

Sperber RF5B

SAILPLANE OF INDEPENDENT MEANS

How to keep flying when
you're running out of
thermals—or gas.
by Gordon Baxter

IF THE GAS PUMPS ever really do run dry, there is an airplane that will carry two people but no suitcases at 96 knots on 2.6 gph.

A good interim plane to know about, until development could begin on a coal-burning Cessna, a nuclear Piper or a rubber-band Beech. It's the Fournier-designed, VW-powered RF5B Sperber, built by Sportavia-Pützer of West Germany, an associate of the VFW-Fokker group, and sold in Wooster, Ohio by Bert Buytendyk.

Unless the oil drum really runs dry, or American buyers change their minds about wooden airplanes powered with converted auto engines, or the FAA changes its mind about certificating single-ignition engines, it is not likely that hordes of Pützer Fournier RF5Bs will darken our skies. To date, a total of 28 American enthusiasts have laid down the required \$29,950 for the fun of switching off, feathering the prop and riding free.

The Sperber is a truly beautiful hand-made airplane and a joy to fly. It is regrettable that an aircraft as fine and clever as this one has been dropped into aviation's sorting box marked "Misc.," but \$29,950 is heavy bread, and for that, a real airplane driver could buy a good used Bonanza and go like there's no tomorrow.

The Sperber is properly classified as a powered glider, but it is not at home among the pure souls of soaring society. I flew it cross-country to Marion, Ohio, where the tennis-hatted and solemn members of the local

soaring club were having a whisper-in. I clattered once round the pattern, mingling my exhaust fumes with exotic glass-winged shapes, staining their sky. Then I feathered and turned off the stink pot and pretended to be one of them as I landed. Then I fired up again and taxied past glaring ground crews to the clubhouse, where I was about as welcome as Sammy Davis, Jr. at a Klan rally.

"Hi, stink pot," said one clubber.

"That's cheating," said another.

"It's prostitution!" said a third.

These were some of the more polite comments. Only one *avant-garde* sailor saw merit in my auxiliary sloop. "I would cram that contraption full of IFR instruments and go out and explore mountain waves on nerd days. Oh, what I could learn!" But he didn't say any of this very loud.

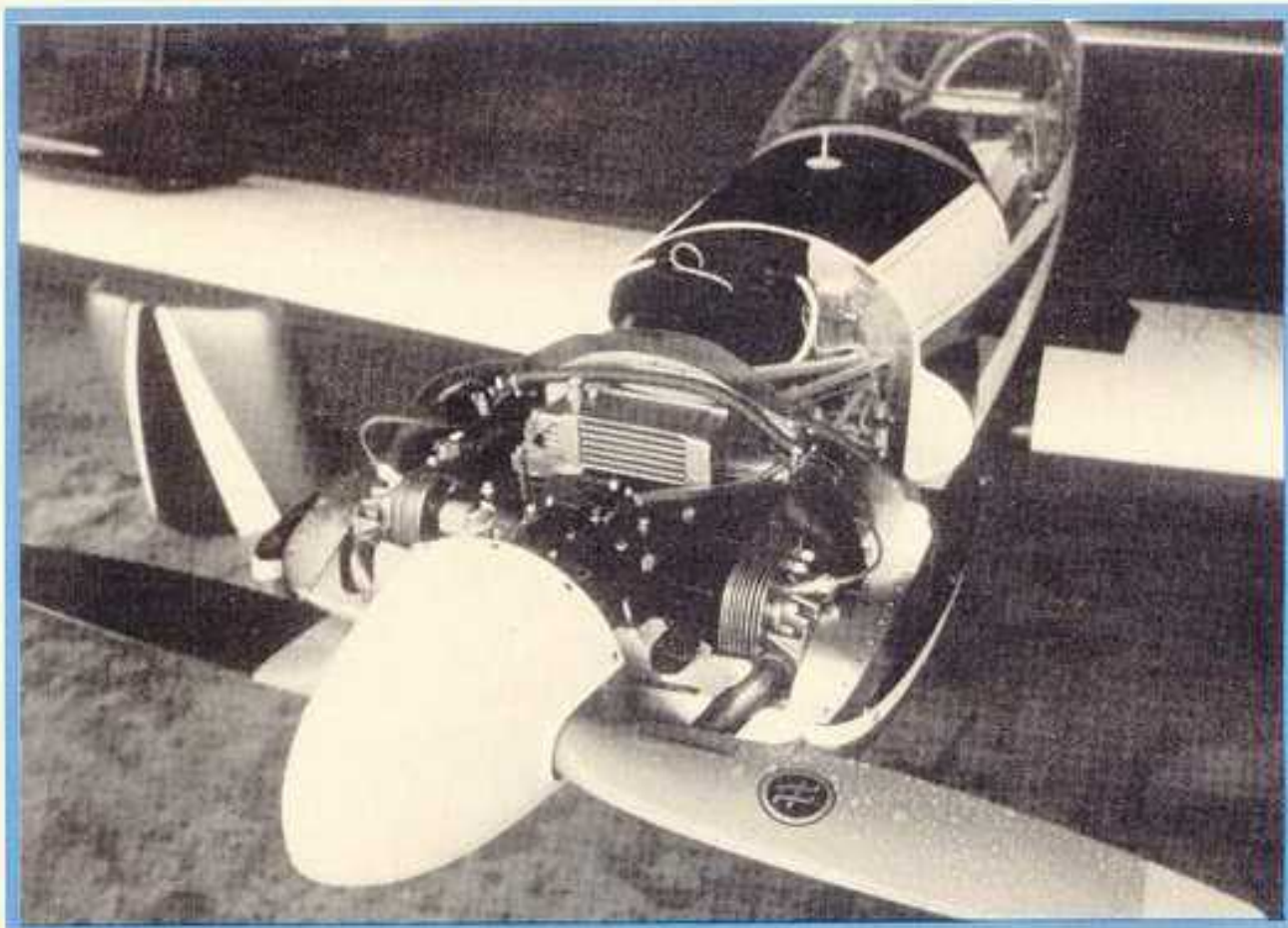
It is truly regrettable, but only fad or famine could give Pützer's powered glider the acceptance it deserves. And Pützer is puzzled by this, for he relates more to soaring than to powered flight. "To explore the motor glider as a form of transportation, it is not," said Herr Alfons Pützer.

"But, Sir," I asked this noted German aircraft designer, who has practiced his exacting craft since 1934, "didn't your American distributor assemble one at Teterboro, New Jersey and then fly it 500 miles through a snowstorm to Wooster, Ohio in three hours and 59 minutes, using up only \$4.10 worth of gasoline?"





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Lift insurance: the Sperber's 68-hp engine at first seems to make the glider a neither-here-nor-there aircraft, but it powers the ship to altitude or to new thermals.

Herr Pützer appeared not to have heard the question. "The Sperber is not only a self-launching glider, it is also self-recovering. No unplanned landings, no launch crew, no recovery crew."

I persisted. "Did not that noted American aircraft designer and writer, Peter Garrison, fly one out to the West Coast to deliver it to some bird fancier by the name of Dick Bach?"

"We prefer that you use the engine at a minimum. Make as little noise as you can. Restart the engine in the air to dash from one area of lift to another—when necessary."

"But, Sir, what of Mira Slovak? The story is that he flew one of your powered gliders across the North Atlantic, from Germany to Los Angeles."

"A very foolish thing to do."

"And then he flew it back again to the Paris Air Show and won the prize in the *Daily Mail* transatlantic race."

"Not first prize."

"How about Helmut Lehmann setting the official world altitude record of 7,780 meters over Innsbruck with the engine off?"

"That is something you should print in your magazine."

Herr Pützer does not regard the Sperber as anything more than a sailplane of independent means, regardless of strong evidence that some of them have slicked along for very great distances on the 68-horsepower VW engine.

This attitude may show that Pützer is being very careful not to jostle his small clutch

of eggs being hatched by the FAA. His application for certification is only for a self-launching glider. At last report, the Sperber still bears the stigma of "experimental," although powered gliders have long been certificated in the normal category in Europe and in Canada. Dealer Buytendyk believes that recent certification of the type in Canada may help to move the bowels of the FAA, where the paperwork has been since 1969.

The Feds object to single ignition, the glider pilots object to any ignition at all, and American airplane buyers do not take seriously any airplane made of wood and powered by an auto engine. So much for the trivialities, how does it fly?

I mentioned to Herr Pützer that it seemed that for twice the price of a German high-performance soaring plane, or twice the price of an American training plane, a person could get almost both of them in one. He drew himself up, glancing first along the tapered span of flawless airfoil and then at me, and said, "One pound of aerodynamics is worth more than a pound of horsepower."

And truly, there is perfection in every detail of the fit and finish of this machine. The rows of tiny screws that mate the canopy to the fuselage look like the work of a neurosurgeon. Everything moves as if on ball bearings. Everything *is* on ball bearings. The throttle travels with certainty along a machined rack-and-pinion assembly. The Volks engine up front is made of select factory parts, each of which is X-rayed and weighed on scales in

fine balanced sets of four.

The engine started with a healthy roar, and I tried not to think of VW engines I have blown up by using the cars too hard. I also put folding wings out of my mind. The Sperber folds in 10 feet on each side to reduce its 55.8-foot span to a more hangar-social 35.8. Had I not inserted the thick locking pins myself? Kerchunk. Did not the Navy and the Marines win wars with folding wings? Forget folding wings. Concentrate on taxiing on one wheel and those two little whisker-pole casters way out there on the wings, and try not to embarrass your hosts by mooring this belly sweeper to a runway light.

The VW came to a raving 3,200 rpm and we used a lot of runway, lifted and climbed very flat. But the climb rate of the Sperber can be deceptive. The Sperber is fat with lift. For our photo mission, I told them I would take the 172 up to 6,500 feet and wait for the Sperber among the cloud castles of the sky. The Sperber was waiting for me when I got there, making long, graceful passes.

On my dual check out, I levered the main wheel smoothly up into its ankle well, leveled at 2,500 and learned the tricky business of shifting the prop into its fixed cruise-pitch position. Too much pull on the cable control handle will flatten the blades out to knife edge. Halfway pull puts the pitch into high gear, and the engine at once quiets down to 2,200 rpm. The airspeed shot up to an indicated 96 knots and stayed there. And here the grinning began.

The Sperber is perfectly mannered and balanced about all three axes, but as with all sailplanes, the rudder way back there demands some coordination. It will wake up your feet if you learned to fly driving tricycles in the sky. And the Sperber will give you the sense and enjoyment of feeling the fine feather-edge of flight.

We motored along, hugely enjoying the view from the canopy and the long pole-balancing feel of banking about on slender wings of great span. The serenity was disturbed only by the sudden in/out banging of the leading-edge slats whenever we got near the 34-knot stall. We passed beneath a decaying cu, and I was surprised to see that we had secretly gained a thousand feet. When the Sperber finds green air, it acts like a sailplane and climbs flat, power on or no.

All our landings were done power off. And if you ever experience the no-sink, hydraulic-brakes effect of managing an approach with spoilers, you will always wonder why we still mess around with flaps.

Only a Sunday glider pilot, I found the

Sperber a better sailplane than the good, honest Schweizer 2-33 I learned in but not as good as the Blanik L-13 I loved in. I can more fairly compare it to airplanes. Better than the 65-hp Champ, not as good as the Cessna 150. A lovely piece of versatile but highly specialized aircraft.

Yet Pützer and his associates persist in high hopes for the American market, and plans are afoot for a West Coast assembly plant to ship the planes in smaller boxes so as to cut costs. After the day's flying, Pützer, Buytendyk and I leaned back from a good meal followed by fine brandy and cigars, and I listened and learned of a veteran aircraft designer who should be taken as seriously in the American market as he is in Europe.

There is more than one model of the Sperber, as the numbers would indicate. The RF4 is a short-wing aerobatic single-seat edition of the Fournier design, the SFS 31 Milan is the same plane but with the long soaring wing. There is an RF6 with a Lycoming 150 or 180 (your option) that is truly beautiful and has a more conventional side-by-side de-

sign. Cross-country, trainer and fully aerobatic, a 200-mph airplane. And Pützer has some prototype designs of various training aircraft he has designed and submitted to the Luftwaffe that come close to being the all-American dream airplane; a 200-mph business machine, fully aerobatic, that is tame enough for training.

Pützer knows the limitations of the European lightplane sales market, and, as have so many before him, he dreams of making a significant penetration into the U.S. Warmed by the brandy, I made bold to suggest to Pützer that one must come to the American market armed with many dollars, an airplane significantly better than Beech, Cessna, Grumman or Piper make and a sales organization at least as good. I suggested he give up his powered glider idea and develop some of his high-performance conventional aircraft and capture our imaginations by trading on his parent company's name: call it Fokker American, introduce the Fokker D.9 and treat Wichita to a second Fokker scourge. Herr Pützer just looked at me and smiled. †

THE FRENCH WAY

THE MIRACULOUSLY lucky René Fournier, the creative force behind the Sperber, continues to design and build airplanes at a small factory on the domain of the Château de Nitray, near Tours. Fournier's history is unique. Formerly a ceramist by trade, he started off as a homebuilder with a design he called the RF-01 Avion-Planeur (airplane-glider). The aircraft caught the fancy of someone in the French Government, which provides grants-in-aid to projects it considers worthwhile. A second prototype was built, and then Fournier entered into partnership with Antoine d'Assche, who was then producing Jodel two-seaters in a hangar at Gap in the French Alps under the trade name of Alpavia. They produced quite a number of the little airplanes, which were not exactly powered sailplanes but airplanes with an unusually shallow angle of glide; successive improvements brought about the RF4 (the second prototype having been the 2, and the original production version the 3), which developed a certain fame in the United States in the course of unsuccessful efforts by its importers to win it a certificate of airworthiness from the FAA despite the single ignition of its converted Volkswagen engine.

Eventually, the German firm of Sportavia-Pützer GmbH took over manufacture of the single-seater, and of a two-seat development of it, the RF5; Fournier, however, became dissatisfied with "cas Allemands" and struck out on his own. Again with government money, he built an all-metal airplane similar

to the RF4, but which metamorphosed the RF4's cuteness into sleekness and sexiness. Unfortunately, nothing came of this project.

Fournier had in the meantime installed himself in a workshop/studio in converted outbuildings alongside a grass runway at the château of a friend and client of his in his native Touraine. He bought a crumbled stone farmhouse several hundred years old and, over a period of several years, restored it, with the assistance of artistic and historical consultants, to pristine condition. He designed a two-seat trainer, the RF6 (the numbering of his creations having earlier bifurcated into one lineage of production models and another of aborted dreams, experimental prototypes and crib deaths). Then, with another "prime d'état," he constructed a factory in a wood across the runway from his workshop and launched series production of the side-by-side, two-seat aerobatic trainer, which has the very classic appearance and flying qualities typical of his work.

When I last saw Fournier, he talked about the hopeless business situation in France, predicted doom and disaster and longed to be able to go into business in the United States, where he imagined great strides could be made in an environment of perfect freedom. I did not want to disillusion him and so did not explain that here there are no state grants-in-aid to exceptional homebuilders, no châteaux, no Touraine, no appreciation of classic appearance and flying qualities, and, most of all, no chance whatever that he, or

anyone like him, could have done here what he had managed to do in France.

His current project is the kind over which airplane buffs go wild and which would look like pie-in-the-sky to any American investor. It is a modular airplane—three airplanes in one and a half, so to speak. The core of the idea is a thick, tapered, high-aspect-ratio wooden wing with a retractable landing gear. The outer third or so of each panel is removable. With the outer panels on, the wing supports a two-seat self-launching sailplane; with the outer panels removed, it carries a four-seat touring fuselage on the order of a Mooney or Gardan Horizon. The *coup de maître*, however, comes when you bolt the outer panels to yet a third fuselage and create a single-seat racer/sport plane resembling a clipped-wing RF4, with speed, grace and aerobatic capability. The design does for airplanes what the tempered scale did for keyboard instruments, using a small number of parts to produce a large number of different results.

Fournier is not only a gifted aeronautical engineer but also an artist, an extremely amusing raconteur and a skilled violinist. He is an exceedingly lucky man who has moved from strength to strength and has succeeded in doing what the rest of us have only dreamed. Though he deplores his country's hidebound business atmosphere and its descent, as he sees it, toward socialism and chaos, Fournier owes much of what he has to the quixotic generosity of France.

PETER GARRISON