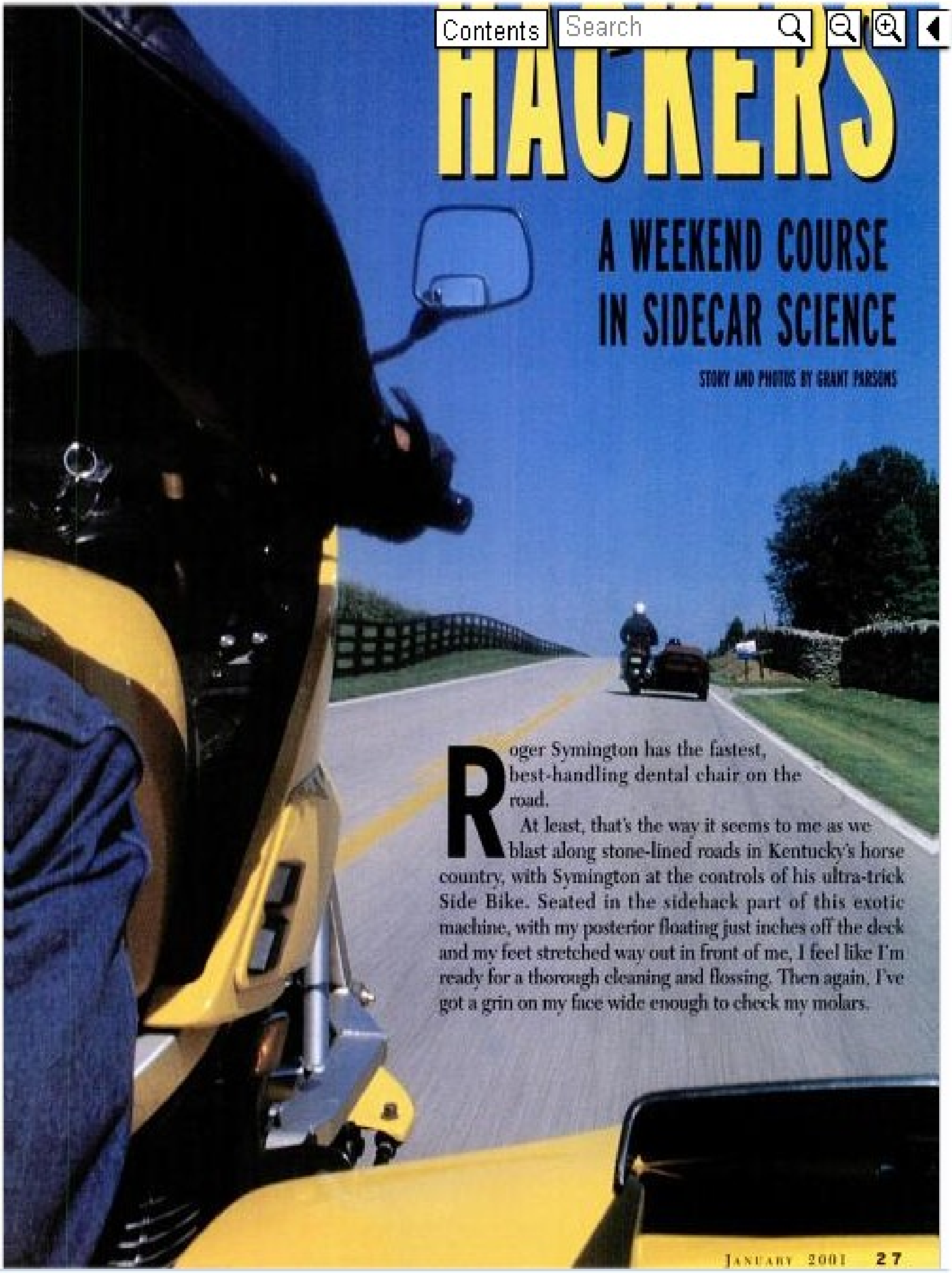
HACKERS

A WEEKEND COURSE IN SIDECAR SCIENCE

STORY AND PHOTOS BY GRANT PARSONS



Roger Symington has the fastest, best-handling dental chair on the road.

At least, that's the way it seems to me as we blast along stone-lined roads in Kentucky's horse country, with Symington at the controls of his ultra-trick Side Bike. Seated in the sidehack part of this exotic machine, with my posterior floating just inches off the deck and my feet stretched way out in front of me, I feel like I'm ready for a thorough cleaning and flossing. Then again, I've got a grin on my face wide enough to check my molars.

it can carry a bigger family than some cars.

That's the thing about sidecars. They represent one of the few specialties within motorcycling that children get their parents started on, instead of the other way around.

"My wife and I were big into riding," says Bruce Stephens, who rode here from Bethlehem, Pennsylvania, on a Royal Enfield hack. "When we had our first kid, it was, 'Well, what do we do now? Does one of us go at a time? Do we get a babysitter? Or do we find some way to do this as a family?'

"We decided to get a sidecar, and just never stopped."

As someone with a kid in my own household, I can definitely see the attraction. But there's no denying that the hurdles in the

Up where Roger is sitting, piloting the motorcycle part of the rig, I'm sure our speed seems absolutely normal—legal, even. But down here, close enough to the asphalt that when I lean into right turns weeds snick my helmet, it feels like we're going about a million miles per hour.

It's a serious hoot, and it blows away all my preconceived notions of motorcycle sidecar rigs. Which is exactly what I was hoping for when I came to the United Sidecar Association National Rally, based at the rolling Kentucky Horse Park in Lexington.

I've always thought of sidecars as cool in a vintage kind of way—stately period pieces that recall a different era in motorcycling. Symington's machine, pairing a screamin'-yellow-zonker Yamaha FJ1200 with a French-built Side Bike Comanche sidecar, shows me another side of three-wheel motorcycling.

"For me," Symington says, "It's all about performance."

No kidding. The monster six-piston brakes and fat, square-section car tires on each wheel should have been a clue. But the late-braking capabilities of the rig, and the cornering forces it can generate thanks to a sidecar wheel that steers with the front end, are beyond anything I ever expected.

By the time our hour-long ride is over, I know two things:

First, Symington is nuts—and I mean that in the best possible way.

Second, sidecar rigs can be as different as, well, motorcycles as a whole. There are touring machines, cruiser machines and sport machines, all within the sidecar category.

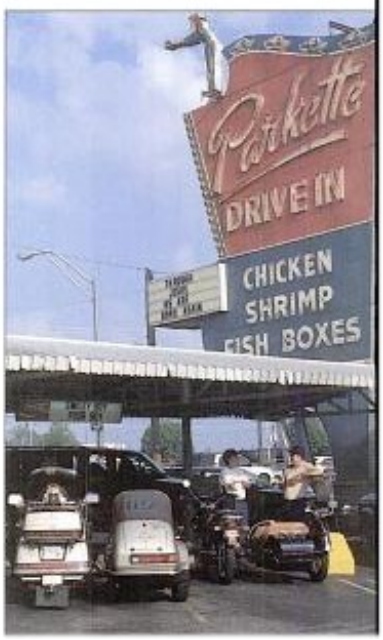
The one thing they all seem to have in common, though, is a non-threatening image we two-wheeled motorcyclists can only hope for. All kinds of people, even non-riders, seem to be drawn to sidecar rigs.

"We're not the bikers your mom warned you about," says Jim Cain, president of the sidecar association. "We're probably the most outgoing group of motorcyclists you'll ever find."

One reason for this is instantly obvious at the rally. Unlike most motorcycle events, there are plenty of kids along for the ride.

Most of the rigs are set up for one operator on the bike and a passenger in the sidecar, but a few can haul a serious load. Take one Gold Wing at the rally, for example. It's got the standard two seats on the bike, plus a massive Wat-

All that and a bag of chips: Sidecars offer major carrying capacity, all-weather stability and a way to really stand out on the road (above) or at the drive-in (below).



way of would-be sidecar riders can be daunting. First, you need to relearn almost everything about motorcycling.

"When you look at it, a sidecar makes no sense to traditional motorcyclists," says Gary Haynes, an experienced "rigger" who helps people assemble sidecar outfits. "They eat up gas. They eat up tires. They pull to the right when you start. They pull to the left when they stop."

And countersteering? It just doesn't exist.

The trick, says Haynes, is to realize from the start that you're not on a motorcycle. A sidecar is something completely different.

"Generally," he says, "with most modern sidecars, you're a dual-track vehicle weighing a thousand pounds or better. You've got maybe 100 horsepower, and you're on 6-inch car tires.

"That's just the nature of the beast, and you have to live with it."

But before you can live with it, you have another problem to face: How do you get a sidecar outfit?

Although no hard numbers exist, enthusiasts figure there are probably a few hundred thousand sidecar rigs running around out there, only a tiny slice of the overall motorcycle market. That means it's unusual to even see a sidehack on the road, let alone find one for sale.

There are a few companies that still offer new, off-the-showroom-floor rigs—Harley-Davidson, Ural and MuZ, for instance. And there are a few companies that assemble complete rigs with their own sidecars. But beyond that, many are put together by enthusiasts in their own garages.

The problem, as Haynes cautions, is that it's not quite as simple as bolting all the pieces together. There are several critical elements of sidecar geometry that you need to understand.

The most important is called "wheel lead." It's a measure of how far the sidecar wheel sits ahead of the motorcycle's rear wheel. Then there's "toe-in"—how much the sidecar wheel points inward, toward the motorcycle. And finally, there's "lean-out"—the angle at which the motorcycle leans away from the sidecar to counter the crown of the road.

Get the last two wrong, and you may end up with wonky handling or poor gas mileage. But the stakes involved in screwing up the wheel lead are far higher.

Many people know that a sidecar rig with the car mounted on the right (as they are in places where we drive on the right side of the road) can actually loft the sidecar wheel in a tight right turn. This can come as a surprise to the passenger, but it's a fairly controllable event for an experienced rider. As Haynes notes, however, getting the wheel lead wrong can lead to a more serious problem.

"If the sidecar wheel is too far backward," he says, "then the weight shift can lift the rear wheel of the motorcycle in hard left-hand corners.

"If that happens," he adds, "you better have good religion, because that's the only thing that's going to save you. Your instinct will be to brake, and that will only take you the rest of the way over. You have to straighten out the bars and ride it out—and that only works if there's room directly in front of you."

Besides those issues, Haynes notes that most well-done sidecar outfits incorporate changes to the motorcycle as well. A stiffer frame, beefed-up brakes and even a fork with more rake can all help a hack roll down the road better.

It should be clear, then, that rigging up sidecars requires more than enthusiasm. For that reason, Haynes recommends that novices look for a factory-rigged machine or one assembled by a sidecar manufacturer (a good resource for finding sidecar manufacturers is the Sidecar Industry Council, P.O. Box 8119, Van Nuys, CA 91406; (818) 780-5542). Barring that, he suggests purchasing a good used rig that's already sorted.

How does a sidehack feel when it's set up right? Haynes tells me that you shouldn't have to fight the steering and that gas mileage should be good. But then he adds that there's a better way to find out—by riding a sidecar rig myself.

Thanks to Dale Radcliff of Ural Classic Sidecars of West Virginia, I get the chance to do just that. Radcliff sets me up with a Ural Deco Classic, one of the most authentically old-looking new motorcycles you can buy anywhere.

There's a reason for that. Ural rigs may be assembled in the U.S. these days, but

The coolest of vintage hacks? A 1930s-era Nimbus, from Denmark (left). Gary Haynes' rig (below) offers more modern technology, including a leaning sidecar controlled by buttons on the handlebars.

many of the parts come from the former Soviet Union, which has been building copies of pre-World War II BMW boxers for decades. The U.S. version gets several engine and drivetrain upgrades over its Russian counterpart, but it's still pretty much a 1933 design—and an attractive one, at that.

Naturally, given that decades-old technology, you can't expect a modern ride, and the Ural doesn't disappoint. The engine makes no end of mechanical noises, and the transmission shifts like a tractor.

But in spite of all that (or maybe in part because of all that) it's a load of fun. The controls are all the same, but it's a completely different experience from riding a motorcycle.

The most noticeable adjustment is that, like all sidecar rigs, the Ural doesn't countersteer. No matter what your speed, you turn right to go right—more like an ATV than a bike.

I find myself planning turns much farther in advance than I normally do. And even a quick introductory ride makes me realize that this thing requires a bit of upper-body strength to muscle around, especially at parking-lot speeds. At higher speeds, the rig is neutral under even

Never let it be said that sidecarists aren't proud of their three-wheeled obsession.

throttle, but you have to get used to the fact that suddenly accelerating or decelerating usually requires a steering adjustment.

In a quick test ride, I start to get the hang of it, but before heading out into traffic, I'd want an opportunity to practice these different skills in a controlled setting. Fortunately, the USCA offers that chance through the Sidecar/Trike Education Program, a rider-training course for hack pilots.