

WEEKEND *in the*

SKY

by

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SNUGLY strapped into his rugged Pratt-Read sailplane one minute, glider pilot Larry Edgar was cruising along at 55 miles per hour 17,000 feet above the California desert. And the next, his battered body was falling through space, miraculously spared by the frightening forces of a roll cloud that, with sudden fury, had shredded his craft to bits like a pair of giant jaws.

Nothing comes closer to Edgar's aerial ordeal than A. Conan Doyle's "horrors of the heights," fictional floating monsters who lurked behind lofty clouds, ready to pounce upon high-flying aeronauts daring enough to invade their airborne jungles.

"The shearing action was terrific," Edgar recalls. "I was forced sideways in my seat, first to the left, then to the right. At the same time . . . a fantastic force shoved me down . . . my head went forward and my chin was pressed hard against my chest. I could feel my body crumple . . . as I quickly blacked out. Just then . . . it felt like a violent roll to the left with a loud explosion, followed instantaneously by a violent upward thrust.

"I was unable to see after blacking out. . . . However I was conscious and felt my head hit the canopy. There was a lot of noise and I was taking quite a beating. . . . Just as suddenly as all this violence started, it became quiet except for the sound of the wind whistling by. I felt that I had been thrown clear of the glider.

"I felt and fumbled across my chest for the rip cord. I yanked and the chute opened immediately. I still couldn't see."

Battered, bloody and bruised, Edgar recovered his vision on the way down and had to fight the shroud lines of his chute to keep from being sucked back up into the roll cloud's deadly turbulence. When he fell free of the cloud, he reported that "for the first time . . . I could see parts of the Pratt-Read being carried *up* past me. This is the first I had seen of any glider since hitting

the turbulence. It was the first indication that perhaps '195' had broken up in the air and it was not just a matter of my being thrown out because of a loose seat belt."

Edgar made it safely to the ground with a new respect for the roll cloud and some new data for the Air Force's jet stream project. He had been exploring one of the last frontiers of motorless flight — wave soaring. The wave phenomenon, not yet fully understood, is most striking on the lee side of a mountain range. It amounts to a series of strong downstream ripples formed when a high-velocity wind hits the range perpendicularly and tumbles down the lee side much as water in a fast stream causes several standing ripples behind a submerged rock.

Special cloud formations and fantastic turbulence are common in the lee wave. Some of the vertical currents traveling at 5,000 feet per minute are believed to rocket up to 80,000 feet. But man can go no higher than 45,000 feet even with the best oxygen equipment unless he is surrounded by a weighty pressurized cabin.

HOWEVER, not all of the wonderland of clouds is so forbidding, or presents such hazards to the traveler who would journey there. Any weekend soaring enthusiast can tell you, as he anxiously scans the weather reports on Friday for signs of favorable winds and good soaring conditions, that you don't have to

tangle with lee waves to get all the kicks an amateur sportsman could ever want out of sky sailing.

From Miami to Seattle, from San Diego to Boston, hundreds of pavement-bound earthlings are rediscovering the silent thrills of soaring, the world's oldest, safest and least expensive form of flight. Once strictly for the birds, soaring is the art of defying gravity in motorless heavier-than-air craft (gliders or sailplanes) by substituting rising air currents for engine power. It is also an off-beat way to spend Saturday or Sunday away from the cares of terra firma in the congenial company of like-minded aerial pleasure seekers.

You can get in on the fun by joining one of the 55 soaring clubs scattered from coast to coast. Although their number is growing, America's soaring enthusiasts are still a pretty small group. But the 4,000 licensed glider pilots in the United States — about half of them active — more than hold their own with the older and much larger European soaring fraternity. American pilots flying U.S.-made sailplanes set both the present world's soaring altitude and cross-country distance records, 44,255 feet and 535 miles respectively.

They are almost all amateurs from every walk of life who have regular jobs during the week and pool their enthusiasm, elbow grease and pocketbooks on weekends to indulge in the only readily available form of sport flying. Take the Metropolitan

Air Hoppers Soaring Association (MASA) based at the Wurtsboro Airport, 80 miles from New York City. There are engineers, construction men, magazine editors, school teachers, lawyers, students, secretaries, airline pilots, businessmen and photographers. Some have their own craft which they tie down at Wurtsboro; some bring their sailplanes in on trailers and assemble and fly them. But most use the three sailplanes and power towplane operated by Sail Flights, Inc., the stock of which is owned by MASA members. Sailplanes may be towed into the air by a power plane, a winch or an automobile.

Soaring clubs all over the country have found the joint ownership set-up the most economical. A one-hour flight in a two-place tandem Piper Cub airplane costs from \$8 to \$10 an hour solo and \$12 to \$14 for dual instruction. But a MASA member can easily get away with \$4.50 per flight in a sailplane if he owns \$100 worth of stock in Sail Flights, Inc. and makes 50 flights during the April-November season. (On the West Coast and in the South, soaring conditions prevail all year around.) The more flights he makes, the less each one costs him. He can stay aloft as long as weather conditions and his soaring skill permit. Two- or three-hour flights are not uncommon. There is no extra charge for dual instruction. MASA will teach any prospective member to fly a sailplane if he has soloed in a

regular airplane, which the average kiwi can do after eight to twelve hours of flight instruction. Regular airplane flying lessons are also available at Wurtsboro. A sailplane has the same basic controls as an airplane so almost anyone who can fly one can learn to fly the other without great difficulty.

MASA also has a bunkhouse right on the field where members and their families bed down for the night at a dollar a head. On Saturday nights there is a weekly outdoor barbecue. After filling themselves with steak and beer, the Air Hoppers sit around the log fire and do the next best thing to soaring—hangar flying. Stories of soaring feats, of the old days (the Wright Brothers solved the problem of flight control with gliders before they built their airplane), of the rare glider accidents and projects for the future are discussed under the night sky. The hypnotic influence of the dying embers makes altitude flights to 80,000 feet and a soaring hop across the South Atlantic seem almost real.

BUT NONE of this gingerbread, pleasant as it is, changes the fundamental appeal of soaring, which is a new intimacy with the ocean of air. In power planes man has penetrated this life-giving fluid as an intruder, riding or bucking its currents with slashing propeller blades or spewing jets. But the sailplane pilot and his craft are creatures

of the air. They ride the winds, now spiraling upward in a cloud-topped cone of rising air called a thermal, now ascending in the upwash over a windswept ridge or mountain, now daring to enter the dark, violent interior of a frothing thunderhead, where rain, hail and lightning cut through the madly tumbling and soaring vertical currents, capable of sucking the slight but sturdy craft upward or thrusting it downward at dizzying speeds.

The sky sailor has no fuel or fumes or fires to worry about, no engine vibrations to listen to, no tachometer or oil pressure gauges to watch. There is just the hushed hiss of air sliding over his wings as he lords it over an indulgent Mother Earth until she calls him back to her.

The better the pilot the longer he can avoid answering the call. Flying a sailplane is still a full time job if you don't want to find yourself right back on the ground again. Most sailplanes have gliding ratios of between 20 and 30 to one. That means that for every foot of altitude the sailplane loses it goes forward 20 or 30 feet in still air. Of course, wind speed, wind direction, updrafts and downdrafts have to be taken into consideration also. Novice pilots won't venture beyond gliding distance of their home airport.

CROSS-COUNTRY flying poses some more ticklish problems and is not undertaken lightly. The pilot must always consider the possibility

of running out of lift and should always have a suitable landing spot picked out in that eventuality.

The more advanced stages, especially cloud-soaring and wave-soaring, are better left to the experts; just as amateur mountaineers with experience limited to the Catskills would be ill-advised to try their skill on the Himalayas. Soaring inside clouds is usually done in thunderheads because they are the tallest (sometimes reaching six miles high) and have the strongest lift. There is no visibility whatsoever inside them so they are reserved for instrument pilots flying sailplanes equipped for instrument flight. Furthermore the pilot must be ready to encounter severe turbulence, usually not as bad as that found in a wave, but capable of breaking up a ship if he doesn't stay right on the ball.

The Soaring Society of America, acting on behalf of the Federation Aeronautique Internationale, with headquarters in Paris, issues a series of pins and certificates to glider pilots testifying to their proficiency in the art of soaring.

Sport soaring, while it is tremendously satisfying and thrilling, is not at all dangerous if the usual flying safety rules are observed.

And the grin on the face of a novice pilot who has just come down from his first 45-minute soaring flight is proof positive that you don't have to get in and mix it with a thunderhead or a wave to get an intoxicating thrill out of sky sailing.



AMBASSADORS IN SHORT PANTS

By Al Balk

IT WAS 1951, and the Cold War was going badly for the United States in Berlin. There'd been Red youth riots, booing and bottle-throwing at a boxing match involving Sugar Ray Robinson, and assorted other slaps in the face to the West. A dramatic move was clearly called for — and soon. But diplomats were stumped.

Then along came a basketball team, the Harlem Globetrotters. In Paris with a day off on their European good-will tour, they were contacted by John J. McCloy, then U.S. High Commissioner to Germany, and flown to Olympic Stadium, where 75,000 persons waited. The colored clowns wowed 'em, blending

their usual formula of skill and slapstick to win whoops of approval even from Red agitators in the crowd.

But that wasn't the only blow to the Commies' chins. A helicopter slowly settled into the stadium and discharged former Olympic champion Jesse Owens. There was a crash of applause as the great Negro sprinter jogged toward the spot where Adolph Hitler snubbed him in 1936, and Berlin's acting mayor, Ludwig Shreiber, stepped forward.

"Jesse," he said, "fifteen years ago this month Adolph Hitler refused to give you his hand. I'm proud to give you both of mine."