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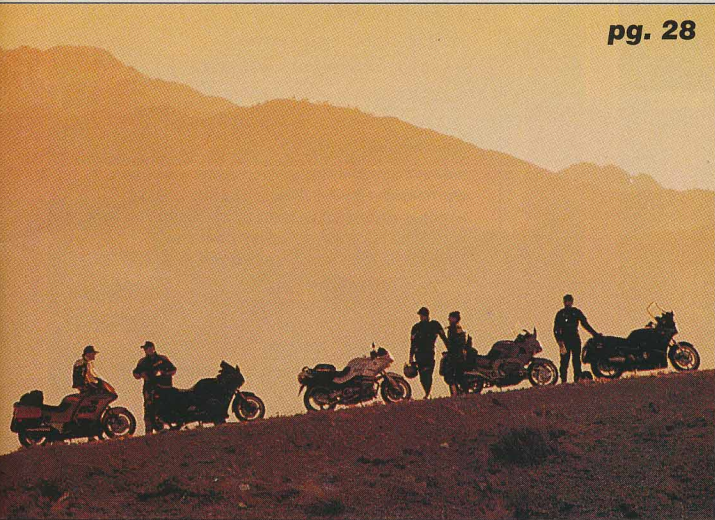
VOL. 32 NO. 8

# CW

1962 1993

AMERICA'S  
LEADING  
MOTORCYCLE  
MAGAZINE

PHOTO BY RICH COX



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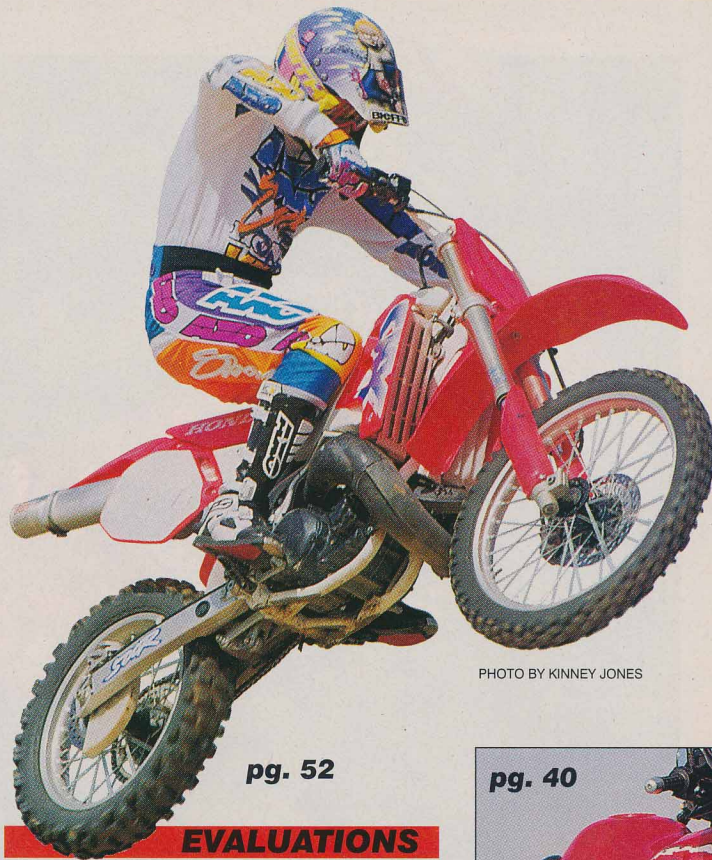


PHOTO BY KINNEY JONES

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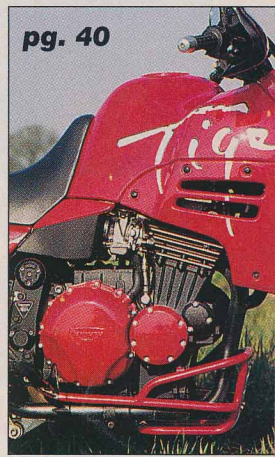


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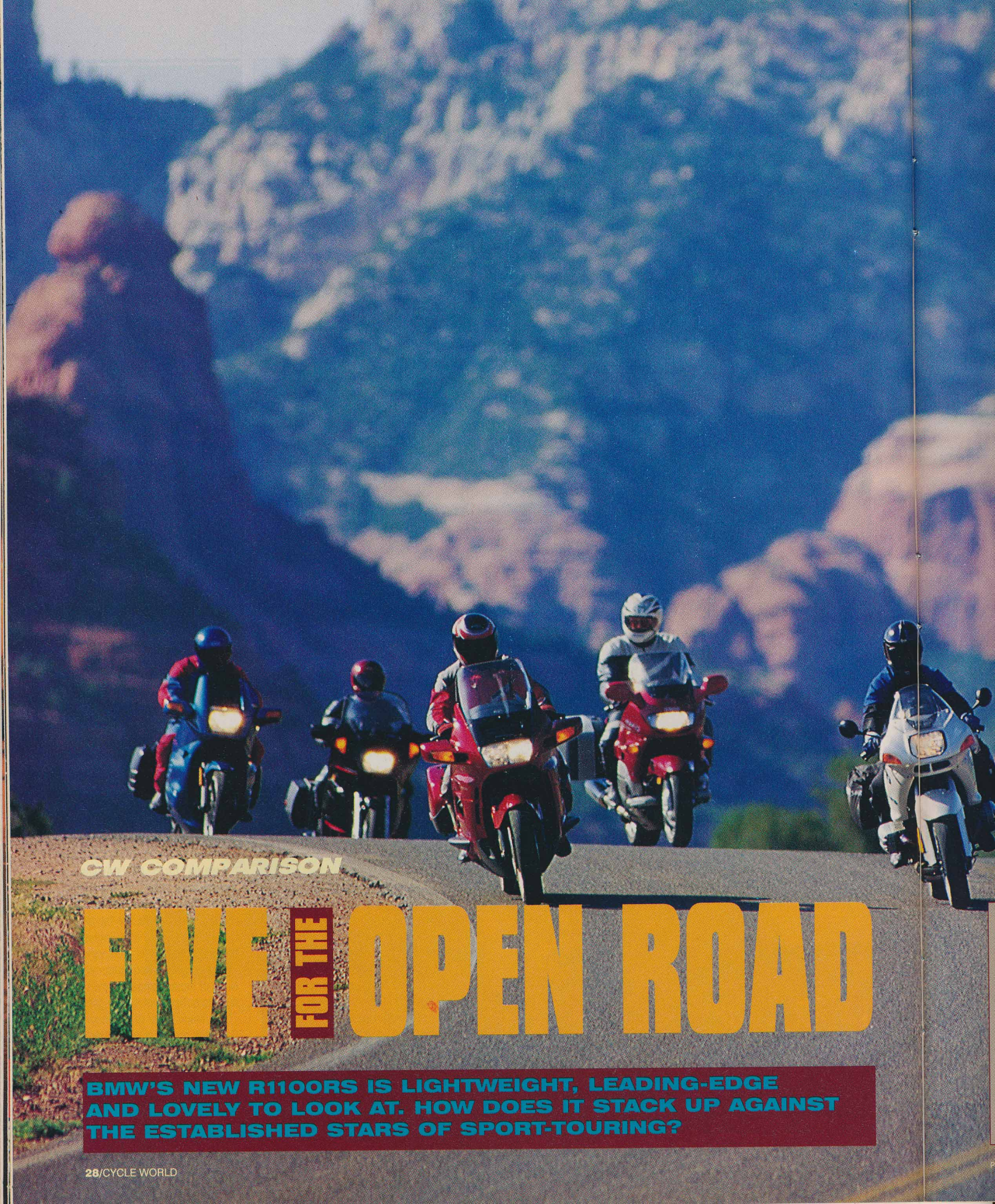
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**BMW's R100RS sport Twin, cleared for takeoff.**

Photography by Rich Cox.



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**CW COMPARISON**

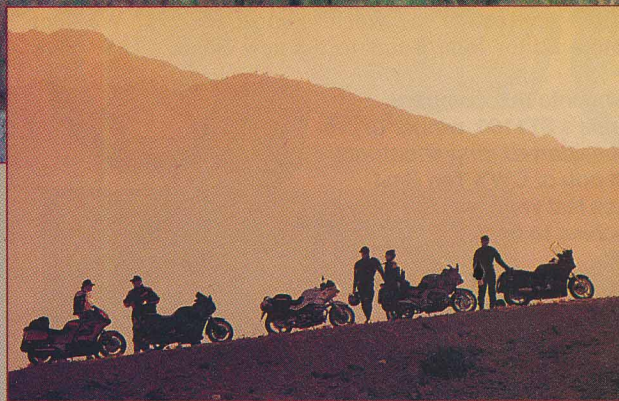
# **FIVE FOR THE OPEN ROAD**

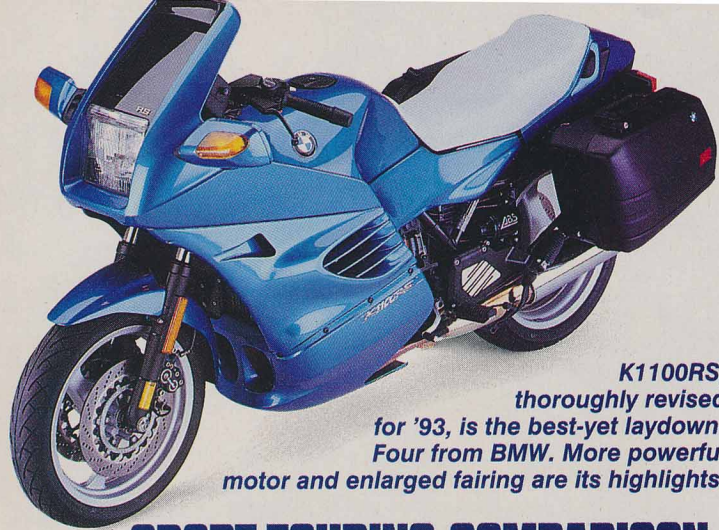
**BMW'S NEW R1100RS IS LIGHTWEIGHT, LEADING-EDGE AND LOVELY TO LOOK AT. HOW DOES IT STACK UP AGAINST THE ESTABLISHED STARS OF SPORT-TOURING?**



**C**ONSIDER THE CASE OF OLD GENERAL COUNT Dietrich von Hulsen-Haeseler, in 1900 chief of the German military cabinet. At a *soirée*, he appeared before Kaiser Wilhelm II dressed in a pink ballet tutu and rose wreath. "The general's ramrod back dipped low in a swanlike bow," wrote historian William Manchester of the evening, "then he whirled away in a graceful dance as the assembled officer corps sighed passionately in admiration. Hulsen-Haeseler circled the floor, returned to the imperial presence for his farewell bow, and then, to Wilhelm's horror, dropped dead of a heart attack...Still, everyone had to agree that he had 'danced beautifully.'"

The moral of the story, perhaps, is that the Germans *do* know how to have fun; it's just that it takes a lot out of them. BMW's all-new Boxer Twin has been a long time coming (when the four-cylinder K-bikes were introduced to the U.S.





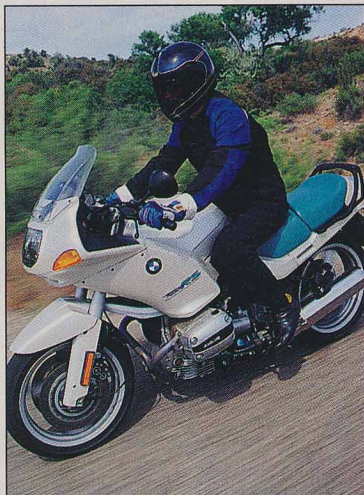
**K1100RS, thoroughly revised for '93, is the best-yet laydown-Four from BMW. More powerful motor and enlarged fairing are its highlights.**

## SPORT-TOURING COMPARISON

in '84, it looked as if it never would). But now that the R1100RS is here, we find that, like the late general, it dances beautifully. And the new Boxer even sings—in a powerful baritone, no less—a characteristic that becomes clear every time the tach needle sweeps past 4500 rpm.

In our May, 1993, issue, Editor Edwards came away from the R1100's world press introduction highly impressed. In that same issue, Technical Editor Kevin Cameron provided an in-depth analysis of the Boxer's engineering highlights: Motronic fuel injection, catalytic converter, Telelever front end, Paralever rear, second-generation ABS, etc. We won't cover that ground again. Quite simply, BMW threw its entire intelligence into this bike. And it shows.

The question to be resolved now is this: How does it rate against the rest of the world's sport-tourers? We sent Feature Editor John Burns to the new Boxer's U.S. press



**Going into this comparo, Honda's ST1100, winner of previous sport-touring shootouts and one of CW's Ten Best Bikes last year, was the machine to beat.**



launch in Arkansas' Ozark Mountains to retrieve CW's test bike, the plan calling for a rendezvous several days later in picturesque Sedona, Arizona, with the rest of the class: the BMW K1100RS, the Honda ST1100, the Kawasaki Concours 1000 and the Yamaha GTS1000.

### DAY ONE: LITTLE ROCK, ARKANSAS

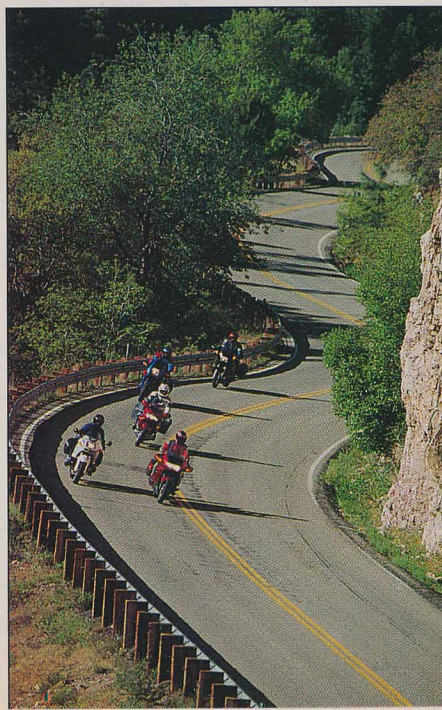
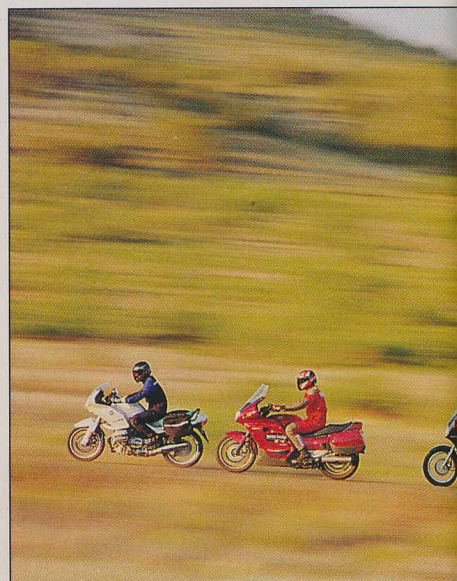
*This is a broken town, littered with sobbing women pining for Bill. Nine new Boxers are assembled, several motojournalists, a few BMW execs. To be frank, BMWs—and a large percentage of the people who ride them—have never been my cup of tea. BMWs are for guys intent on working Shakespeare into the conversation. Wheelies are frowned upon. Still, I'm willing to give any Twin a chance.*

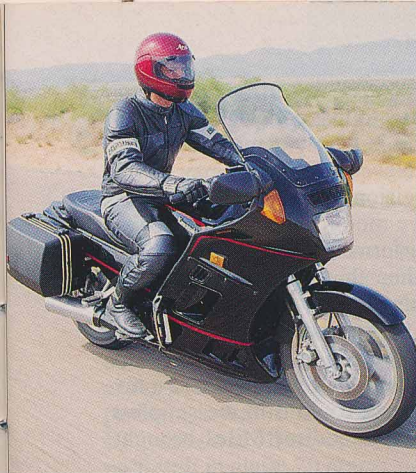
*Stepping warily into the banquet room at the Capital Hotel, BMW's plush intro location, I see the RS for the first time. She's beautiful, so unlike those other angular frauleins, so lithe....*

### DAY TWO: EUREKA SPRINGS, ARKANSAS

*In the sober morning light she's still beautiful, but can she be trusted? Some British press accounts told of horrifying tank slappers from the pre-production RSs. I proceed slowly at first, warily, then faster...say, what's that noise? Is a Ducati catching me? Could it be? Why, no, it's the sound of my very own Boxer. Unlike the old R, there's surprisingly serious power to be gained by revving the thing up. And the way she corners—are we sure this is a BMW?—is precise, supple and solid.*

*I'm not about to tell any of you bicoastal types what a great place northern*



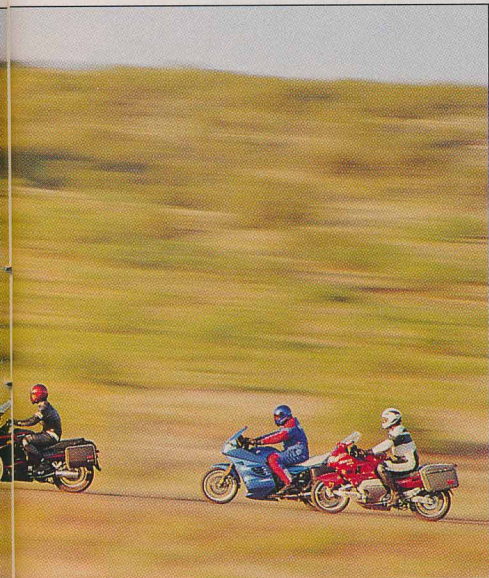


Arkansas is—how swervy and empty are the roads, how crisp it feels to park the bike and swim in the Buffalo River—because I don't want you all flocking there, traffic-jamming the place and raising the price of real estate. You'd hate Arkansas. Stay away.

### DAY THREE: KANSAS CITY, MISSOURI

A day of rest. Dropped by to visit the folks. Mother

Burns, commenting that I could probably use a home-cooked meal, rustles in the fridge for a bag of frozen tortellini, throws on a jar of Ragu, and nukes a box of frozen peas. It's good to be back in the land of Wal-Mart, but not that good.



### DAY FOUR: TUCUMCARI, NEW MEXICO

Outta there, south by southwest, early sunshine turns to dark clouds, rain and high wind within an hour. ABS II (a \$1200 option) much improved, much smoother.

Two hours later we break out from under the rain, slice off Oklahoma's panhandle and a corner of north Texas in a white-cloud blue-sky frenzy. Welcome to the west, fraulein. The Boxer sucks up these long straights with absolute casual disregard (autobahn-bred, tall-g geared, definitely powerful). Tucumcari—about 650 miles—takes about 11 hours. I feel pretty fresh.

### DAY FIVE: SEDONA, ARIZONA

Boycott the interstates and save your money. From Tucumcari, drop down south from I-40 onto the 60, dou-

ble the double-nickel, and roll off the throttle only when approaching cars come within radar-range. Trust me. The Boxer passes through its heaviest vibration—not at all bad—at about 80 mph (4000 rpm), and anything from 85 to 120 is its sweet spot. No drama at all; just simple asphalt inhalation. Ms. Boxer is as stable as can be. Cranking the adjustable-rake windshield up gives my head a nice, quiet

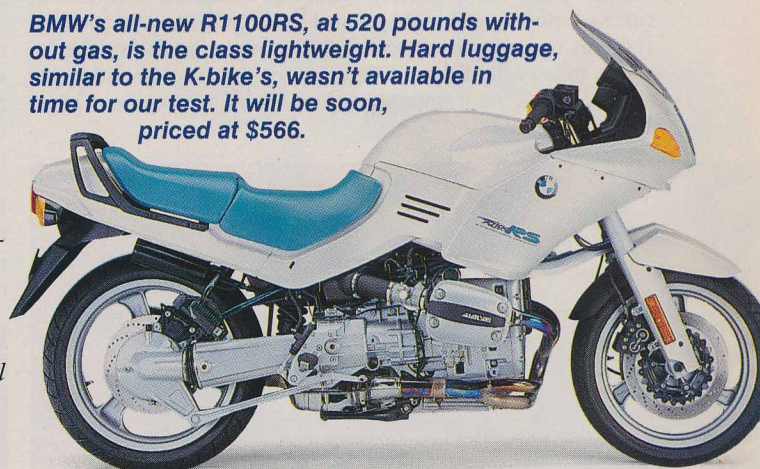
Kawasaki promised to leave the Concours unchanged for five years. That was in 1986. Time's up, but the bike still has its strong points.



Yamaha's GTS1000 was voted most likely to exceed the speed limit. Bars are a little too low for all-day comfort, mirrors too closely spaced for effective rear views.



BMW's all-new R1100RS, at 520 pounds without gas, is the class lightweight. Hard luggage, similar to the K-bike's, wasn't available in time for our test. It will be soon, priced at \$566.



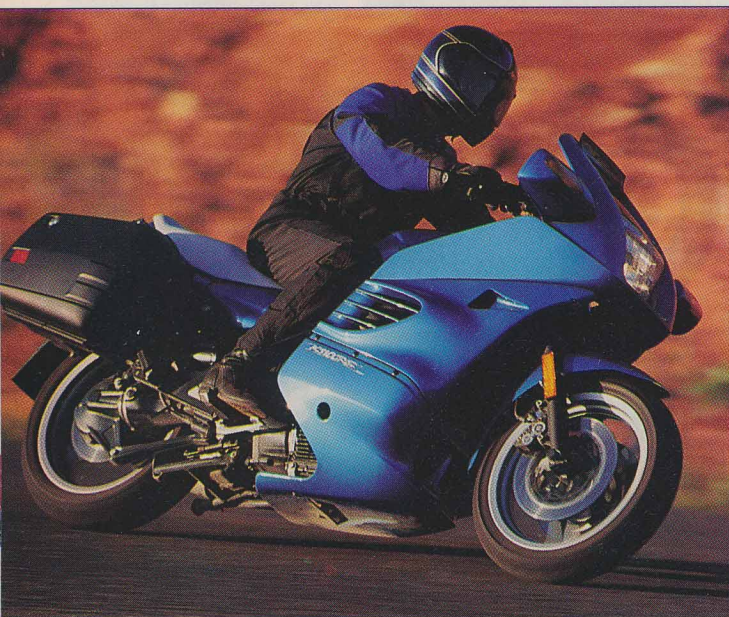


## SPORT-TOURING COMPARISON

*air-pocket when I put my 5-foot-7-inch body into its long-distance slump. Alternate that with windscreen-down, lay-on-the-tank. Throttle action is light; "claw-hand" isn't a problem, and the bike does no worse than 43 mpg. The 600 miles from Tucumcari to Sedona take 8.5 hours. The others are already there. Let the festivities begin.*

—John Burns

**W**e thought at first that it would be necessary to define "sport-touring" in order to decide which of these bikes is best, but we soon realized that no clear-cut definition would be possible. While one rider's "sport-tour" might mean Los Angeles to Vancouver, B.C., in two days over reasonably straight roads, another's might mean a half-day, 200-mile twisty loop with frequent stops. What's more important: Comfort? Or power and handling? It depends.



These five bikes helped lead us to that conclusion. A couple stress comfort, another one is barely removed from a serious performance machine. Nevertheless, they pay us the big money to make the hard decisions. And so we're back to square one: Which of these five motorcycles most successfully combines comfort with performance?

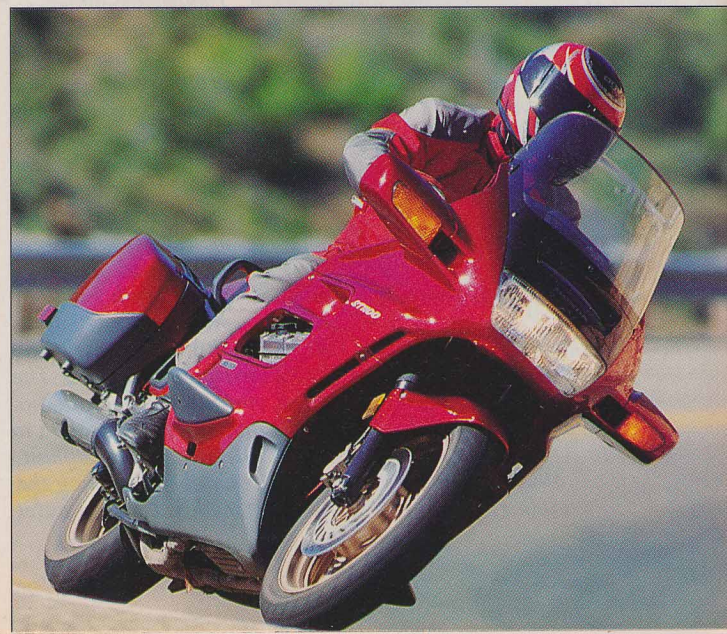
Simplifying is good, but when that fails, the next best thing is to quantify. We consumed mass quantities of food and drink over the course of this test, lobbied for our favorites, consumed more, and seemed to reach no consensus. Much like Congress. This called for numbers and a tax hike. We decided, unlike Congress, to do it in the simplest possible way. Six riders (Associate Editor Miles brought



along his project ZX-11, see page 37) would rank the bikes in each of three crucial categories: engine, handling, comfort. Each rider's favorite bike in each category would score a 1, second favorite would get a 2, etc., so that the lowest total would win that category.

### ENGINE

Not the Concours. Though the Ninja 1000-based Four makes good power, it requires many revs to do so, and each excursion around the tachometer sends serious buzziness



through the grips, pegs, gas tank and rider. Lower in the rev band, the bike runs smoother, and it's not bad for straight-line droning. But in the presence of the smoother, torquier motors in the other bikes, all six of us rated the Kawasaki last: 30 points.

Things happen fast. Just last year, we ranted about the ST's great torque-monster of a motor, and now we're whining about it being a bit "uninspiring." Actually, the ST's 1084cc V-Four is still a fantastically smooth and manageable motor, producing the most torque and damn near the same horsepower as the sportbike-bred GTS engine. The problem is that it has to propel the biggest bike here. Sorry, ST, with three all-new players in the field, your motor ended up fourth in class: 20 points.

BMW's new K1100RS finishes mid-pack in the engine department. While there was never any doubt that this is a quick motorcycle, seat-of-pants impressions had us convinced that the K would be no match for the Yamaha GTS.



## BMW R100RS

**AN OLD SPORT-TOURER THAT REFUSES TO FADE AWAY**

**T**HEY SAY THE AIR-COOLED BMW TWIN'S DAYS ARE numbered, its neck held firmly on the chopping block of ever more stringent noise and pollution controls. They say that without a thorough redesign to squelch its clattery engine, without fuel injection to clean up its emissions, the old Boxer is going down for the count.

Certainly, BMW's engineering corps hasn't wasted much of its mainframe computer time updating the old sport-tourer, what with all the hubbub over the new R1100RS Twin and improved K1100 Four. It doesn't even get the Paralever shaft-drive set-up that works so well on the R100GS dual-purpose and R100R retro-roadster Twins. In fact, aside from the single-sided swingarm and K75 fork added in 1988, the 1993 version looks really no different from the original 1977 RS. This year, it carries the same blue-and-silver paint scheme as the '79 model, topped off by perfectly imperfect hand-drawn pinstripes.

It's those quaint pinstripes that give insight into the R100RS, though. This is a charming, eccentric motorcycle, part old, part new, definitely not for everyone. With no more than 50 rear-wheel horsepower at the ready, the RS will make its way to a top speed of about 115 mph, a full beat behind today's front-line sport-touring stars. Handling, suspension and braking likewise are less than state of the art. For this, BMW charges a premium of \$9340, a price that at least includes chrome case-guards, four-way emergency flashers and, most importantly, well-integrated hard saddlebags and mounting brackets.

But your money also buys one of the best fairings ever attached to a motorcycle, an aerodynamic masterpiece that provides toe-to-shoulders protection and even keeps fingers dry in a rainstorm. Faceshield-rattling turbulence off the windscreen, especially for riders under 6 foot 2, and lack of storage compartments are the only things denying the Beemer's fairing all-out sport-touring perfection.

Settle in behind that cozy bodywork, reach out for the

narrow handlebar, and you're ready to use the RS's venerable flat-Twin for some serious sport-touring. It may not have an abundance of power, but the engine is torquy and feels stronger than its numbers suggest, helped by the bike's sub-500-pound dry weight. Plug into a comfortable seventh-tenths backroad pace, remember that the bike appreciates smoothness in both throttle application and



**With two more modern sport-tourers, the K1100RS and the R1100RS, already in its catalog, BMW made only a limited number of '93-model R100RSs, and the bike's future is very much in doubt.**

steering input, and it's very easy to forget you're atop a motorcycle that is essentially 15 years old.

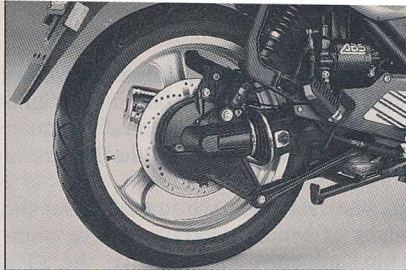
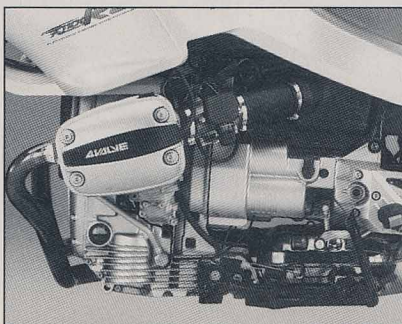
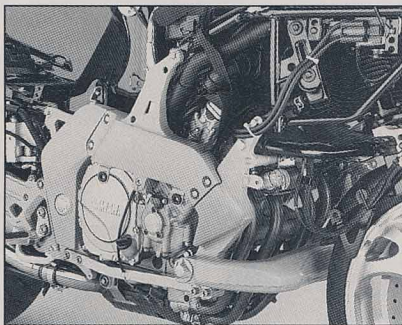
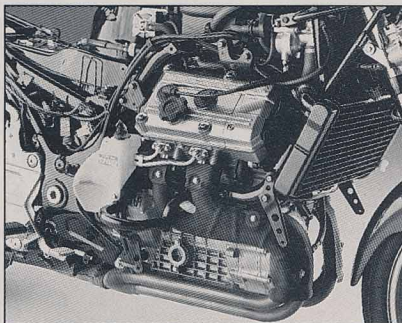
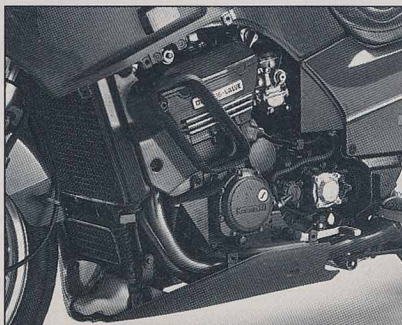
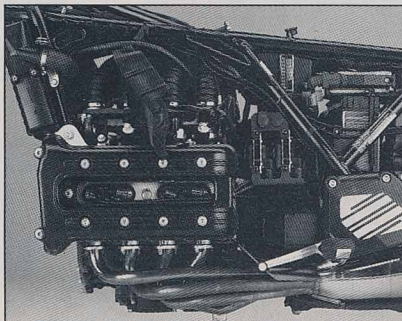
In 1988, we called the R100RS a "sportbike for grownups." That was a pretty good description then, and it works equally well in 1993. The old RS's time may indeed be short, though this isn't the first time pundits in the press and within the company itself have predicted the bike's demise. They were wrong then, but it's entirely likely they're right today. All the same, we're betting on the Boxer.

—David Edwards



# SPORT-TOURING COMPARISON

(Top to bottom) All this disagreement as to what sport-touring really means is reflected in the broad array of powerplants available. BMW's longitudinally hung, 16-valve, electronically fuel-injected K1100RS engine was strongest at the dragstrip, but it buzzes at various rpm. Kawasaki has stayed with the tried-and-true liquid-cooled inline-Four for its Concours 1000. Even with smallish 32mm Keihin's, though, it lacks low- and midrange power, and needs to be revved. The Honda ST1100's 1084cc V-Four is the strong, silent type, perfectly complementing the bike's grand-touring demeanor—but can still rattle the big ST out of corners when the revs are up. Yamaha GTS' super-smooth, super-torquey, FZR1000-based inline-Four gets our unanimous vote for best motor in this group. With good earplugs in, you can only tell it's running because trees and road signs rush past in a big whoosh. New BMW R1100RS air-and-oil-cooled opposed-Twin gets four-valve heads, high-mounted cams, Motronic fuel injection, and instant respect from all who ride it. Both the R1100 and the GTS are equipped with catalytic converters.



**Both BMWs use Showa shocks and Bridgestone Battlax tires on their Paralever rears. Results are superb.**

Never trust your pants. Our last GTS was a pre-production unit, and ran a best quarter-mile of 11.66 at 115 mph; the production GTS tested here managed only 11.90 at 113 to the K-bike's 11.79 at 115. Top-gear roll-on times were almost identical, the BMW a tenth of a second quicker from 60 to 80 mph. But even though the K's motor makes it the quickest bike here—highly impressive—that doesn't make it the favorite. Except for a serene sweet spot between 68 and 80 mph in top gear, the motor hits various vibratory resonances up and down the tach, and somehow discourages the kind of hard usage the GTS engine invites.

Ahhh, the new Boxer. The last R-bike we strapped to the dyno—an R100R for our May, 1993, issue—made 50 rear-wheel horsepower at 6750 rpm, with 54 foot-pounds of torque. The new R1100RS makes 80 horsepower at 7000 rpm, with 65 foot-pounds at 5500 rpm. We're talking PeeWee Herman to Arnold Schwarzenegger, here. The gearbox is still BMW-notchy, but the engine idles quietly, revs easily, makes great sounds at speed, feels smoother than before yet still produces that wonderfully satisfying thump-thump vibration and, when prodded, has plenty of arm-straightening ability. And, it's a Twin. You can't not like it: 16 points.

Score a perfect 6 for the GTS in the engine department. Okay, so the K1100 was a tenth quicker through the quarter, so what? The GTS' 20-valver is eerily smooth, makes the most power, gives tons of torque, enjoys walks on the beach and likes to cook. On the GTS, you go as fast or as slow as you want; the motor doesn't intrude. The fact that the injection system is a bit abrupt in off-on throttle transitions didn't keep all six testers from rating its motor numero uno—the only clean-sweep winner of the test.

## HANDLING

Sorry, Concours. It may finally be time to step aside. New in 1986, the Kawasaki's older-tech chassis doesn't quite cut the mustard in this company. The bike works fine in most situations, steering with a light touch and arcing nicely into corners. But when the pace inevitably picks up, the road deteriorates, or both, the Concours loses some of its composure. The single-piston brake calipers require a strong hand, and the bike's somewhat top-heavy design and underdamped legs give the rider a less-than-secure feel at speed: 28 points.

Score another fourth for the ST1100. While it's still possible for a skilled rider to really hustle the Honda, the front end now feels a bit vague compared to the best bikes here. The ST's manners still belie its weight (at 668 pounds without gas, it outweighs the lightweight Boxer by 148 pounds). It still corners, stops and accelerates like something much less hefty. But the competition is brand-new and rookie-hot for a job: Give the ST 24 points.

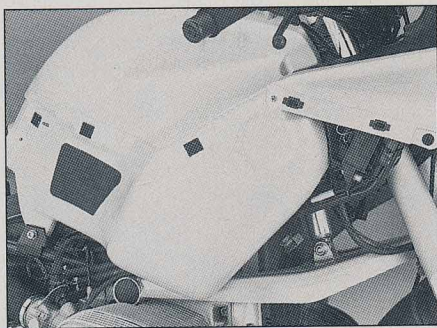
BMW's newest K-bike again stakes out the middle ground. Said Managing Editor Boehm, "Competent to a point very near the limit, with neutral steering, good cornering clearance, great suspension action (especially in bumps), and enough flickability despite somewhat heavy steering." Senior Editor Thompson agreed: "Amazingly

stable and solid." Add 20 points to the K's total.

But in the end, the handling derby came down to the two forkless wonders, where the GTS edged out the Boxer 8 points to 10.

All six test riders ranked these bikes either 1 or 2, but the two have distinctly different characteristics. The GTS front end is a bit numb, though aggressive riders quickly learn to trust it and rail through curves like a tabby cat on carpet. Speedracer Canet thinks the "fly-by-wire" feel is due to the fact that bumps don't deflect the GTS' bars. He ranked it first. Boehm, our heaviest rider, also picked the GTS first. So did Matthew Miles and Jimmy Lewis.

The more touring-oriented among our entourage preferred the Boxer, which steers considerably lighter, and gives more front-tire feedback. A big part of that is due to the fact that, at 520 pounds dry, the BMW weighs a full 89 pounds less than the GTS. In slower corners (or downhill or off-camber corners), that lightness makes a big difference, especially to less confident riders who might be reluctant to chuck the big GTS onto its side. Both bikes have compliant, smoothly

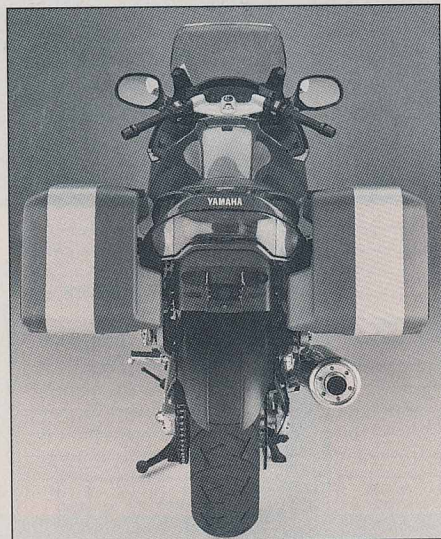


**The Boxer's 6-gallon tank and fairing are recyclable plastic. Tucked-under front shock is by Showa, but is non-adjustable.**

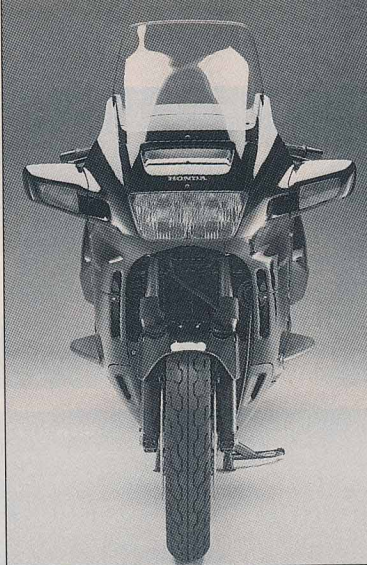
damped suspensions—the BMW's front and rear Showa shocks are a bit more softly sprung than the Yamaha's. Both can whoosh right up to a bumpy apex, brakes on, with complete nonchalance. In this class—and perhaps in any class—both set new standards for steering precision. The BMW is a bit more accessible, a bit more forgiving of indecision, a bit more feline; the GTS is a military fighter locked on target, and prefers its rider have the Right Stuff.

## COMFORT

And, as with all great heroes, we come to the GTS' fatal flaw: It finishes last in terms of comfort. For long-distance



**GTS' wide, snap-on saddlebags are a \$680 option. Only the Concours and the ST1100 have detachable bags as standard equipment.**

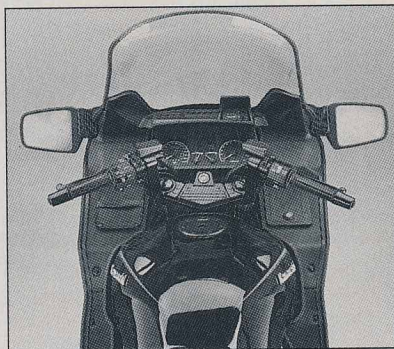


**Honda ST's barn-door frontal area punches a big hole in the air for long-haul creature comfort. Testbike was an ABS-TCS version, \$2000 more than the base ST.**

use, the bars are too low, the windscreen too noisy, the seat a squidge too hard for our Goldilocks behinds. And if you like to ride with the balls of your feet on the pegs, the bodywork allows no place for your heels. It's not bad, but the other bikes are better: 26 points.

Hard to believe the big, roomy Concours didn't score better here. Believe it. The engine buzzes, several riders complained of severe buffeting from the windscreen (even as they praised the seat and riding position) and the suspension is harsh: 25 points.

We have a Teutonic tie for second-most comfortable, with both Beemers scoring 16 points. Despite the engine vibes and a heat problem that can cook your inner thighs in a half-hour on a hot day, we like the K1100RS' thick, flat seat, its roomy, semi-upright riding position, its high level of suspension compliance, and its superb weather protection.



**Some \$7000 cheaper than the BMW K-bike; \$6000 less than the GTS and R1100, the aging Concours still gives great wind protection and an upright seating position.**

Fraulein Boxer may have the best seat here, though all is not perfect. Some of us felt the pegs were too far rearward. Taller guys denounce the adjustable windscreen as a gimmick. Protection from the fairing is minimal, though BMW says a fully faired RSL version will be available shortly—with ABS II as standard and a fuller complement of gauges than the RS has—priced at \$13,990. Though the Boxer is adjustable for seat height, handlebar reach and bend, we did too much swapping to have time for everyone to get ergonomically dialed in. Even so, supple suspension and an outstanding saddle helped the RS tie for second-most comfortable.

Comfort is what the Honda ST is about. It gives the best wind protection, superior seating and body positioning, and plenty of room for rider and passenger. Maybe two passengers. And while the big V-Four may not be the most exciting engine of the bunch, it is perfectly in keeping with the unobtrusive character of the total package, and has enough

# SPORT-TOURING COMPARISON

oomph to propel the ST as fast as the rider wants. Score the ST 7 points for comfort.

## MAY WE HAVE THE ENVELOPE PLEASE?

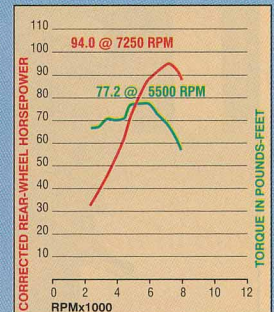
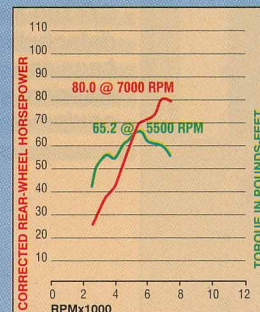
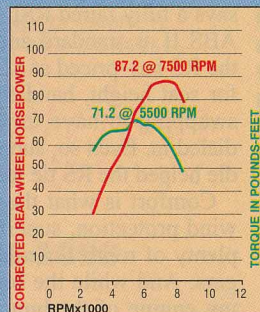
Adding up the numbers brings us back, really, right where we started. We figured the Honda would be the most comfortable. It is, especially if you travel with a passenger. But the BMWs are not far behind. We had a good idea that the

Yamaha GTS would be the sportiest and least comfortable of the bunch. It is both. But the new Boxer finished second in the motor department, and the GTS only barely edged it out in handling.

We could've almost agreed on this from the start. If your main criterion in choosing a sport-tourer is comfort, buy the ST. If it's speed and handling and solo riding you're after, get the GTS. If you want some from each category, the revised BMW K1100 will serve with distinction. If you're on a tight budget, the \$7400 Kawasaki is sport-touring's bargain bike, though it lacks such niceties as fuel injection and anti-lock braking.

	BMW K1100RS	BMW R1100RS	HONDA ST1100 ABS-TCS
<b>GENERAL</b>			
List price	\$14,676*	\$13,656*	\$11,399
Warranty	36 mo./unlimited mi.	36 mo./unlimited mi.	36 mo./unlimited mi.
<b>ENGINE</b>			
Engine	liquid-cooled, four-stroke inline-Four	air-and-oil-cooled, four-stroke opposed-Twin	liquid-cooled, four-stroke V-Four
Bore & stroke	70.5 x 70.0 mm	99.0 x 70.5 mm	73.0 x 64.8 mm
Displacement	1093cc	1085cc	1084cc
Compression Ratio	11.0:1	10.7:1	10.0:1
Valve Train	dohc, four valves per cylinder, replacement tappet	sihc, four valves per cylinder, threaded adjusters	dohc, four valves per cylinder, shim adjustment
Valve adj. intervals	16,000 mi.	6000 mi.	16,000 mi.
Carburetion	fuel injection	fuel injection	(4) 34.5mm Keihin
<b>CHASSIS</b>			
Weight:			
Tank empty	603 lb.	520 lb.	686 lb.
Tank full	634 lb.	556 lb.	730 lb.
Fuel capacity	5.2 gal.	6.0 gal.	7.4 gal.
Wheelbase	61.6 in.	57.6 in.	61.2 in.
Rake/trail	26.0°/ 3.7 in.	24°/ 4.1 in.	27.5°/ 4.0 in.
Seat height	31.5 in.	30.5-32.0 in.	31.7 in.
<b>SUSPENSION &amp; TIRES</b>			
Front suspension:			
Claimed wheel travel	5.3 in.	4.7 in.	5.9 in.
Adjustments	none	none	none
Rear suspension:			
Claimed wheel travel	4.7 in.	5.3 in.	4.7 in.
Adjustments	rebound damping, spring preload	rebound damping, spring preload	rebound damping, spring preload
Tires:			
Front	120/70-VR17 Bridgestone Battlax BT53F	120/70-ZR17 Bridgestone Battlax BT50F	110/80-V18 Dunlop ArrowMax D103F
Rear	160/60-VR18 Bridgestone Battlax BT53R	160/60-ZR18 Bridgestone Battlax BT50R	160/70-V17 Dunlop ArrowMax D103
<b>PERFORMANCE</b>			
1/4 mi.	11.79 sec. @ 114.94 mph	12.24 sec. @ 111.94 mph	12.41 sec. @ 108.43 mph
0-30 mph	1.1 sec.	1.3 sec.	1.5 sec.
0-60 mph	3.3 sec.	3.5 sec.	3.9 sec.
0-90 mph	6.9 sec.	7.8 sec.	8.1 sec.
0-100 mph	8.8 sec.	9.7 sec.	10.2 sec.
Top gear time to speed:			
40-60 mph	3.7 sec.	4.3 sec.	4.9 sec.
60-80 mph	3.7 sec.	4.9 sec.	5.4 sec.
Measured top speed	135 mph**	134 mph	131 mph**
<b>FUEL MILEAGE</b>			
High/low/avg.	44/38/40 mpg	50/42/45 mpg	45/41/42 mpg
Avg. range inc. reserve	208 mi.	270 mi.	311 mi.
<b>BRAKING DISTANCE</b>			
from 30 mph	34 ft.	32 ft.	30 ft.
from 60 mph	127 ft.	133 ft.	123 ft.

## HORSEPOWER/TORQUE



But chew on this interesting tidbit before buying: The bike that most successfully combines performance and comfort, is BMW's beautiful new R1100RS. R should stand for Renaissance, because that's how this bike feels compared to the last Boxer: reborn. It incorporates everything BMW has learned about internal combustion, yet retains just enough Boxer character and minimalist simplicity to satisfy those opposed-Twin faithful who still regard inline BMWs as blasphemous. More importantly, you don't have to be a BMW guy, quote Shakespeare, or ride really slow to enjoy this BMW. It flat works. Welcome to the Nineties, fraulein. ☐

## CW PROJECT

# ZX-11 FOR THE LONG HAUL

## HOW TO MAKE A 176-MPH SPORT-TOURER



**N**OT EVERY MOTORCYCLE MEETS THE *CYCLE WORLD* definition of a sport-tourer. Take Kawasaki's ZX-11, for example. With a top speed of 176 mph, the big Ninja is blazingly fast. It's also a very competent sportbike, even if its limits aren't as lofty as those of front-line replicators. And unlike those narrowly focused motorcycles, the 11, with its moderate riding position, large fairing and 6.8-gallon fuel tank, is a pretty versatile machine.

By *CW* standards, though, a true sport-tourer must have hard saddlebags. Kawasaki doesn't offer accessory hard luggage for the ZX-11, so we ordered a set of GIVI Maxias from Capital Cycle. Manufactured in Italy, the plastic Maxias are impressively engineered, stylish, lockable, and each is capable of swallowing two full-face helmets. (For a more detailed look at the Maxias, see the product evaluation elsewhere in this issue.)

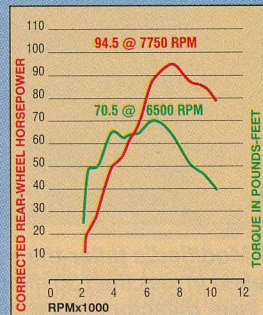
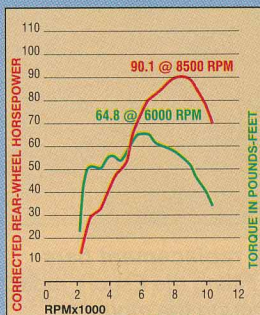
Capital Cycle also imports color-matched Bagster tank covers. Available for a wide range of models, the naugahyde cover is designed to be used with Bagster's line of detachable tank bags. We tried the Alpha, an expandable 30-liter unit that clips to the cover and features a map window and a self-contained rain cover. Both bag and cover performed well, though their color-match with the ZX's dark-maroon paint was less than perfect.

Our next goal was to improve the ZX's ride quality. In stock form, the ZX's non-cartridge fork suffers from excessive compression damping and too-soft springs. Ridden quickly on a bumpy road, the bike's suspension reacts harshly, transmitting road irregularities directly to the rider. For a relatively inexpensive solution, we sent the fork and shock to Lindemann Engineering, a northern California firm

### KAWASAKI CONCOURS

### YAMAHA GTS1000

..... \$7399	..... \$13,679*
..... 36 mo./unlimited mi.	..... 24 mo./unlimited mi.
..... liquid-cooled, four-stroke inline-Four	..... liquid-cooled, four-stroke inline-Four
..... 74.0 x 58.0 mm	..... 75.5 x 56.0 mm
..... 997cc	..... 1002cc
..... 10.2:1	..... 10.8:1
..... dohc, four valves per cylinder, threaded adjusters	..... dohc, five valves per cylinder, shim adjustment
..... 6000 mi.	..... 26,600 mi.
..... (4) 32mm Keihin	..... fuel injection
..... 631 lb.	..... 630 lb.
..... 676 lb.	..... 662 lb.
..... 7.5 gal.	..... 5.3 gal.
..... 61.9 in.	..... 58.9 in.
..... 27.5"/4.4 in.	..... 24.0"/3.9 in.
..... 31.8 in.	..... 30.1 in.
..... 5.2 in.	..... 4.7 in.
..... air pressure	..... compression and rebound damping, spring preload
..... 5.8 in.	..... 5.1 in.
..... rebound damping, air pressure	..... rebound damping, spring preload
..... 110/80-VR18	..... 130/60-ZR17
..... Dunlop Sport Radial K105F	..... Dunlop Sport Radial D202F
..... 150/80-VR16	..... 170/60-ZR17
..... Dunlop Sport Radial K700G	..... Dunlop Sport Radial D202
..... 12.07 sec. @ 110.97 mph	..... 11.90 sec. @ 113.63 mph
..... 1.3 sec.	..... 1.3 sec.
..... 3.4 sec.	..... 3.3 sec.
..... 7.3 sec.	..... 7.2 sec.
..... 9.6 sec.	..... 9.1 sec.
..... 4.8 sec.	..... 3.7 sec.
..... 5.6 sec.	..... 3.8 sec.
..... 127 mph**	..... 133 mph**
..... 42/33/35 mpg	..... 42/37/39 mpg
..... 262 mi.	..... 207 mi.
..... 33 ft.	..... 27 ft.
..... 127 ft.	..... 112 ft.

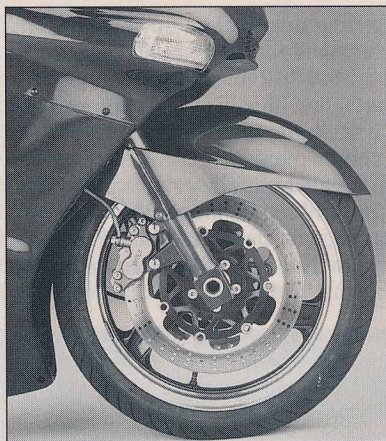


\* PRICE INCLUDES OPTIONAL SADDLEBAGS

\*\* TESTED WITH SADDLEBAGS IN PLACE

# ZX-11 FOR THE LONG HAUL

PHOTO BY RICH COX



**Revalving the fork and shock yielded good results. Replacing the stock brake lines, pads and fluid with Fren-Tubo and EBC components improved lever feel and minimized fade. Continental's Radial 2000 replacement tires offer good traction and appear to be long-lasting.**

that specializes in suspension modification.

Jim Lindemann disassembled the fork, polished the tubes, replaced the seals and shortened the stock springs. The damper rods were modified for a more appropriate rebound/compression ratio, and oil level was set at 140mm from the top of the tube using 10-weight Rock Oil. This combination proved nearly ideal, although the fork bottomed lightly during hard braking. Adding an additional 10cc of oil per leg solved the problem.

At the rear, Lindemann revalved the shock—also suffering from harshness—for less compression damping. Using the stock spring, the shock was reassembled with fresh oil, then re-pressurized. With preload set to give 1.5 inches of sack, and rebound damping on the number two position (out of four), the rear suspension is noticeably more compliant than stock and provides a solid platform for either solo or two-up sport-touring.

In the past, we've complained about the 11's front-brake system, citing its tendency to fade after repeated use at high speeds. To improve the situation, we swapped the stock rubber brake lines for Fren-Tubo Kevlar hoses from Indigo Sports. We've used these lightweight lines before and found them durable and easy to install. At the same time, the stock brake pads were replaced with a set from EBC. After carefully bleeding the system, lever feel was improved and the tendency to fade greatly diminished.

With less than 3000 miles on the clock, the stock Bridgestone Battlax Radials were wearing thin. Although we were pleased with their steering and traction characteristics, the stock tires weren't as durable as we had hoped. Looking for additional mileage without giving up performance, we levered on a set of Continental Z-rated Radial 2000s, a 130/60 front and a 180/55 rear. Although traction with the Continentals was good, the front tire made the ZX stand up when trailing the front brake during cornering, most likely because of its quarter-inch of additional width. They do, however, appear to be long-lasting; after 2300 miles of all-around use, half of that at full-tilt sporting pace, ours still have plenty of life.

For a more sport-touring-oriented riding position, we ordered a set of replacement handlebars from Heli-Modified. A full 2 inches taller and 1.25 inches more rear-

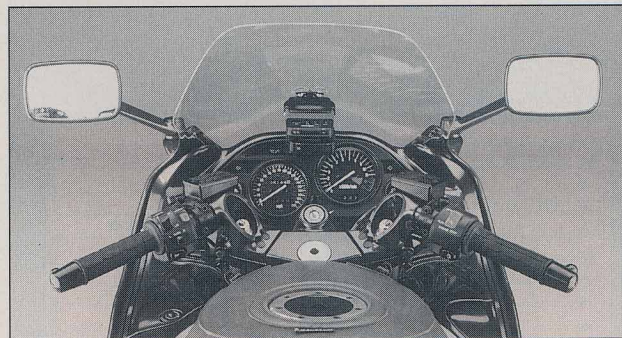
ward than stock, the Heli bars are nicely finished, easy to install and retain the stock cables and switchgear. Although they are expensive, the Heli Bars are a considerable improvement over stock, making 500-mile days a relatively painless affair.

A Corbin Gunfighter & Lady seat was the next addition. The seat mounted easily using the bracket from the stock saddle, and fit precisely. With its stiff pan and dense foam, the Gunfighter is significantly firmer than stock. For this reason, Corbin suggests a 1500-mile break-in period. Even after 2300 miles, though, some staffers felt the seat was still overly firm. Others found the seat's shape and level of comfort to their liking.

We also fitted a Zero Gravity windscreen to our project ZX-11. Although it offered good coverage, the stock screen was wavy and difficult to see through. Optically correct, the Zero Gravity screen fit perfectly and has a more pronounced lip that provided more wind protection than stock.

J&M's voice-activated intercom system offers hands-free communication between rider and passenger. Besides its individual systems, J&M also sells full- and open-face Arai helmets with microphone and stereo speakers pre-installed. We ordered a matching pair for use with J&M's Dynavox II amplifier. To this we hooked up one of Sony's just-released portable MiniDisc players, housed in the tankbag.

Compact and easy to use, the 1.8-pound Sony MZ-2P plays pre-recorded MiniDiscs and features a buffer memory that stores audio data for up to three seconds. Should the optical pickup be jarred out of position, the correct information is played from memory, virtually eliminating shock-and-vibration-induced skipping. The 2.5-inch MiniDiscs are encased in tough plastic cartridges and store up to 74 min-



**Heli-Modified's taller-than-stock replacement bars installed in less than 30 minutes. Fitting the Escort radar and laser detectors was easy, although the mounting brackets had to be modified slightly.**



**J&M Engineering sells Arai helmets pre-fitted with its helmet-to-helmet intercom system. The Sony MiniDisc player was a welcome addition on long rides, and the Escort radar and laser detectors kept us informed of speed traps.**

utes of material, about the endurance of the player's rechargeable battery.

While the Sony MiniDisc player performed flawlessly, the J&M intercom system had one drawback. The stereo speakers worked very well, but the intercom's voice-activated microphones were a bit too sensitive, often mistaking wind noise for conversation. For fully faired touring bikes, that's not a problem. But for sportbikes like the ZX, it can be a bother.

We didn't have any problems with the Passport 3100 WideBand radar detector and Passport 1000 laser detector ordered from Cincinnati Microwave. Less than 3 inches wide and 4.5 inches long, the 3100 WideBand monitors X-, K- and Ka-band radar signals and features a mute mode, LED strength meter, a city/highway switch and an adjustable volume control.

Similarly sized, the Passport 1000 attached to the 3100 with velcro, and has an LED meter and an adjustable volume control. Via an accessory interface cord, the 1000 can be linked directly to the 3100. Both the radar and laser detectors were wired through J&M's audio override system



**Significantly firmer than the stock seat, Corbin's Gunfighter & Lady saddle fit perfectly. Passengers appreciated the removable backrest.**

which interrupts conversation or music with an amplified warning signal through one of the helmet's earphones. Under ideal conditions, the 3100 WideBand was able to sniff out radar about a half-mile away, giving enough time to react to all but instant-on guns. The 1000 Laser was less capable, sounding-off only 400 yards from the source. In testing with a cooperative local police department, the cop's laser gun always won, making the detector, in our view, a questionable purchase.

And that completes our project Kawasaki ZX-11. The modifications—some simple and inexpensive, others more involved and extravagantly priced—have transformed the world's fastest sportbike into a competent sport-tourer. Especially if you've got to get someplace in a big hurry.

—Matthew Miles

## SUPPLIERS LIST

### Capital Cycle Corporation

1508 Moran Road  
P.O. Box 528  
Sterling, VA 20166  
800/642-5100  
GIVI Maxia 50L luggage:  
\$622  
Mounting hardware:  
\$206  
Bagster Alpha tankbag: \$90  
Bagster tank cover: \$83

### Cincinnati Microwave

5200 Fields-Ertel Road  
Cincinnati, OH 45249  
800/433-3487  
Escort Passport radar  
detector: \$180  
Escort Passport laser  
detector: \$100

### Continental Tire

General Tire, Inc.  
41 Strong Street  
Wallington, NJ 07057  
201/471-8890  
Conti-Radial 2000 130/60-17:  
\$130  
Conti-Radial 2000 180/55-17:  
\$190

### Corbin Saddles

11445 Commercial Parkway  
Castroville, CA 95012  
408/633-2500  
Seat: \$228  
Backrest: \$111  
Backrest hardware: \$26

### EBC Brakes

12860 Bradley Avenue  
Sylmar, CA 91342  
818/362-5534  
Brake pads:  
\$25 per caliper  
Brake fluid:  
\$5.80 per pint

### Heli-Modified

P.O. Box 628  
Cornish, ME 04020  
800/859-4642  
Handlebars: \$219

### Huntington Honda

7911 Warner Avenue  
Huntington Beach, CA 92647  
714/842-5531  
Install sound system: \$165

### Indigo Sports

12405 Slauson Avenue  
Unit J  
Whittier, CA 90606  
310/945-8149  
Fren-Tubo Kevlar brake lines:  
\$153

### J&M Corporation

1415 South Cherry Avenue  
Tucson, AZ 85713-1997  
800/358-0881  
Arai Signet with headset:  
\$480  
Radar override system: \$100  
Dynavox II amplifier: \$180

### Lindemann Engineering

520 McGlincey Lane  
Unit 3  
Campbell, CA 95008  
408/371-6151  
Modify fork: \$160  
Revalve shock: \$120

### Sony Corporation of America

1 Sony Drive  
Park Ridge, NJ 07656  
Portable MiniDisc player: \$600

### Zero Gravity

5312 Derry Avenue  
Unit D  
Agoura Hills, CA 91301  
818/597-9791  
Windscreen: \$75