## Sport by John Sedgwick



ome years ago, a group of mountaineers made the mistake of telling David Gordon Wilson that he could not possibly complete the strenuous trek they were planning in the White Mountains of New Hampshire. After all, he was near 60. He'd never make it.

The English-born Wilson is in about the same shape today at 79 as he was then, which is to say as tough as a steel chain. And with good reason. For years Wilson has been known as the Father of the Recumbent Bicycle, and he was once the president of the International Human Powered Vehicle Association. As a professor of mechanical engineering at MIT, he codesigned the recumbent Avatar-2000 that captured the world human-powered speed record in 1982. He still rides a recumbent five and a half miles every day from his home in Winchester to an office in Woburn, Massachusetts.

## Laid-Back

Recumbent riders know the pleasures of low-slung, high-speed cycling.

Photograph by Evan Kafka

"The first time I got on a recumbent, my whole body felt so relaxed that I started singing," says Wilson. "Now is the month of May," he croons, offering a sample of what his wife terms "the greatest hits of the 16th century."

It's probably safe to say that one is either a recumbent person or not. The bikes may be goony-looking to most of us, but to a fierce fraternity of adherents there's plenty to appreciate about the laid-back ride.

For one thing, the recumbent is the fastest human-powered vehicle in existence and will blow the pinstripes off even a racing upright. On pan-flat Highway 305 in Battle Mountain, Nevada, a recumbent rider hit 81 miles per hour. By contrast, the speed record for a standard upright bike is 51 miles per hour.

The difference isn't so much the rider's pedal power as aerodynamics. According to Eric Perlman, writing in *Newton at the Bat: The Science of Sports* (Scribner), at ten miles per hour an upright cyclist uses one third of his energy pushing air out of the way; at 30 miles per hour and over, 90 percent of a rider's effort is devoted just to overcoming wind resistance.

The low-slung recumbent, however, dramatically reduces that aerodynamic nuisance. When encased inside a "fairing," or lightweight shell, which redirects the flow of air around the bike, the effects are even more pronounced. So much so that recumbents are banned from the Tour de France.

But not from other contests, such as long-distance Ultra Marathon cycling races. There they dominate. At this year's 24-hour race in Sebring, Florida, John Schlitter, an unfaired recumbent racer and part owner of Bacchetta Recumbent Bikes, won by traveling 479.5 miles in the allotted time. The fastest upright rider trailed him by 12 miles.

Recumbent die-hards of the nonracing variety stress the bike's comfort factor as half Ferrari, half chaise longue. The shift from an upright's narrow, perchlike seat to a long recliner eliminates pain on the bottom and strain on the hands, arms and shoulders. The recumbent rider isn't actually able to put any more power into the pedals than an upright rider, but he feels better for longer periods, increasing his endurance by making the ride more enjoyable. "You don't have all of these other muscles holding you up," says Wilson.

So with all of these fine attributes going for it, why don't recumbents get more respect? Overall sales come to only about half of one percent of all bikes sold in the U.S.

"The conspiracy theorists say it's because they were banned from racing in 1934, so people don't see them beneath pro riders," says Bryan Ball, who became a convert at 24, mainly because he found racing along low to the ground at higher speeds on a recumbent more fun than upright riding. Ball now runs a website with news and reviews of all things recumbent (www.bentrideronline.com) that receives 20,000 to 30,000 visitors a month.

"Plus there's the geek factor," he says. "Some recumbents are beautiful, but it's not the same thing all your buddies are riding."

Peter Stull, owner of the Bicycle Man in Alfred Station, NY, agrees there's an image problem. Though he is one of the country's most evangelical sellers of recumbent bikes, he readily admits that they "tend to attract fat guys who want to get back into shape," he says.

Perhaps those New Hampshire-bound mountaineers, too, believed that David Gordon Wilson was a mere faddist years ago when they blackballed him from their White Mountains hike. Wilson thought otherwise, and that day bicycled his machine from his home in Cambridge all the way to the trailhead at Pinkham Notch—a journey of about 160 miles. He completed it in a single day. "I arrived at 5:15," he says. "Just in time for supper." He was deemed fit enough to hike. •



## **Test-Drive**

Eager to ride a recumbent bike, I took delivery of the Wisconsin-based manufacturer Volae's 2007 Century, a \$2,175, lightweight, candy-red steel-frame model. Early results were mixed. The pedals are positioned fairly high above a small front wheel, making the whole contraption hard to control, a fact not improved by the placement of the handlebars at thigh-height, where they sometimes hit the knees. I eventually got the hang of it enough to go for a quite pleasant tour of a nearby park, where I enjoyed bemused looks from pedestrians. The bike's frame had been specially fitted to my own, and the result was a wonderfully snug cycling machine. I could imagine being able to fly aboard it someday. Indeed, after another spin, and then another, my learning curve had steepened, I was steady and soon found myself humming along at a pretty good clip. www.volaerecumbents.com —JS