

FOR THE JOY OF RIDING

MOTORCYCLE

JOURNAL

Winter 1972-73

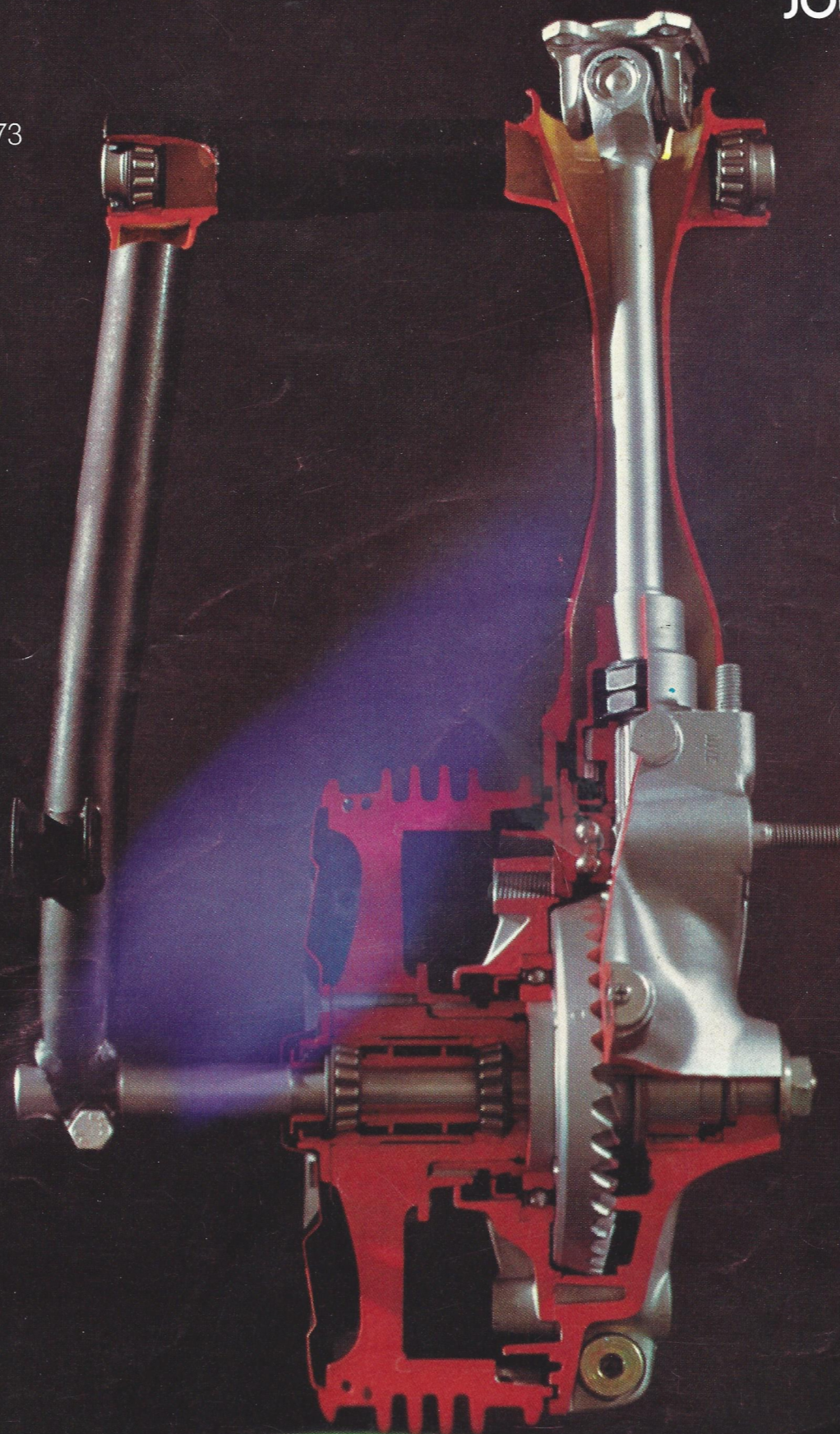


PHOTO: VOLKER BEER

For the Joy of Riding

In the winter of whose discontent?

"In the winter there's not much to do anyway, except the things you should have done in the summer. Like the chain bit. All four of us—me, Fat Freddie, Stan, and Murray—were down in the garage soaking those chains in kerosene, stretching 'em out on butcher paper to check the wear, boiling them on Freddie's camp stove in that foul black stuff. It is what you might call messy.

"So in walks this guy dressed in some kind of dark blue pilot suit and he's carrying a helmet. 'Space cadet,' says Murray. This guy's got heavy black boots and he walks to a parking stall further down. We can see him through the chain-link fence that separates the stalls.

"There's a bike down there and he fiddles with it a minute, punches a button on the handlebar and it fires right up. Nice sound, low and quiet. He puts on his helmet and a pair of leather riding gauntlets, gets on the bike. We hear the stand slap up and he's riding past us, even giving us the nod. He charges up the ramp and we hear a click as he changes gear but that bike's so quiet it's almost eerie.

"'You can always tell a BMW owner,' says Murray. 'That fool doesn't even know it's cold outside.' We nod because Murray as usual is right on. Even though it's a bright day out there and the garage is dark. When we hear the garage door close, we go back to boiling our chains."

So spake a reader of the BMW Motorcycle Journal who (incidentally) now owns a BMW. And we heard more from many other readers. You BMW owners certainly don't sit tight when you read a good (or a

bad) thing about BMWs. Your response to our first issue was tremendous and we loved all of it. The gripes and complaints as well as the praise. If you keep it coming we'll keep firing back. And that should keep the Journal the two-way street we want it to be.

Incidentally, we discovered that many non-BMW riders were reading the Journal also. We welcome you to our pages and hope you'll find some interesting ideas.

Readers sent us articles, travel stories and photographs, too, much of it very fine material. I wish we had room enough to publish it all. As it is, we've chosen two "winners" whose contributions begin on the center spread of this issue. Karen Shane of Albuquerque, New Mexico, tells how an offhand remark led to a whole new world of touring and adventure. And Gunter Kaufmann sent a magnificent vacation

photo taken in the Canary Islands. Both will receive a token of appreciation from Butler & Smith.

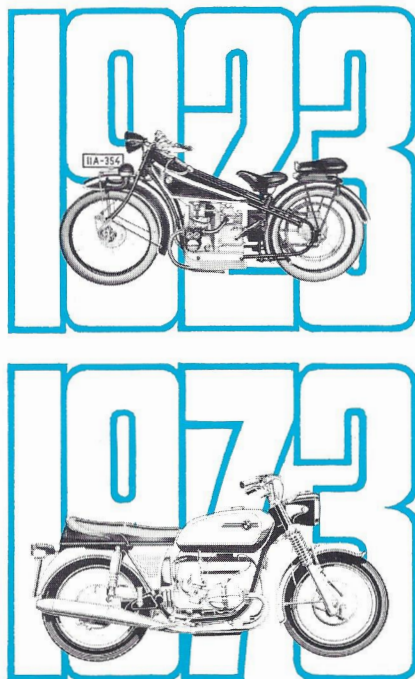
In fact one of the most impressive things about the mail that came in was how widespread in geographical location BMW owners are. We heard from practically every state in the U.S. and other nations. And to top that, you need only read the places BMW owners have *been*—on their BMWs of course. Europe, Asia, Alaska, Central and South America, you name it! We're happy to confirm our suspicions that BMW owners make the world's finest touring motorcycle earns its reputation the hard way.

A few readers felt that there wasn't enough coverage of BMWs from earlier model years. Well, we were holding out deliberately on that, for our next issue will be a gala celebration of BMW's fiftieth anniversary. We like the old bikes, too, so stay with us: you guys will get your day.

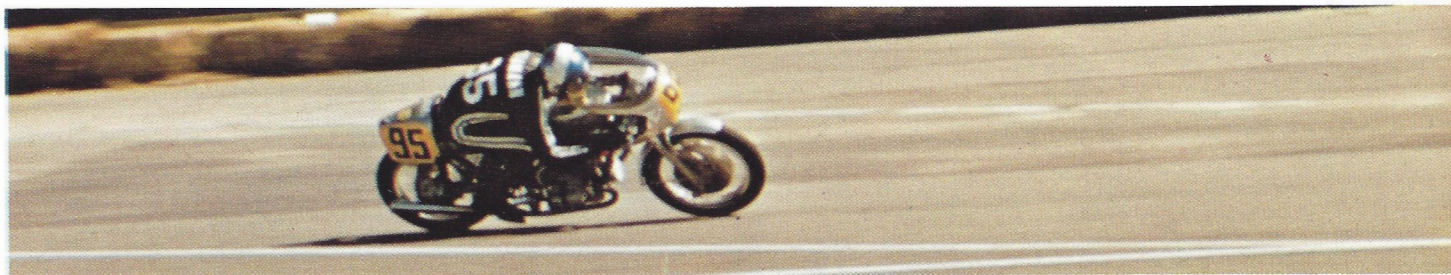
Some letters came in from riders announcing their receipt of 100,000-mile awards. We applaud you all and wish we could acknowledge each award. We doubt very much if any other manufacturer has so many bikes that have gone so far. In fact if any of you newcomers would like to shoot for one of the awards, let your dealer know that you're in the running. He's the man who, by following the service life of your bike, can verify that you actually went the distance.

Until next issue, we hope you'll enjoy the winter. We especially hope you won't have to spend it down in a garage, boiling a chain...


John P. Covington



Front cover: BMW's unique engineering masterpiece, an in-unit swingarm, drive shaft, and ring-and-pinion rear drive. Back Cover: Kurt Liebmann leading the field on the new BMW 750cc RS.



BMW Wins Four Championships

BMW's U.S. racing effort is not a massive, heavily-funded campaign with platoons of riders, development engineers, and mechanics. Rather it consists of a few enthusiasts backed-up by Butler & Smith's two-man racing department, Udo Gietl and Helmut Kern. With initial factory help, these two build and tune a handful of BMW R 75/5 racers. Yet in less than one year, this modest group has been able to deliver four championships!

Reg Pridmore did it on the West Coast by winning two: the AFM production class championship on a BMW R 75/5 and the AFM 750cc Grand Prix title on the new BMW 750 RS. In the East, Kurt Liebmann captured the AAMRR Grand Prix title in the 500cc class on a BMW Rennsport (RS) and the AAMRR open class Grand Prix on a new BMW 750 RS.

And now, instead of resting on their laurels, the group is preparing its assault on 1973. Udo spends long winter nights at the dynamometer trying to squeeze one more horsepower from the engines while the others clean up, mend and repair such running gear as fairings, brakes and cables.

The pace gets especially hectic as Daytona approaches, America's premiere roadrace. There, with a little bit of luck against random mishaps, the long winter's effort will get a chance to prove itself. Excitement will reach its peak on the last day of race week: the running of the 200-mile Daytona classic. Two new 750 BMWs will be ready for competition at Daytona.

One will be ridden by Kurt Liebmann, who, as a result of last year's successes, has been advanced to the AMA Expert class. Kurt has been racing since he was sixteen and his record book is impressive. His first championship came in the early Sixties when he took the Canadian 200cc Championship. Since then he has twice been the Canadian National Roadrace Champion and won numerous American and Canadian class championships in FIM-style racing. Kurt lives in New Jersey and is married to the former Candy Neussom, daughter of TV-star Tommy Neussom.

The other new BMW 750 RS at Daytona will be ridden by Reg Pridmore. Reg, who was born and raised in England, came to the U.S. after gaining some excellent British

short-track experience. He came to the U.S. in the mid-sixties and soon became the ACA and AFM West Coast Champion. He found considerable enjoyment in also racing a sidecar outfit in California. It is not uncommon for Reg to enter in a single weekend the production-bike race, the 500 and 750cc GP categories and the sidecar competition. You might say he digs racing! For 1973, he plans to go all out with the new BMW 750 solo racer and he's also building a new sidecar rig.

Chuck Dearborn is the youngest member of the BMW team. Born in Summit, New Jersey, his first BMW race was in a team with Kurt Liebmann for a five-hour production race in Danville, Virginia. The Liebmann-Dearborn team won convincingly, six laps ahead of the second place bike. Since then, Chuck has maintained his edge and has completed two successful seasons racing a BMW street production bike.

Hopefully the new team is in for better times. A promising racing season lies ahead and BMW should make a good showing among the great racing marques of the day.

—Volker Beer

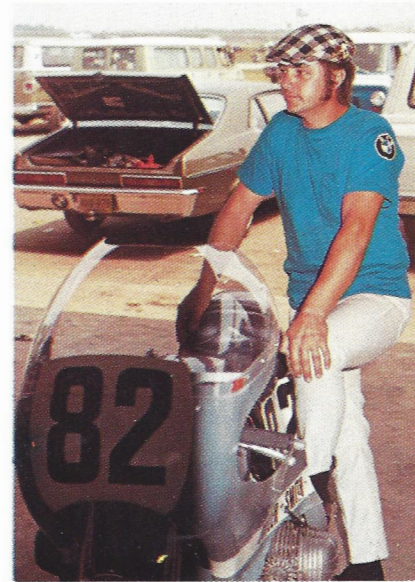
Chuck Dearborn



Candy and Kurt Liebmann



Reg Pridmore



The Lady Answered 'Why Not?'

I've decided that my flippant response of "Why not?" to various proposals is going to get me into trouble one of these days. A typical case in point occurred late last fall when my husband, John, casually remarked, "Let's buy a roadbike." Rather surprised, I nevertheless quickly responded, "Why not?", thinking he was really only speculating aloud and if he was serious, I could fake him out with my apparent indifference rather than open opposition.

In fairness to him, I should preface my story with the fact that we had always had a sports car (my definition: a sports car is not a true sporty car unless it has only two seats and no top) until the last couple years when we reluctantly relinquished it for a van, of all things.

Our Corvette hardly qualified as a tow car for John's racing Formula Vee. If we thought everything was loaded in the car before leaving for a race, we knew something had been omitted—because everything wouldn't fit simultaneously.

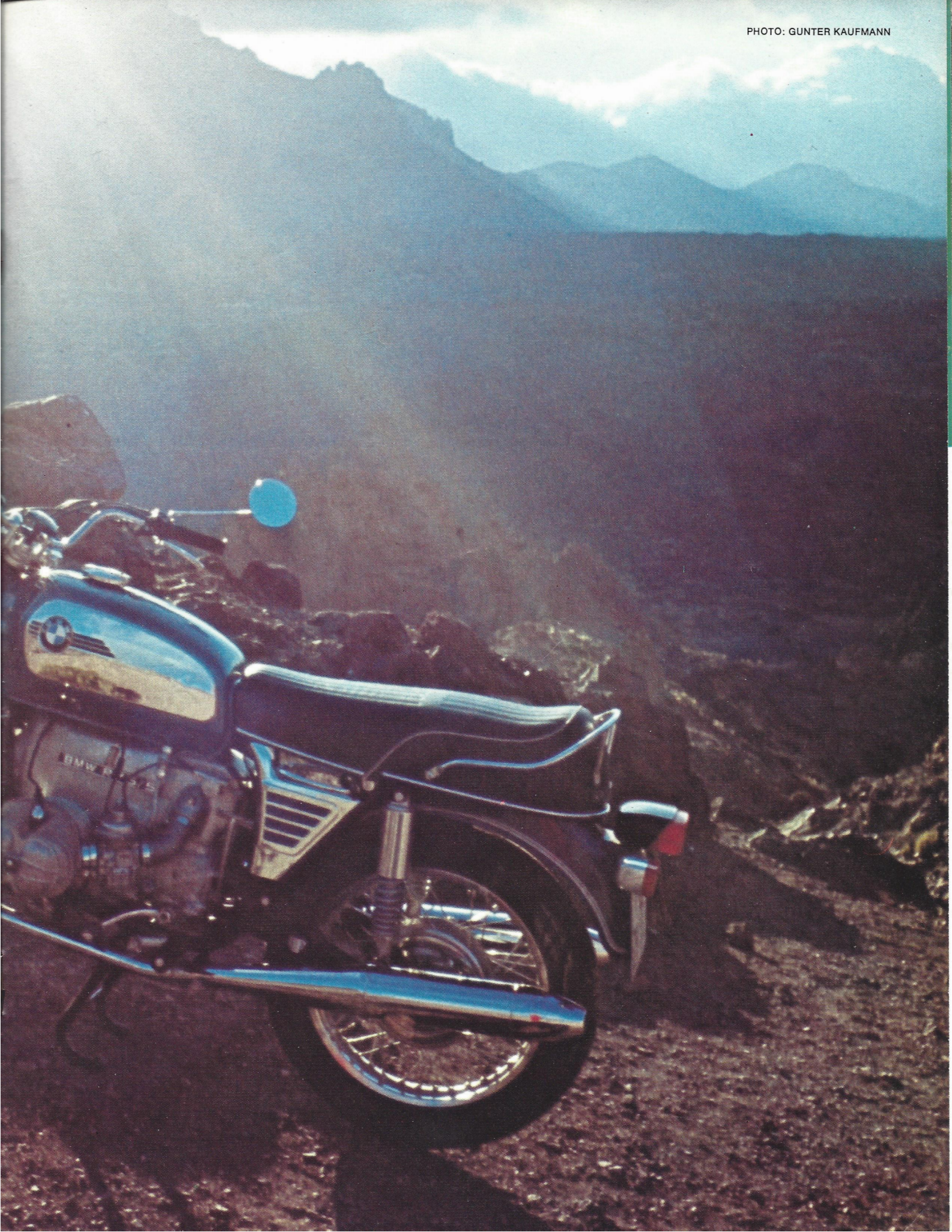
When John asked me if I would like to try sports car racing and have my own trail bike, my "Why not?" was followed up with a driver's school/regional race and my own trail bike. After 13 years of marriage, I'm beginning to suspect his motives in nonchalantly introducing ideas.

When we began searching for a new sports car we were disappointed in the low-priced cars available. John was quick to point out that a roadbike did meet my criteria for a sports car: only two seats and no top! After test driving numerous bikes, we settled on the Rolls Royce of roadbikes, a BMW. As long as he was conning me into this, John felt I ought to go first-class and get as good a first impression as possible.

By this time I was getting accustomed to the mechanics and aesthetics of roadbikes, but I still could not dispel my stereotype of the motorcycle rider. I envisioned playing chicken with the squalid highway gangs I would encounter. My relatives (Midwestern conservatives) and friends (Southwestern liberals) were, and still are, aghast that I would consider such a thing—but why not?

We had our bike only a couple of weeks when we decided to travel to southern New Mexico and Arizona. Over seven days our trip included such highlights as heat, rain, cold, shocked *maitre d's*, terrified waitresses, surprised motel owners, beautiful scenery and good words from friendly truckers. (continued overleaf)





In fact I was surprised that so many people were friendly to us and admired our way of travel.

The first day we managed some 125 miles riding right in the eye of a storm. Daunted slightly, we headed out the next morning for Douglas, Arizona, in 30-degree weather. The scenery was spectacular, however, and it eventually got warm enough for me to remove my gloves and take pictures. At our breakfast stop, the waitress had hot coffee for us even before I had removed the first several layers of clothing.

She smiled knowingly and said, "Bikers, huh? I'll bet you could use something hot!"

Tombstone, Arizona was next, and then Tucson. We did the whole tourist thing, visiting monuments and museums wherever we found them. As the country got more beautiful, the weather got more unpredictable. Sometimes we chose to reward ourselves with a posh meal. It didn't take us long to learn that phoning ahead for reservations is a wise move for motorcyclists.

As we approached Gila Bend many days later, I suddenly realized we were heading home and I was surprised to find that I really didn't want our motorcycle adventure to end. By this time I had become so nonchalant about our mode of travel that one time John caught me napping. It should be noted that I'm capable of instantly falling asleep. On a lonely stretch of highway I had put my arms around him and promptly done so. When I began to slip precariously, he decided that enough was enough.

Not far outside of Albuquerque, we had to pause as a band of Zunis drove their sheep across the highway. I reflected on our proposed trip to Canada later this year. John had assured me we would travel via van because of distance, time and weather. But I was musing about the trip via motorcycle. After all, why not?

Karen Shane

If he's lucky enough to start with a good engine, the motorcycle designer's next problem is applying power to the rear wheel and hence to the road. His choice of techniques includes chain drive, shaft drive, and even such exotic possibilities as electric or hydraulic drive. But for the present, chain drive and shaft drive are the more realistic alternatives. Let us take a look at the chief design differences between them.

Perhaps the greatest advantages of chain drive are that its initial manufacturing cost is low, it is exposed and easy to replace in case of wear or damage, and its mechanical simplicity seems to offer reliability. But experienced motorcyclists know these virtues to be deceptive.

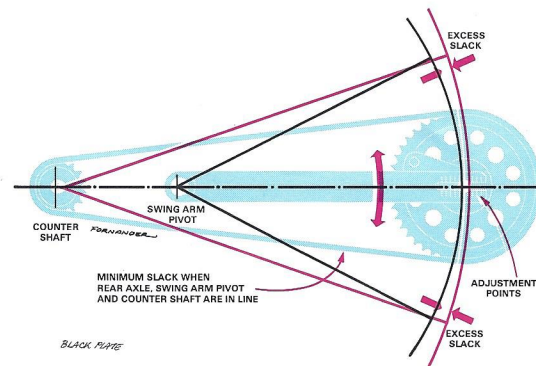
Exposure, for example, makes a chain vulnerable to rapid wear. Besides corrosion induced by water and road chemicals, tiny bits of road grit lodge in the chain lubricant to create a very effective grinding paste.

And while the initial cost of a chain drive is low, consider the cost of this maintenance — particularly for large-displacement (over 500cc) bikes. For bikes 350cc and under, a chain is probably the best overall design choice. But the lifetime of a chain on a typical high-power motorcycle average around 5,000 miles. Figuring \$32 for a replacement chain and \$23 for new sprockets, you get a parts tab alone of about \$250 for every 25,000 miles of riding. Assuming, of course, the chain has never broken in service and caused some expensive mechanical damage to other parts of the bike.

But dynamically speaking, these

parts become quite complicated. Their path around the sprockets is continuously subject to the shock loads of acceleration, gear changing, and braking. They are subjected to harsh radial acceleration as they are whipped around the sprockets and, if the chain is a bit slack from wear, standing wave forms are created in the lower run which further increases stress.

BMW's shaft drive avoids many of these problems. Being fully enclosed, its parts turn continuously in a clean, weatherproof oil-bath.

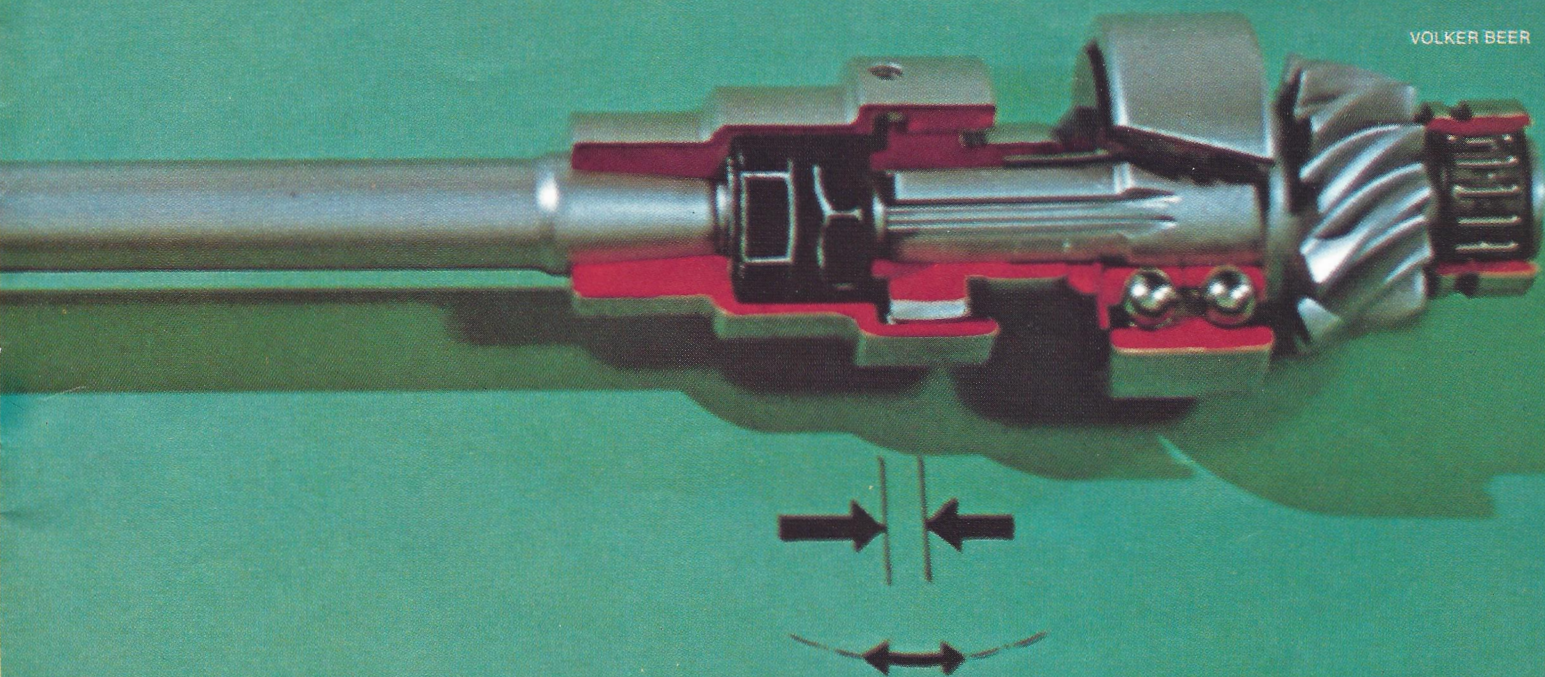


The shaft drive is connected to the transmission output by a universal joint which permits flexing as the rear wheel moves up and down. The U-joint contains four sets of expensive, durable needle bearings. At the rear of the shaft is a sliding, splined coupling that permits the shaft to change length as the rear wheel moves up and down.

A special feature of this splined coupling is that the inner part is not cylindrical but ball shaped. This per-



THE BMW MOTORCYCLE JOURNAL, Winter 1972-73, Volume 1, Number 2. Published seasonally by Butler & Smith, Inc., Walnut Street and Hudson Avenue, Norwood, New Jersey 07648. Distributed free to BMW owners of record: see your dealer. Others may obtain copies from Butler & Smith at \$1.00 per issue postpaid. Address all correspondence to BMW Motorcycle Journal, P.O. Box H, Norwood, N.J. 07648. Editorial and photographic contributions are welcomed.



mits a degree of wrist-like flexing at the coupling. The drive shaft itself therefore "floats" between two flexible joints. This relieves the stress on the rear bearings, a feature not found on other shaft-drive bikes.

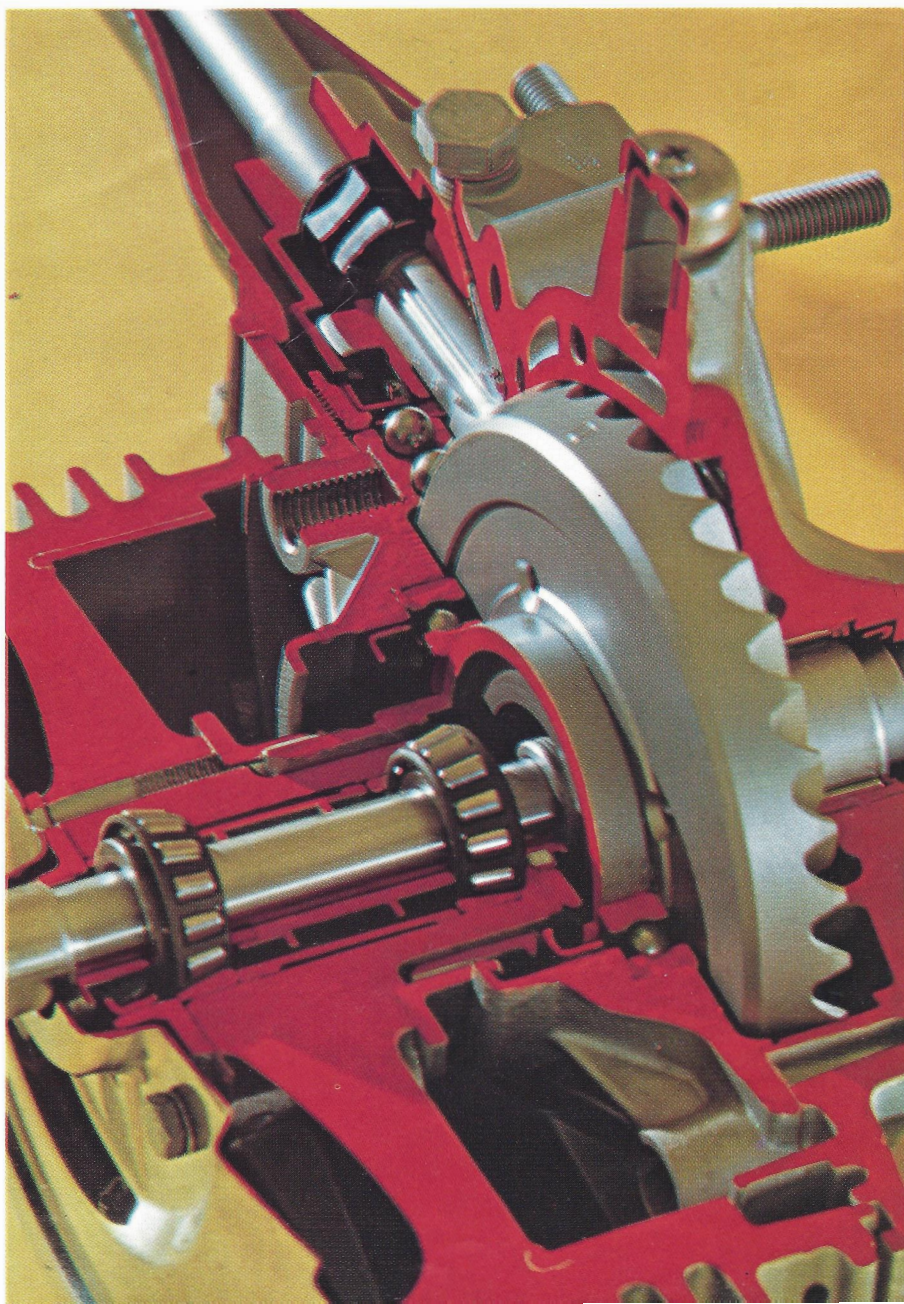
Then come BMW's meshed ring-and-pinion gears which transfer the motion of the spinning shaft to the rear wheel. BMW supports this pinion gear with a double-row ballbearing at the front and a needle-roller bearing at the rear.

BMW's ring gear also has double support, a needle-roller bearing on the outside and a ball-bearing on the inside. The overall assembly of anti-friction bearings and high-precision gears and splines is costly, but it is longlived, foolproof, and virtually maintenance free.

About the only harm that can come to BMW's fabulous shaft-drive system is over-lubrication. Although the moving parts turn in an oil bath, they are not *immersed* in oil. The needle-bearings in the universal joint, for example, are lubricated quite satisfactorily by the oil mist generated when the shaft is turning.

For the drive shaft, the correct amount of oil is 3 ounces. That is *total* oil, the amount you would add if the shaft and enclosure were bone dry. If you drain the shaft, add merely 2 ounces, as some oil remains in the boot and the housing. As a visual check for the correct amount, you can look through the shaft filler hole. When you rotate the rear wheel, and hence the shaft, the shaft should just pick up enough oil to wet its surface. You should see no standing oil.

—Volker Beer



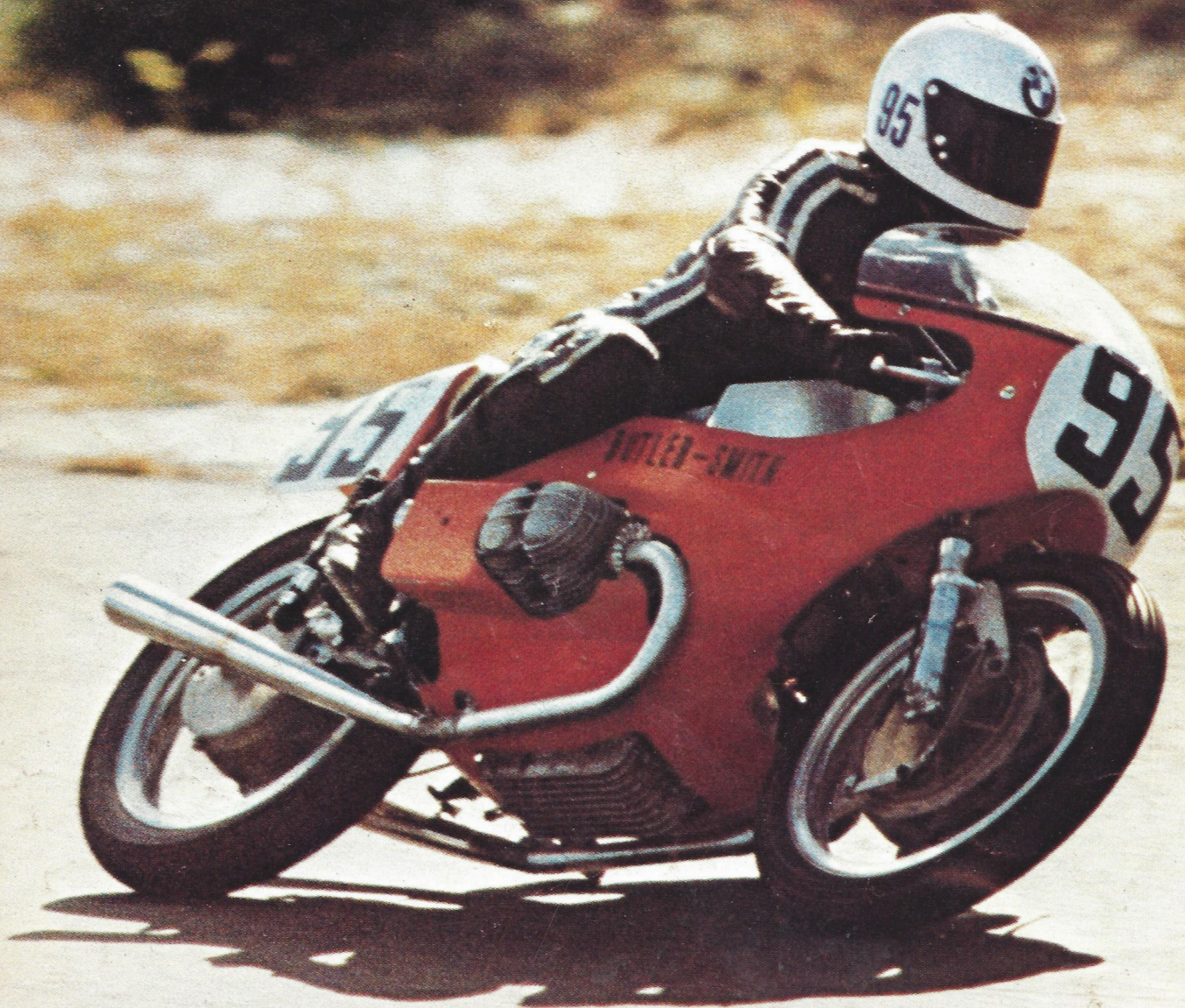


PHOTO: BILL MORANDO