

FAA WEATHERMEN gave us reports too ambiguous to be of any use, so we watched the 11 o'clock news every night, where simplistic meteorologists analyzed the weather picture for us with somewhat more self-assurance. Two thorny lines lay across the country like appendectomy scars: One front, buxom and straightforward, came down from Canada across the Northwest, straightened somewhat, swung slightly upward and eventually passed out over the Atlantic; another split somewhere in Colorado into an inverted Y as the forces of cold overran and lifted into stratospheric uselessness those of warmth and justice.

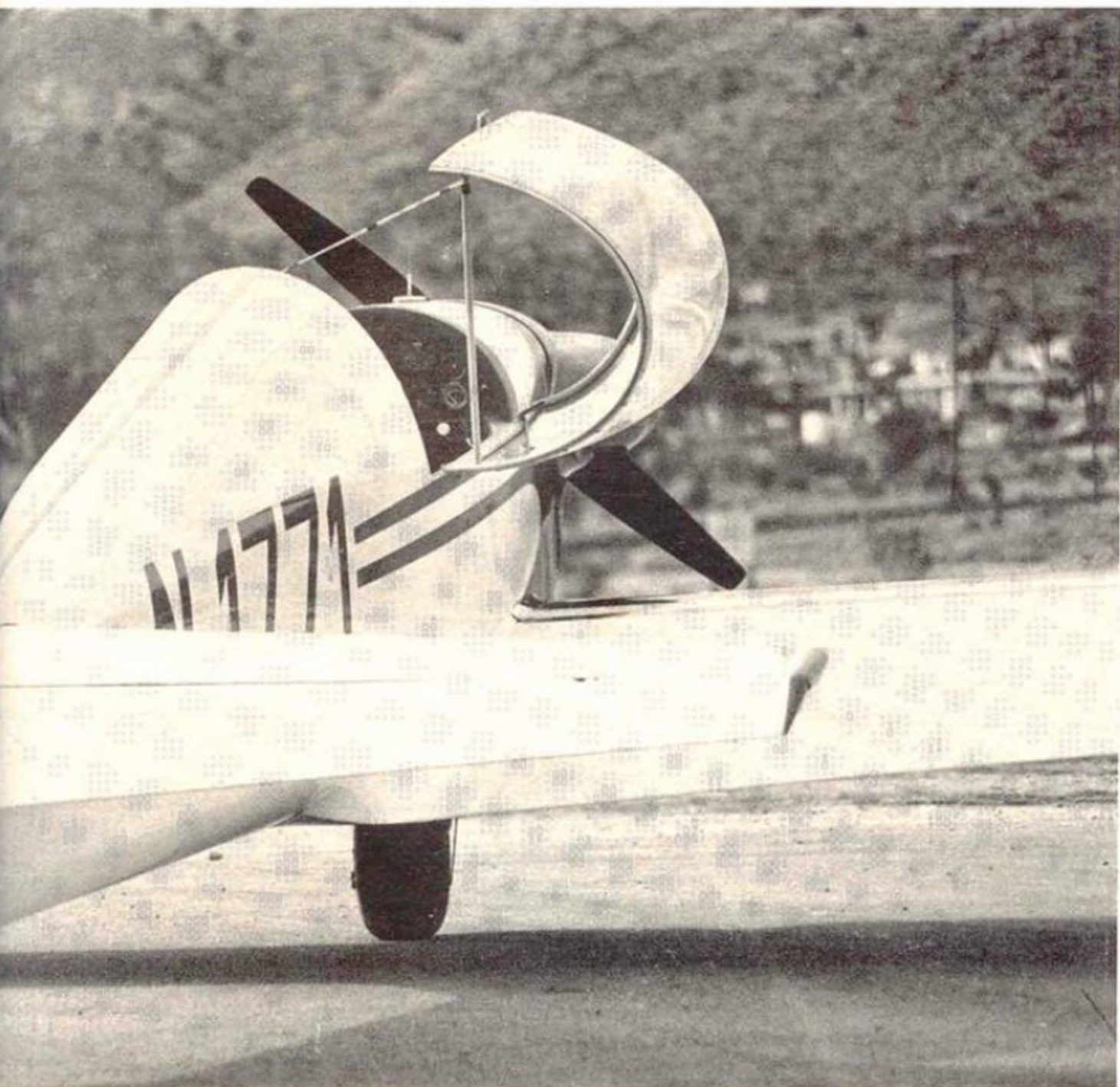
We had two Fournier RF4Ds to deliver, Phil Paul and I, from Wooster, Ohio, to California—across those pronged and studded lines. One was Mira Slovak's

ship, which he had flown from Germany across the Atlantic (the smallest airplane ever to do so) and to Santa Paula, California; there, he wrecked it on arrival, an improbable anticlimax that would raise eyebrows in any novel. The remains were sent back to Germany, a new airplane built around them and the old number—N1700—painted on its side. This was the airplane I was to fly. Phil Paul, the Lancaster, California distributor for the Fournier, was delivering the other plane to a buyer in Salinas, California.

Saturday, December 29; I was there, Phil Paul was not. Twenty-five hundred scattered, visibility 25, distant cumulus, gusty winds. Bert Buytendyk, the Wooster man who receives the Fourniers in crates from Sportavia GmbH in Germany and

assembles them for delivery by air to the rest of the country, rolled the two ships out of the hangar and we started their engines.

When you are inside the cockpit, the engine makes a staccato, blatblatting noise; outside, it has the lightweight, air-cooled sound of a Volkswagen—which is not surprising, since it is a Volkswagen. Modified only by the addition of a pull-type hand starter for midair restarts, a prop mount, an underslung carb and a Bendix mag, and by the removal of its cooling baffles and mundane automotive accessories, it is that excellent 36-hp VW engine that sells off the shelf for \$490 or so. It drives a diminutive wooden prop (painted to look like metal) at up to 3,600 rpm, and breathes its own cooling air, so that carburetor heat is



Cheap Thrills

Take a Fournier RF4D up to 15,000 or so, shut down the engine, level the prop with the hand starter and you've got a good hour's silent soaring ahead of you—even if there's nary a thermal in sight.

not necessary. The mixture control is only a choke, used for cold starts just as on a car; you don't lean for altitude.

The two airplanes sat on the ramp, occasionally tipping from one underwing skid to the other as the gusty wind shifted. I adjusted the cushions in N1700 so that my head cleared the canopy, and went over the instrument panel, from left to right: nav light switch, stall warning, gear warning and test button; air-speed indicator (green from 44 to 130 mph, white—for airbrakes—from 44 to 112, yellow from 130 to 155), magnetic compass, ball (no needle), rate of climb and single-pointer altimeter; rev counter, oil temp, oil pressure and ignition switch.

On the left side, next to the seat, is the airbrake lever; it rises out of a dent while the brakes—the no-effort, circular-arc spoiler type—remain motionless, and then deploys them through about 40 degrees of travel. Above and forward of it, the plunger throttle; on the right, just beneath the panel, fuel on-off and choke; below these, inside your right leg, the hand start lever; beneath your right knee, the gear-lock release; and on the right side of the cockpit, the gear actuator lever and trim knob. Between your thighs is a stubby control stick, the top of which is level with the tops of your legs, so that charts can be spread across your knees (more or less) while you continue to steer.

This plethora of levers, switches, plungers and arms, squeezed into a tiny cockpit so that all fall easily to hand, is no mean ergonomic accomplishment. Everything must be in easy reach: You are held in place by a five-branch acro safety harness, and cannot plunge and lurch about the cockpit reaching for things. You needn't—everything is handy and, when not needed, unobtrusive.

The wind rose, and Buytendyk and I put the planes back inside. In another part of the hangar were a partially assembled Zlin—the Czech acro plane—and a Czech Blanik sailplane just out of its crate. The Zlin comes with a cheese-cake photo above the panel as standard equipment—the personal touch. The wind struck up to 30-knot gusts, then 40. We waited, went to visit Bert's friends, had lunch; finally, an hour and a half before sunset, Phil Paul arrived.

FAA weather declared that if we didn't get out then, we wouldn't for three days; but now the gusts were at 50, and a direct headwind at that. We demurred.

The following morning, we awoke in a snowstorm. By 11 a.m., contrary to the gloomy reports of the FAA and precisely in accordance with the predictions of the TV weatherman, the snowfall slackened, visibility increased and the ceiling rose to about 1,200 feet. It was better to the southwest. We scrambled. Choke, brake, contact, blatblatblat. Phil took off, I followed, fumbling momentarily with the

three-step gear-retraction apparatus. Phil immediately flew into a cloud while unfolding a map; I circled and waited. He plunged back out again eventually, and we continued. We picked up a road, settled at about 500 feet above the ground and flew on in close formation. Soon the snow resumed; the visibility was rotten. The sad, patriotic, brown towns appeared out of the snow and mist at regular intervals: North Liberty, Democracy, Mt. Vernon, Mt. Liberty. We reached Columbus, passing north of the city in a bright island of unexpected sunlight.

We stopped briefly in Springfield to see friends of Phil's, took a dollar's worth of fuel, and went on, scraping the bottom of clouds, 600 to 1,000 feet above the ground. The visibility varied between seven or eight miles in the good stretches, and zilch in rain and fog. Since I was wearing a full suit of quilted thermal underwear, a woolen turtleneck sweater, heavy corduroy pants and a navy pea coat, I wasn't cold; but I kept speculating upon Phil's condition, for he was much less warmly dressed than I. My feet, in fur-lined boots, were numb. We formed, periodically exchanging the lead, indicating 118 mph, I at 3,400 rpm and he at 3,300. (His plane was a little faster than mine.) The dwarf winter day grew grayer and grayer; waving my hands and pointing to the bottom of my folded map, I signalled a stop at Vandalia. The stalk of my fuel gauge had bottomed.

Vandalia, Illinois; the essence of grayness. Icy pools on the ground, crunching underfoot and trapping your feet in inches of concealed water; grim buildings; no sign of life. I took 9.2 gallons (the plane holds 10) of 80/87; this quantity of fuel had taken me 300 miles in three and a half hours, against headwinds (we had stopped briefly at Springfield, Illinois). We climbed into our bright airplanes—the only touch of joy in all Vandalia that day—and took off to make the best of what little remained of the light.

I learned something interesting about the Fournier: Since its prop revolves in the opposite direction from a normal American one, you use left rudder on the takeoff; if you forget and try to use right, you are in for a conga down the runway, which had better be wide. I did; it was.

We landed, half an hour or so later, at East Alton, Illinois, on the other side of the Mississippi from St. Louis. We could see several employees watching with acute but idle interest in the windows of Walston Cessna as we hunted for a suitable tiedown.

Day One: 5.7 hours flown, 480 miles covered against headwinds, usually indicating around 115 in the cold air. Fuel used: 14.9 gallons. Total cost: \$6.60. Not so hot.

Curiously enough, I discovered that

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The FAA feels the Fournier is potentially dangerous because the VW engine does not have twin ignition or carb heat, and they haven't yet certificated it for anything other than "exhibition" flying. A dual-ignition VW is now under development.

Ahead of me and to the left was the elegant, slender shape of the other RF4; at times, it was impossible to see in front because of rain; we skimmed the hilltops peering for towers. Blatblat: the cockpit, at least, was quite snug. With stubborn fidelity to his heading, Phil led us as if by sadistic choice into the worst, blackest squalls I remember ever having flown through. The little airplanes were splendid—and watertight.

The rain stopped, the ceiling rose to 2,000 feet, the visibility increased to 20 or 30 miles. Here and there in the distance were pools of sunlight. We landed at Walnut Ridge, refueled, got a pessimistic weather report from the FSS and took off again. Sure enough, the ceiling dropped and mists rose from the Arkansas River as we neared Little Rock. We picked up the Interstate mainly by smell, and came into better weather as we left the river behind. Night caught us at Sulphur Springs, Texas, where at last under a clear sky and mild winds we tied the airplanes down on grass beside a grazing horse, and called a motel.

Day Two: Seven hours flown, 550 miles covered in snow, hail, sleet, rain, mist, fog, smoke, smog and headwinds. The fuel bill for the day was 18.8 gallons, \$7.73. Lousy: Not even 30 mpg.

It was 12 degrees when we landed in Abilene at 10 the next morning, under an inversion that lay like a sheet of green glass upon Texas—but it was easy going from then on. We slid low over the empty Texas plains, just as the day before we had frightened ducks as we skimmed the swamps of Arkansas. Dallas, Fort Worth, Abilene, Odessa, Midland and Wink. At Wink, it was at last shirtsleeves-warm; we created a stir among the FSS personnel, who took us for two disabled aircraft with only nose gear operating, and came out to take Polaroid pictures. The local paper came to interview us. People arrived in cars, hastily summoned by phone.

From Wink, we flew straight to El Paso at 4,000 feet, with a touch of a tailwind, and then on to Tucson—where we refueled in a hurry after diving in at 130 indicated from 9,000 feet—and Phoenix. Off my left wing, the sun was setting with unusual flamboyance; we landed just after dark at Deer Valley, on New Year's Eve.

Day Three: 10.1 hours in the air, covering 1,040 miles on 28.2 gallons. Not too bad.

The following morning, we were off at dawn, heading for Yucca Valley Airport, north of Palm Springs. We climbed and climbed. (On the ground, with its one wheel hanging out, the Fournier looks Mickey Mouse; in the air, with the gear doors shut and the nose down in cruise, it's beautiful. I never understood why a British writer had compared it with the Spitfire until I saw Phil Paul sailing along above and ahead of me.)

At 10,000 feet, I picked up San Geronio and San Jacinto from about 170 miles away and aimed for them, still climbing. I leveled out at 14,500, indicating 82 mph, truing out at about 106 at 3,350 rpm. We covered the 260 miles in less than two and a half hours, using 6.7 gallons—\$3.10. I lost Phil, who remained around 10,000 feet. Over Yucca, I shut down the engine, and in sudden, beautiful silence, looped and rolled and swooped down through two miles of crystalline desert sky; suddenly the other RF4 appeared beside me, engine off, also rolling and diving. At 5,000 feet, we restarted the engines, buzzed the field once and landed. A crowd had already gathered.

I learned during the trip that N1700 was a tiny bit out of trim, and tended to drop off slightly on the right wing. It had a Plexiglas trim tab that must be heated to be adjusted, and so I was unable to set it en route. It was obvious, even so, that the plane could be flown hands off for long periods. It has excellent directional and lateral stability, and somewhat less longitudinal stability; the speed tends to wander a little except in very smooth air. It can be flown feet on the floor; the crisp Frise ailerons produce very little adverse yaw, despite the large wingspan. (On the other hand, rudder deflection produces very little bank, and so the plane cannot be steered, hands off, with the rudder.)

The rate of roll is remarkably rapid for such a design; an aileron roll requires about six seconds, at a guess. The elevator forces are very low; loops are executed with a fingertip touch from cruising speed; rolls can also be done out of cruise. Snap maneuvers are not recommended by the factory, but they are done nevertheless.

The little airplane is remarkably efficient; it climbs 690 fpm on its mini-engine, and cruises at 112 mph on 2.7 gph. It stalls at 44 up in the air, and seemingly less just off the ground. The huge wing makes ground effect mean something: Over the New Mexico plains, flying at seven or eight feet, I found that I could maintain cruising speed on 150 rpm less than at altitude.

The airbrakes are very effective. Usable up to 112 mph, they bring the airplane down with the rate of descent pegged at its 2,000-fpm stop; the actual rate must be a bit more than that. With the engine shut down (pull up to about 55 mph, shut off the ignition, crack the throttle to silence the gear-warning buzzer and level the prop with the hand starter), it glides almost as well as a Schweizer 1-26, with rather more penetration: The glide ratio is 20:1 (at 65 mph), and the minimum rate of sink is about four fps (at 56 mph)—too much for thermaling on delicate days, but fine for strong thermals and wave riding. If the air is dead, you can always climb to