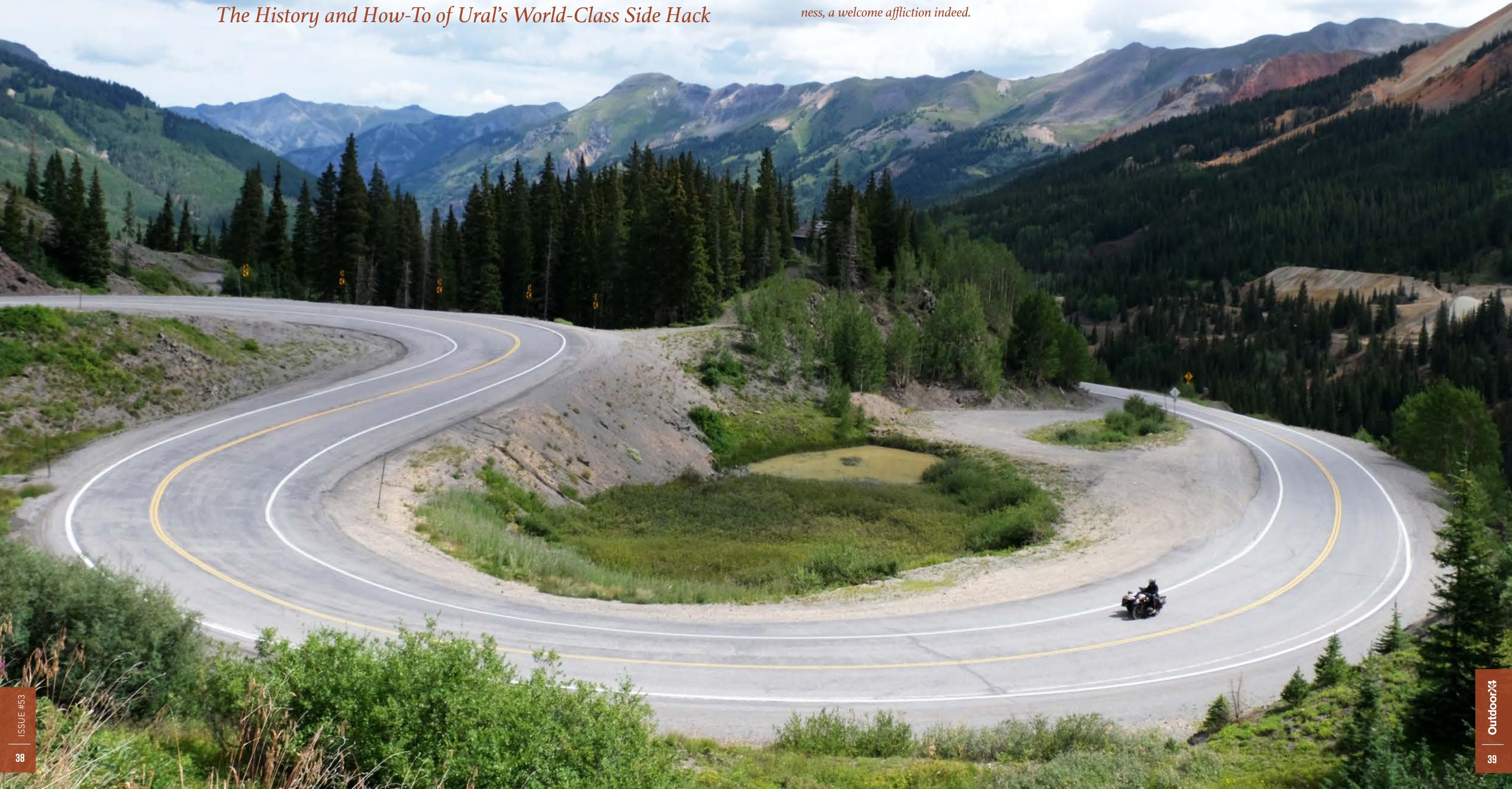


GEARING UP

The History and How-To of Ural's World-Class Side Hack

WORDS – BILL DRAGO | PHOTOS – SUSAN DRAGO

The 1960 BMW R60/2 is one of my favorite motorcycles of all time. It is simple, robust, easy to work on and it draws a crowd everywhere it goes. It embodies the essence of a motorcycle and its infectious personality is a quickly acquired blood-borne illness, a welcome affliction indeed.



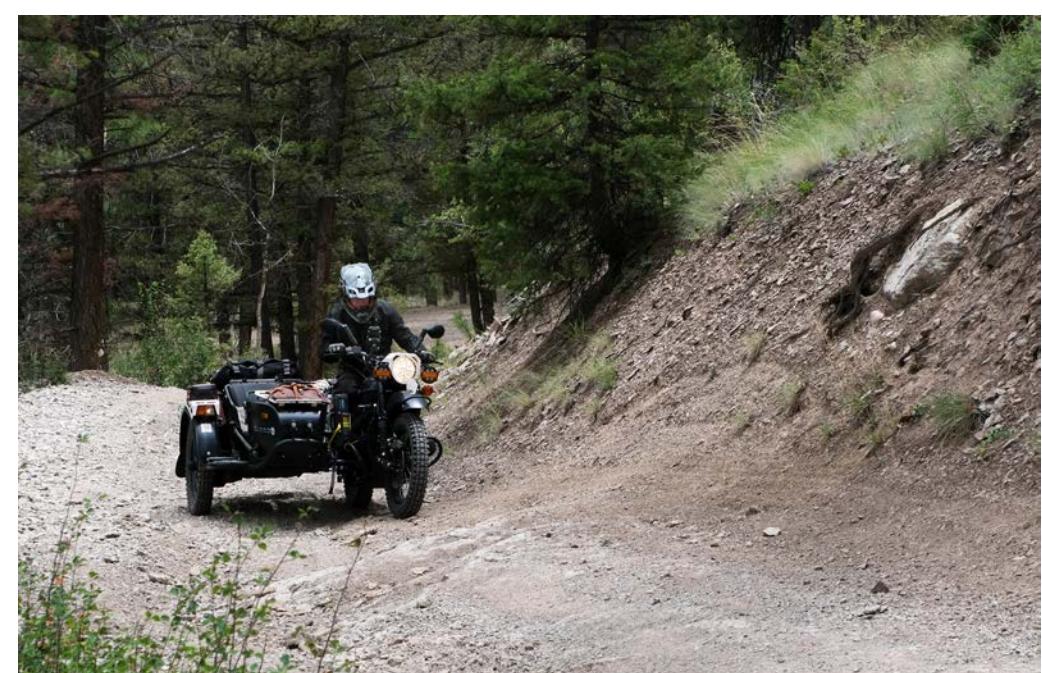
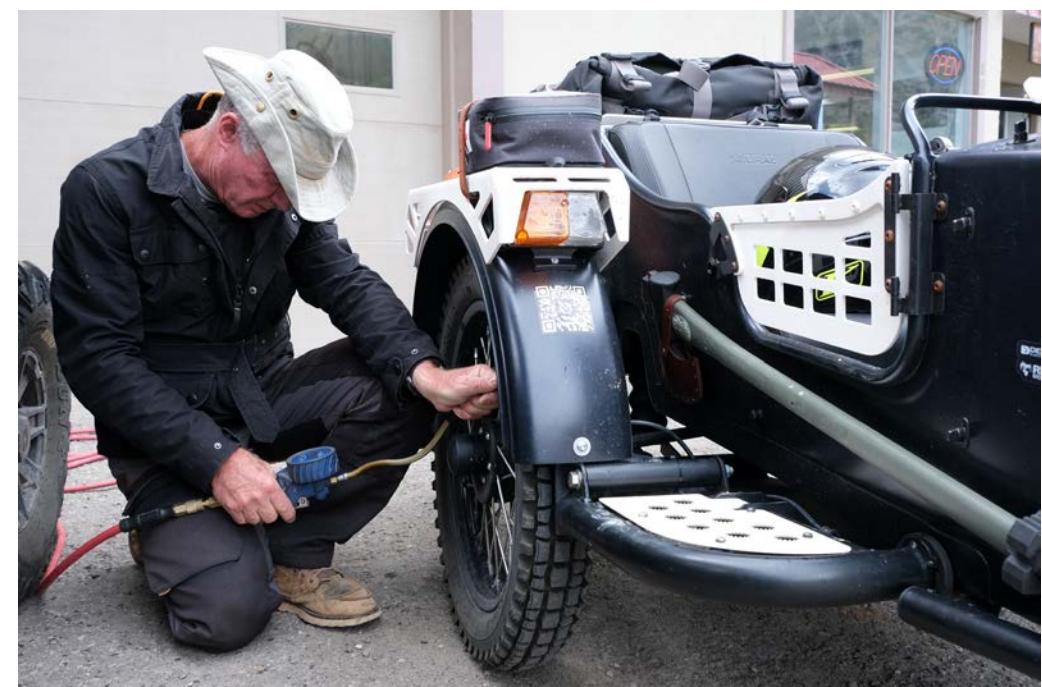
Imitation is the Sincerest Form of Flattery

The 2024 Ural Gear Up is a fair representation of my old BMW. Not surprising, actually, since the Ural's Russian makers "borrowed" its design from a late 1930s BMW R71. The Red Army needed an agile machine, durable enough to carry military loads and personnel quickly over rough terrain to answer the fast-paced warfare of Germany. So, in 1940 the Russian military under Joseph Stalin ordered the production of a new motorcycle based on the BMW. The Soviets purchased five R71s through a third party in Sweden and reverse engineered to replicate their enemy's somewhat balky but beautiful bike...um, trike, since it was designed to tote a sidecar.

Initially dubbed the M71, the early Ural's designation was soon upgraded to M72. The name "Ural" was adopted later, an appropriate moniker when the factory moved from Moscow to a brewery in the town of Irbat, tucked into the Ural Mountains on the edge of Siberia to escape the reach of German bombers. Almost 10,000 M72 motorcycles rolled out of the Irbat Motorcycle Factory (IMZ) for the war effort, and in 1953 IMZ began building civilian models. By the late 1950s military production had moved to Kyiv, Ukraine. Almost every component originated in the plant, from rubber bits, castings, frames and shocks to control cables, plastic pieces and brakes. Ultimately Ural employed some 10,000 workers, producing about 130,000 units annually. The Irbat facility began producing machines for the domestic market and became the only large-scale motorcycle manufacturer in the Soviet Union. The next forty years saw Ural motorcycles selling in Southeast Asia, India, and Western Europe. In 1994 the independent company Ural America set up shop for distribution in the U.S., which became their largest market. By 2023 Ural boasted 190 independent dealerships worldwide, including high-volume markets in Australia, Canada, the EU, Japan and the United Kingdom.

Chitty Chitty Bang Bang?

Like the lovable rattletrap of the 1968 film, *Chitty Chitty Bang Bang*, the Ural has always been a charming machine to ride but ownership required a deft wrench-hand and a willingness to put it to use by the side of the road. Almost any average mechanic could work on it, which was a blessing because Russian-built Urals were known to be unreliable, fussy and clunky in an old-truck kind of way. Castings were rough, gears loosely meshed, electrics were finicky and materials lacked the quality of modern machinery, especially compared to the Japanese motorcycles of the 1960s and beyond. Breakdowns were common, almost an accepted part of Ural ownership.





Constant, Never-Ending Improvement...

...was not initially part of the Ural heritage but by the 21st century a focus on quality became necessary to survival. In 2006 Ural's corporate headquarters moved to Redmond, Washington. Quality has steadily improved and reliability is approaching modern expectations. Ural adopted electronic fuel injection in 2014 and five years later improved it for easier starting and to meet Euro 5 emission requirements. A two-year, unlimited mileage warranty adds value and owner confidence. Urals are now built in Petropavlovsk, Kazakhstan, under great scrutiny. The Ural Gear Up's traditional 750cc 41 hp motor received completely new precision-machined castings in 2023, with a two-piece front bearing housing and rubber gaskets in critical areas where leaks were prevalent in older models. Roller lifters replaced the original flat tappet design of old, extending cam life and lengthening valve adjustment intervals. Brembo brakes now bind all three wheels, adjustable Sachs shock absorbers provide suspension, and Heidenau tires are standard equipment. The widely spaced four-speed gearbox (plus reverse) remains fundamentally the same but CV joints have replaced the previous driveshaft and drive axle U-joints for a smoother, more durable transfer of power to the drive wheels.

Who Would Bother?

Riding the Ural is a horse of different color. It is neither motorcycle nor car. Even the Can Am Spyder, Polaris Slingshot or a conventional trike handles completely differently. At first blush, the Ural's steering feels heavy and the machine seems to have a mind of its own. For someone who is married to a modern vehicle with power steering and air conditioning, plush interior and cushy suspension, this might feel a bit too primal. If you are addicted to the three-dimensional allure of a motorcycle, leaning into curves with the touch of a handlebar, it might feel clunky and heavy. Ural riders, sidecar drivers in general, are a rare breed. The very handling characteristics that make it strange are endearing once mastered, and they add another dimension to adventure travel. You never have to put down a foot at stop signs. Friends and strangers are wowed when you back out of a parking lot and passengers are thrilled (or terrified) when you fly the chair with them inside, a feat not recommended for first dates. The sidecar is at least more comfortable than riding pillion, and the heritage of these odd machines is unparalleled.

Taming the Beast

My wife Susan and I recently had the unique opportunity to ride a Ural in the magnificent San Juan Mountains of Colorado. Our experience was one of the more memorable outings we've had in a long time. Initially, some accuse the beast of trying to kill them. This really isn't fair unless you have spent enough time in the saddle to learn the physics of a completely different kind of transportation, one most people will never experience. The



tendency on right turns for the car to "fly," or lift off the ground, forces the driver to widen the turn radius or slow down to prevent upsetting the whole kit and kaboodle.

I can relate, as on two occasions I crossed the centerline when I felt the car lifting on a right-hand turn at some speed. I quickly backed off the throttle, which yanked the bars left, putting me in harm's way against traffic. Thankfully there WAS no traffic at the time. It wasn't long before I had explored the nature of the machine enough to learn the critical point of no return and could stay within the envelope, or lift the wheel at will. I also discovered that by extending my vision farther down the road and riding more conservatively than on a standard two-wheeler, I could prevent those whoopsies that lead to unplanned changes of underwear. Adding my wife to the sidecar also helped minimize aerial acrobatics. Although her added weight made it more difficult to fly the chair, the consequences also helped keep us grounded...mostly.

Shift and Wiggle

When shifting, the Ural does a little wiggle dance unless you are ahead of the machine. This typically happens when accelerating or on extended climbs like Monarch Pass, where high power settings are interrupted by quickly squeezing and releasing the clutch. There is a yawing moment or tendency to turn left when braking or de-powering. It is caused by the inertia of the car against the motorcycle portion of the rig. Acceleration and deceleration forces act against the rear drive wheel, which is placed roughly four feet left of the car's wheel, and make the rig pivot accordingly. A strong hand is required to keep the bike steady when riding in this way. It would amount to two skaters holding hands and the one on the left suddenly rolling over carpet while the other is still on a hard surface. When the skater on the carpet slows, they will sling the free-rolling skater to the left. The opposite happens when the other skater rolls over the carpet, hence when shifting, acceleration is interrupted by sudden engine braking, then another acceleration as the clutch is reengaged. Smooth operation is well rewarded.

The Gentle Way

These tendencies aren't difficult to mitigate once the rider retrains their habits to address the lateral forces before they occur. This can be done in two primary ways. When shifting, first roll back slightly on the throttle to balance any forward pull or acceleration. Ease in the clutch, shift, then ease it back out again while gently rolling on the throttle. The rig might tug a little to one side or the other but very mildly by comparison. Treat it nicely and it will respond accordingly.



Some Like It Rough

Don't fight the rig. Instead, when riding more aggressively, especially on flat gravel with good sight distance, use the yawing tendency to your advantage to initiate a turn. For example, if you are approaching a left turn, roll in at some speed then roll off the throttle just as you initiate the turn. The motorcycle will effortlessly ease into the turn with little further input from the rider. If a tighter turn is desired, simply tap the rear brake and the rear tires will begin to slide out or "drift," pointing the rig deeper into the turn. This is called oversteer. The skid isn't hard to control if you ease into it gradually, and the fun factor is off the scale. You will be bootlegging turns in minutes.

For right turns, as long as the road tapers gently towards the shoulder or ditch, you can use the car's wheel to scribe a lower pathway than the wheels on the motorcycle. The open-view turns on Owl Creek Pass near Ridgway, Colorado were the perfect playground for this kind of riding. Simply drop the wheel into the groove and let'er rip. The motorcycle and sidecar would track like a slot car on right turns and the car's usual tendency to lift was offset by the camber of the road. If you reduce power, however, the rig will understeer making it harder to turn so it's best to stay on the gas.

These are just a couple of techniques for riding the Ural or any sidecar rig. Use moderation as you explore the possibilities and don't push your limits except when conditions are right to do so. Experts and lifelong side hack riders can perform incredible stunts and tricks far beyond these, but with a little practice, the old BMW knockoff can be a blast to ride and you will make new friends at every gas stop. The history, handling and overall experience of a Ural isn't for everyone, but those with a strong spirit of adventure will find it a unique way to explore the backroads and trails of the American West and beyond.

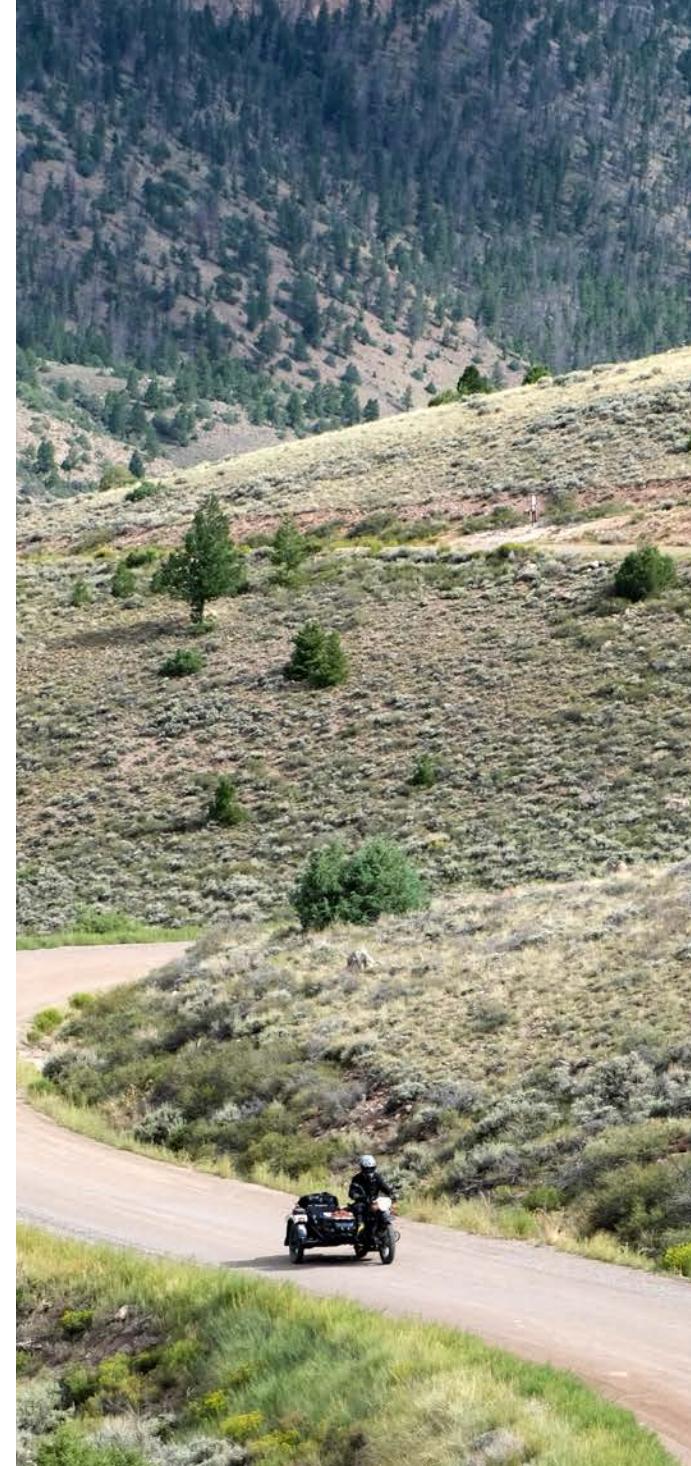
Editor Note: If you want to learn more about Ural's Gear-Up as discussed by Bill from this story, scan the QR code and watch this video highlighting everything about this fun bike. 

BILL & SUSAN DRAGOON

AUTHOR BIO

Bill and Susan embrace adventure travel in many forms – two-wheeled, four-wheeled, and on foot. As long as it involves experiencing more of the great outdoors they are hard-pressed to resist an opportunity. When Bill's not tackling the toughest trails in the Rockies on his adventure motorcycle and Susan's on a break from leading women backpackers through the Ouachita Mountains, the two are exploring together in their Toyota 4Runner, the "GS of Trucks".

A desire to connect contemporary explorers with the places and people of the frontier led the Oklahoma-based couple to study and travel the region of Comancheria. Among his many pursuits, Bill is an MSF-certified riding instructor and recently kicked off an Adventure Riding Skills class near the Dragos' hometown of Norman. Bill was a member of the 2010 BMW GS Trophy team, representing the United States in competition in Africa. Susan devotes much of her time to historical travel writing and outdoor photography.



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