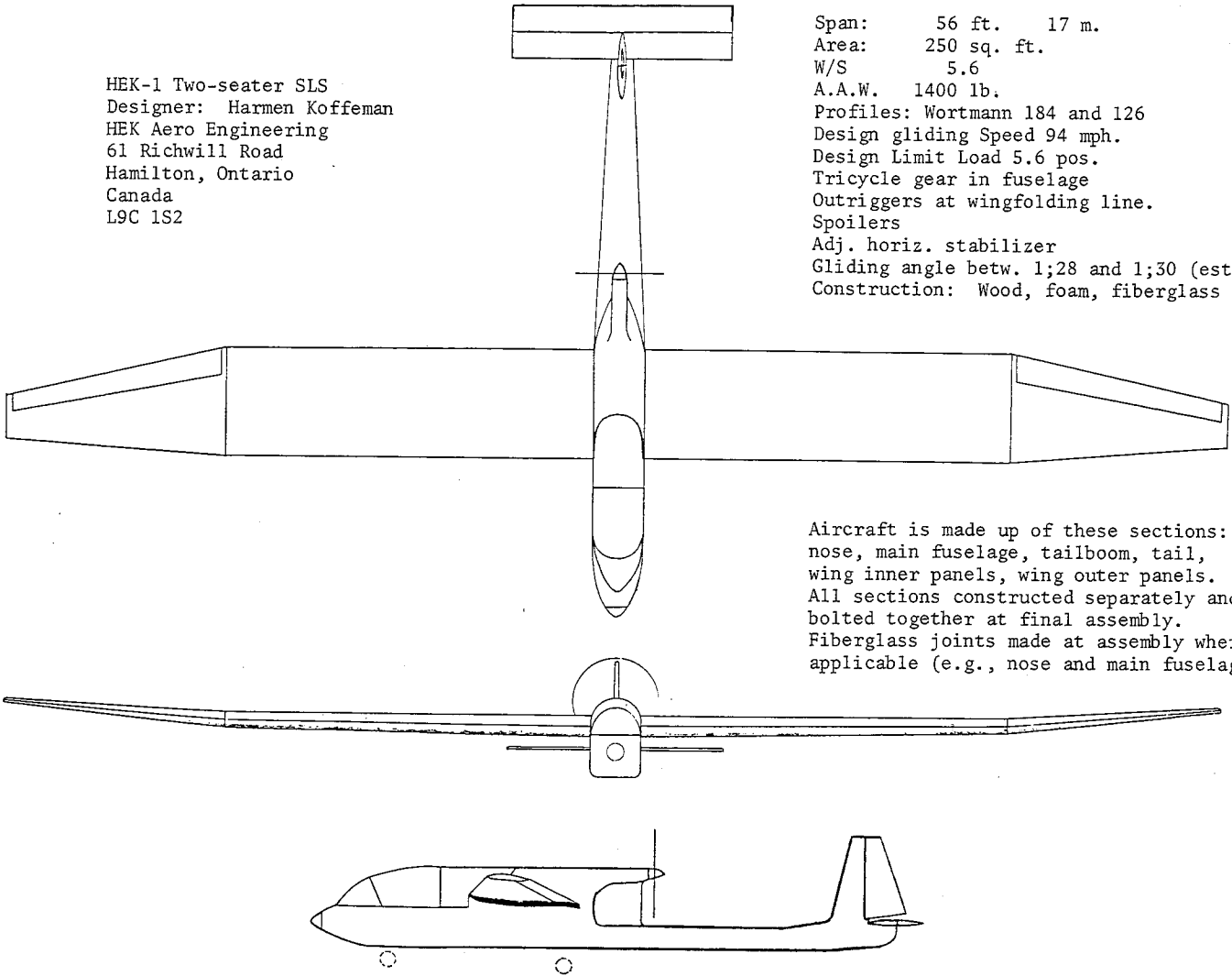
work out his own details.

I myself have long ago decided against using a VW engine, and have only recently come up with the engine I am going to use: an almost new (less than 3400 roadmiles) Honda 550 four-cylinder, four-cycle engine, with a Posi carb and sooner or later a supercharger or turbocharger. I have an older Honda 500 engine (stripped of the innards) which I am using for working out the actual installation in the rear part of the main fuselage. I am reasonably sure that any good Honda, Kawasaki, Norton, Triumph, etc. engine could do the job if everything is done properly. Anyway, that is what I hope to show in my drawings, in principle.

I am very greatly interested in hearing from people outside North America as to what their governments would require or allow in a homebuilt project of this type, especially considering that the main purpose is to come up with a self-launching sailplane that gives a fellow complete independence not only in the air, but also on the ground in taxiing, etc. (not regular powerflying). The outer ten feet of each wing are to be folded flat on the inner panel, like the

HEK-1 Two-seater SLS
 Designer: Harmen Koffeman
 HEK Aero Engineering
 61 Richwill Road
 Hamilton, Ontario
 Canada
 L9C 1S2

Span: 56 ft. 17 m.
 Area: 250 sq. ft.
 W/S 5.6
 A.A.W. 1400 lb.
 Profiles: Wortmann 184 and 126
 Design gliding Speed 94 mph.
 Design Limit Load 5.6 pos.
 Tricycle gear in fuselage
 Outriggers at wingfolding line.
 Spoilers
 Adj. horiz. stabilizer
 Gliding angle betw. 1;28 and 1;30 (est.)
 Construction: Wood, foam, fiberglass



Aircraft is made up of these sections:
 nose, main fuselage, tailboom, tail,
 wing inner panels, wing outer panels.
 All sections constructed separately and
 bolted together at final assembly.
 Fiberglass joints made at assembly where
 applicable (e.g., nose and main fuselage).

Sperber, but with a different type of mechanism, in order to make it as clean as possible aerodynamically. I am also working out a very simple retractable tricycle gear with special rubber suspension springs.

The whole thing is actually too much for one man to do all by himself, but it has me hooked, and I am very determined to bring it to a successful solution, the Lord willing. After all, I am a STUBBORN DUTCHMAN.

Harmen Koffeman
 Hamilton, Ontario
 Canada

Editor:

On Tuesday, February 22, I was ferrying my RF-5B *Sperber* over to Shiflet Airport at Marion so it would be available for the following weekend. It's only about 40 nautical miles from Tri-

City and it's generally pretty good at Shiflet. Although I wasn't dressed for any wave soaring, I thought I would just sniff out the wave for all the "purist" sports sitting around on the ground grouching about the lack of action. The wind was fairly strong, out of about 270 at 40 to 50 knots at 8000 feet. I didn't expect a whole lot of action other than a weak wave. It was early in the morning, about 9:00 o'clock. Upon arrival at Busic Intersection, just over the golf course — behold! — about 900 feet per minute lift! After passing 12,500 feet, I grabbed the oxygen mask, took a sniff or two, and the next thing I knew, 16,000 feet passed by. Contacted Atlanta Center and told them I was moving to 16,000 feet at about 500 feet per minute. The wind actually seemed to be weakening as it required a figure eight to maintain position in the wave. Atlanta Center told me to report flight level 180. A few minutes later, reported 180. They

then told me to report flight level 200 and flight level 220. When I got to flight level 220, my feet were so cold that I was concerned about frostbite (cold air leak under dash). Due to greenhouse effect, the upper body was reasonably warm. Had to use the boom mike under the oxygen mask — very awkward.

Atlanta Center, after I told them I was descending, upbraided me for not calling them on the telephone through Hickory Flight Service.

In the meantime, the "sports" on the ground had been gathered round the stove talking about how poor the soaring conditions were that day. A pilot who arrived in a power plane told them the last he had heard from me I had passed through flight level 200, whereupon the "purists" scattered like a covey of quail and were forthwith launched into the Wild Blue Yonder.

After descending to 14,000 feet with the temperature at minus 25°C, I checked the starter and the battery turned over the engine very well. Didn't start it however. Took about an hour to get down, sniffing out various waves and thermals for the "sports" being launched at the time.

The only other glider on that date, February 22, (a glass-ship "purist") to gain any appreciable altitude went to 19,200 feet. It was a pilot who has been soaring for about 30 years and working on an altitude diamond off and on for that length of time. Missed his diamond by 1500 feet. Too bad he didn't hear my message when I first caught the wave.

As more and more people sniff out the waves around Mitchell, the more interesting it becomes. I plan to install a transponder so an instrument flight plan can be filed without bending Atlanta Center all out of shape.

I'll need a barograph to get my diamond. It should be relatively easy now as the day can be picked when the conditions are just right. From Tri-City it only takes about 30 minutes to arrive over Mitchell. I believe a diamond can be gotten in a *Sperber* here with a little patience.

The new *Sperber* is running fine, going into the fourth year now, and really enjoying it.

George C. Sells
Johnson City, Tennessee

Editor:

Fair warning; this will not be an account of a remarkable flight. It's a journeyman's tale of a mediocre flight.

But it does have one unusual aspect. It's the story of a \$2.39 flying day.

I took off from Corona Municipal Airport in my Scheibe SF-25E *Super-falke* motor-glider with a friend, Jack Elvis, aboard. Wind was out of the northeast blowing pretty stiff. We headed immediately for the ridge to the south and west and worked our way down to the Elsinore Lake area at about half-throttle. There I cut the engine, feathered out and worked the ridge for about an hour.

It was now about 1:00 p.m. and we were getting hungry so I headed across the Lake toward Perris to get something to eat and visit our friends in the Orange County Soaring Association. Lift remained pretty good, so I continued to fly power-off until shortly before we arrived at the Perris Airport. Power-back-on procedure accomplished: release feather handle, master switch on, ignition switch on (AUS to EIN), choke pulled out, and hit the start button. Presto. Propeller spinning nicely — in the wrong direction, of course.

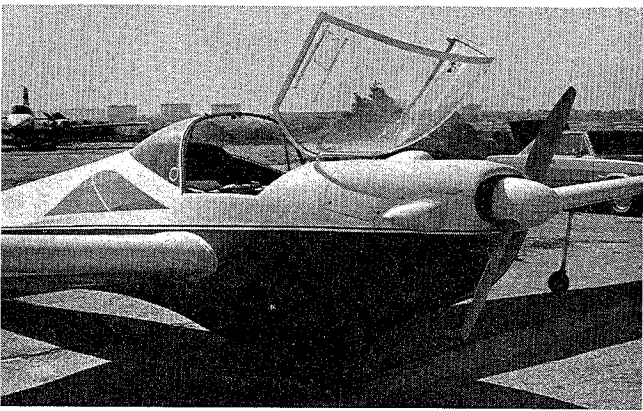
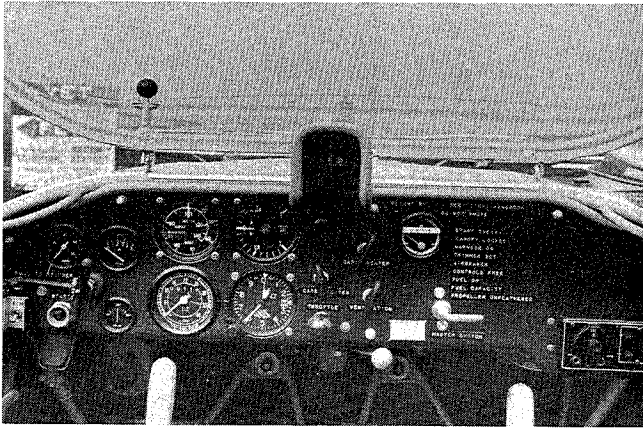
After we checked the wind "numbers," I turned the motor off again and landed at Perris power-off or "as a sailplane" the way we esoterics say it. It was just about 1:30 p.m. The company was good but the snack bar was shut down so we stayed only about 15 minutes and took off again. It was something of a tester since the wind was blowing about 25 knots and was about 20-degree crosswind from the right. But no big problem except the *Super-Falke* insisted on weather-cocking even after takeoff.

At just about 2:15 p.m. I concluded the day's activities with a final landing at Corona Municipal. Just in time to find my tuna/peanut butter sandwich and thermos of coffee and stave off starvation. Jack Elvis patronized the airport cafe.

Statistics: Total time in the air: 2 hours 15 minutes. Gas used (full to full): 3.1 gallons (\$2.39). Mileage covered (not much)... about 54 miles, but this has to be reconciled with the "free hour" with power off.

For the more technical readers, I figure the cost of the flying time as

follows: 2:15 in the air divided into \$2.39 equals \$1.06 per hour. I did that on my Unicom 201 Calculator which Stan O'Donnell sold me "wholesale." Figuring the strictly power-on time and mileage covered... it comes to something like this: 43 mph average (we dawdled a lot) and 17.42 miles per gallon of fuel.



Don Monroe



Don Monroe



Don Monroe



Don Monroe



Don Monroe

More important to this old week-end sailplane renter are these figures. Compare with above:

Rental of sailplane for 2 1/2 hours.....about \$45.00
 Two tows to 2,000 feet..about \$14.00
 \$59.00

And I was able to get away from the nest. No problem.

Byron H. Alexander, Jr.
 Culver City, California

TO MOTORGLIDING SUBSCRIBERS

A very sincere thank you is extended to all the subscribers of *Motorgliding*. You have uncomplainingly borne with our problems of not maintaining a regular production schedule.

I want to personally thank present editor Don Monroe who took over the unpaid editorship position to assist me and for which we are most grateful. Only for the last few issues has the editor position been 'paid' and that at a very low rate.

In any event, although I feel that *Motorgliding* is a natural, separate publication for SSA to publish (its over 1000 subscribers compare favorably to *Soaring's* distribution of 25 years ago), we are terminating publication effective with the next issue. While *Soaring* will not publish *all* the material that *Motorgliding* did, it will contain a growing amount of material on motorgliders. It is appropriate here to acknowledge our great appreciation to you *Motorgliding* authors, columnists and advertisers who have so unselfishly provided the necessary material without which there would be nothing. Please do keep sending material into SSA. Doug Lamont will exercise normal editorial prerogative in selecting material to use in *Soaring*.

All subscribers will receive a refund for the unexpired portion of their subscription. This will amount to as little as 42¢ for domestic subscribers with only one month left to over \$6.00 for longterm subscriptions. The average will be under \$2.00 to be refunded. Should anyone for whatever reason not be satisfied with the procedure, please advise us immediately with a stamped self-addressed envelope and we shall attempt to accommodate.

Reasons for terminating *Motorgliding* publication are many, including the aforementioned inability to maintain regular production. Without going into details other than to acknowledge that we already have had some express dismay over losing *Motorgliding* to balance those who've counseled the action we are now taking, let me end by stating that I believe that motorgliders are the wave of the future for flying. Some guys showed the way to go 25 years ago with the *Hummingbird*. It's still a beautiful bird today, remaining most modern looking with very fine com-

parative performance. Obfuscating, self-serving opinion being input into FAA which has been helpful in FAA maintaining the status quo head-in-the-sand attitude will eventually be overcome as will the FAA itself by the eventual sheer weight of the obviousness to the motorgliding concept. Just think of all that energy out there waiting to be tapped that the less than 100 motorgliders in the USA now have all to themselves!

Bernald S. Smith
Chairman
Publications Board

FAA TO RELEASE NPRM ON MOTORGLIDERS

A meeting was recently held with William J. Sullivan, Chief Safety Regulations Division, who is in charge of releasing the NPRM on motorglider certification. The FAA has been working on these regulations for several years and has finally placed them on a priority listing. At the meeting we learned that we should be looking towards the release of the motorglider regulations within one year. At present there are no regulations relating to the certification of motorgliders. They are either type certificated as an airplane or brought into the country and certificated as an experimental aircraft.

Soaring Society officials met during the National Soaring Museum opening in Elmira, New York and formulated the position to be presented to the FAA that regulations for motorgliders should enhance the use of the machines for the following purposes:

1. To be used for training during local flying
2. For cross-country training to assist the instructor in explaining the methods of searching for lift
3. For badge leg attempts
4. For class competition
5. To be able to be stored in small areas through simple disassembly

Also, listed as a priority for the SSA in this area was that the sailplane instructor should be entitled to use the machine without being required to have a power rating.

The Soaring Society is monitoring this issue and will keep you informed as the NPRMs progress. —FWB

The Winners!

Scheibe's popular high performance powered sailplanes once again demonstrated their superior flight qualities by taking first and second places in their class at the 1974 Burg Feuerstein motorglider competitions. Year after year Scheibe powered sailplanes consistently outperform the heavier and less maneuverable ships. No wonder more pilots fly Scheibe powered sailplanes than all other makes combined!



Contest winning performance at a reasonable price, plus docile handling characteristics and a worthwhile range under power (about 280 miles) mark the Tandem Falke as today's best value in self-launching sailplanes. The 60 hp Limbach engine with a Hoffman feathering propeller provides plenty of power to operate from regular airfields.

Engine-on Performance

Takeoff run	500/650 ft.
Rate of climb (sea level)	430 ft./min.
Maximum speed (sea level)	106 mph
Cruising speed	81-93 mph
Endurance (cruise)	3 hours
Fuel capacity	10 gallons

Gliding Performance

Maximum glide ratio	26/27 to 1 at 53 mph
Minimum sinking speed	2.95 ft./sec. at 43 mph

The Tandem Falke's outrigger wheels and steerable tailwheel allow completely independent operation. With its outrigger wheels removed the Tandem Falke may be conveniently hangared with other sailplanes.

A side-by-side version is available for pilots who prefer this arrangement. Similar performance, but slightly lower rate of climb and glide ratio. Order the SF-25CS "Falke."

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Scheibe SF-25E Super Falke	DM 55,500
(First place, 1974 Burg Feuerstein)	
Scheibe SF-28A Tandem Falke	DM 49,800
Scheibe SF-25CS Falke	DM 49,000

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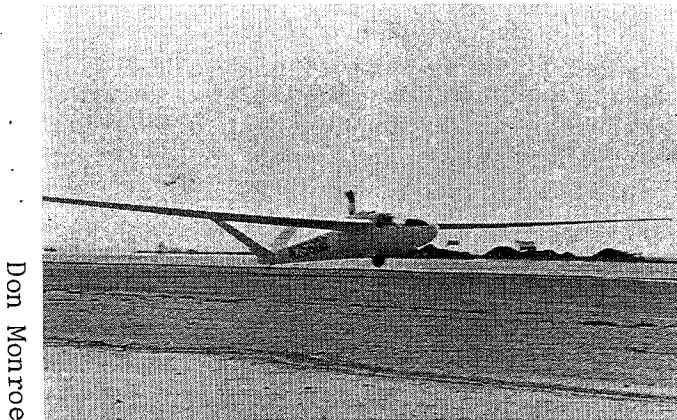
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Don Monroe



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Oldershaw's 0-3 on takeoff.