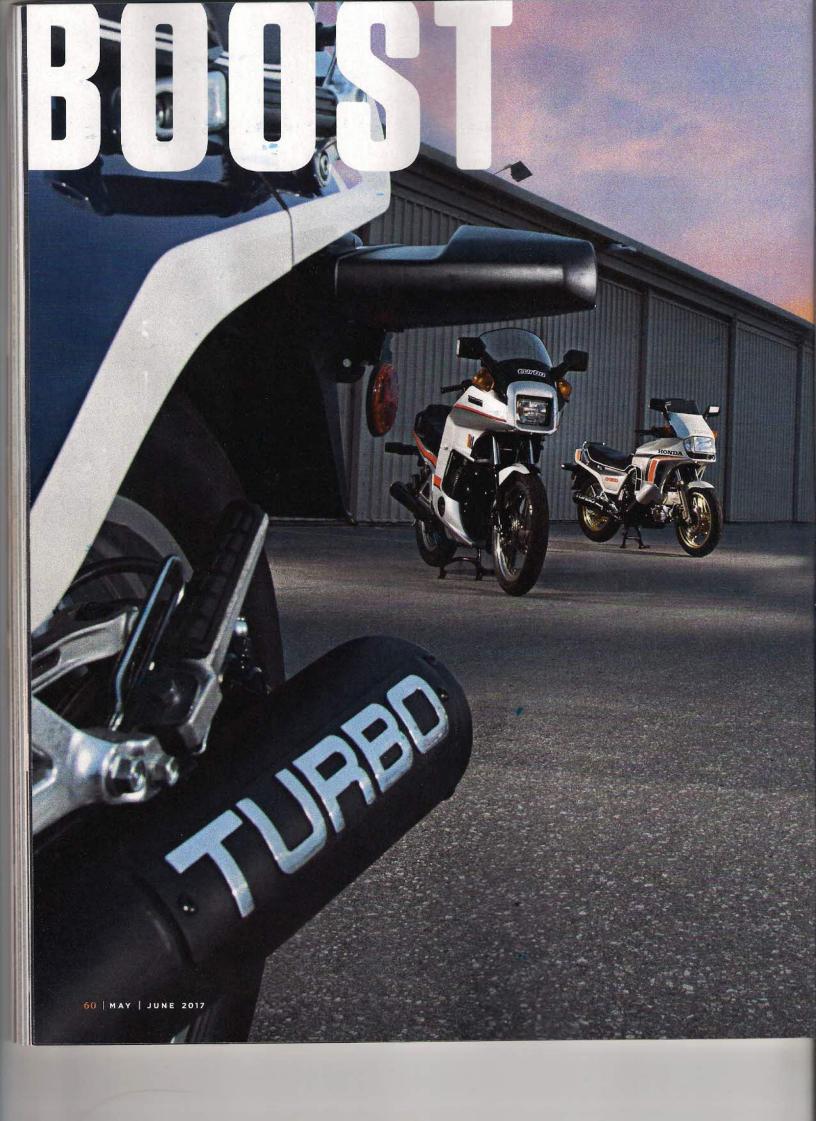


TURBOS OF THE '80s

The Race of Gentlemen

Motorcyclist





JAPAN INC.'S TURBOCHARGED TECHNO-SPASM LASTED JUST 36 MONTHS, FROM 1982 TO '84.
BAD TIMING, HIGH PRICES, AND ADVANCING NORMALLY ASPIRATED TECH DEPRESSURIZED THE BOOST
SOIRÉE, BUT THE EXERCISE LEFT US WITH FIVE HIGHLY MEMORABLE MOTORCYCLES.

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BY MITCH BOEHM
PHOTOGRAPHY BY JULIA LAPALME



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LIKE TODAY, THE EARLY 1980s WERE RAMBUNCTIOUS YEARS— SOCIALLY, POLITICALLY, AND CULTURALLY. CARTER WAS OUT, REAGAN WAS IN, AND WITH THE GIPPER CAME PLENTY OF SOCIAL, COLD WAR, AND ECONOMIC UPHEAVAL.

Motorcycling was spasming too. Honda and Yamaha were at war, each trying to be *numero uno* worldwide, each trying to out-produce one another and beat the other senseless with new-think technology and rapid-fire new-bike launches. Honda, for instance, introduced nearly 40 all-new models between '81 and '84, with Yamaha not far behind. Forty. That's unthinkable today.

But while the two companies duked it out, America's overall two-wheel environment was in decline. You had an economic recession, baby boomers taking a break from all the record-setting bike buying they'd done during the late '60s and throughout the '70s, and many thousands of noncurrent machines piling up at dealerships and being sold at half of retail, which devalued everything around them. It was a depressing time for the OEMs, and the irony of it all—handfuls of interesting, technically advanced new bikes being introduced but far fewer buyers for them—was palpable.

One of the earliest of these technically advanced bikes to appear was a not-ready-for-production Honda prototype, which showed up in late 1980 at that year's Cologne Motor Show, just weeks before the Reagan/Carter election. The prototype, with its gold accents and swoopy, futuristic look, was the hit of the show, and no one failed to miss the significance of a particularly riveting word emblazoned on its flanks and exhaust system: *Turbo*.

Even then, engine turbocharging wasn't particularly new; P38s and B17s in WWII used turbocharged engines, and Kawasaki had done a limited-edition ZI-R turbo—the ZIR-TC—in '78. But by the '80s, the word had become almost

magic, sort of a buzzword for everything trick, special, and fast in the motoring world.

"It was impressive," says former *Motorcyclist* Editor Art Friedman, who attended that year's Cologne show. "I came back thrilled by the idea of a stylish 500 with liter-like power."

Honda would in normal times have kept a prototype of this importance under wraps. But these weren't normal times. This was war, and Honda, suddenly awake after several years of lackluster effort on the two-wheel side (thanks to some goading from Soichiro Honda himself), wasn't about to let an opportunity to establish newfound credibility—or tweak Yamaha's nose—pass by. The message was clear: "We built the six-cylinder CBX, and we'll build a turbo too."

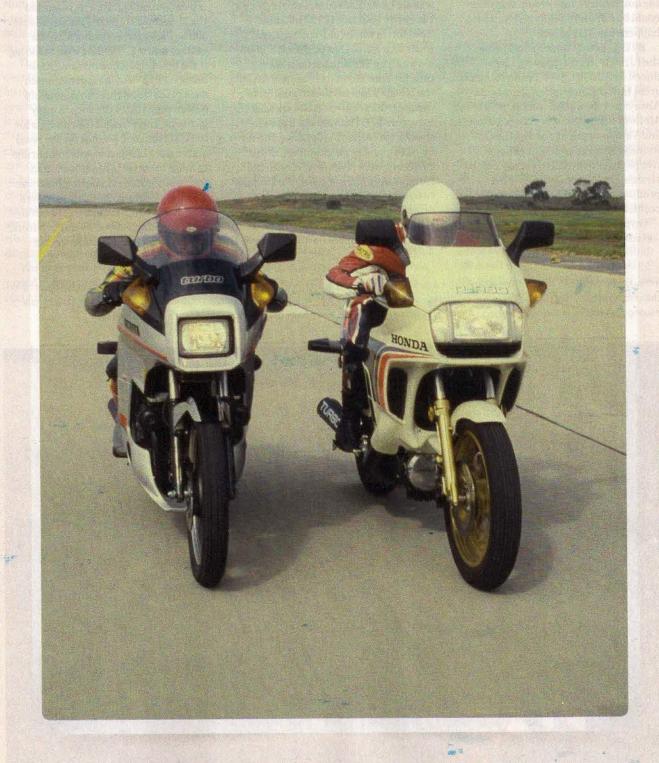
As promised, Honda's production turbo—the 1982 Honda CX500T—appeared a year later to great fanfare and high expectations. The general idea seemed promising: Turbocharge a middleweight machine to give it the horsepower and speed of heavier and more cumbersome open-classers.

Motorcyclist, invited exclusively to ride a pair of pre-production machines for its September '81 issue (before other press outlets got their testbikes), came away with a reasonably positive review, which helped set the stage for some of those expectations. Staffers Friedman, Jeff Karr, and Ken Vreeke found the CX-T smooth, well engineered, comfortable, and surprisingly fast on the boost, with less turbo lag than the aftermarket, non-production turbos they'd ridden before—but still enough to make aggressive riding problematic. Complaints surrounded weight, complexity, price, high-speed handling, fuel mileage, and lag. That's a long list of negatives, but hey, this here, folks,

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Motorcyclist staffers Jeff Karr and Ken Vreeke thrash the Yamaha and Honda turbo models for our July '82 issue. The Honda won, barely, but neither was a performance breakthrough. Weight, price, and turbo lag made them less attractive than the literbikes of the day.

was a production turbo! And because the guys were evaluating pre-production machines, the tendency was (and still is) to give a manufacturer the benefit of the doubt until a full-production bike could be ridden and fully tested, which happened in May of '82.

By that point, Yamaha had joined the turbo fraternity, having introduced its XJ650L Seca Turbo to, again, great fanfare and high expectations. Always hot for a good comparison test, *Motorcyclist* pitted the '82-spec Honda and Yamaha against one another in its July '82 issue and in 12 exhaustive pages proceeded to set the record straight on the true nature of the production turbo phenomenon. To that point, at least.

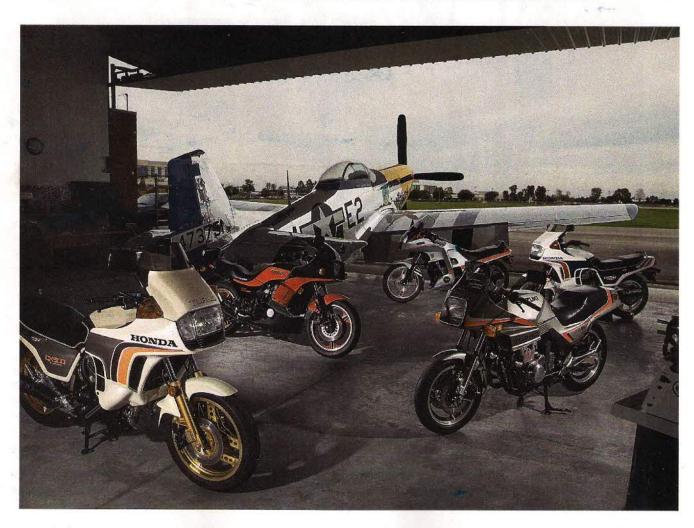
On paper, the Yamaha was decidedly less advanced than the tech-heavy Honda,

which many insiders believed to be a result of Yamaha possibly rushing a bit to get to market in close time proximity to the Honda's release. The Yamaha engine was air-cooled, based on the company's two-valve (but DOHC) XJ650 mill. The Honda was liquid-cooled, based on its four-valve (but pushrod) CX500 V-twin. The Yamaha used carburetors, pressurized in this case, versus the Honda's fuel injection (and, incidentally, the very first Honda product to feature FI). The Yamaha had twin shocks, while the Honda offered up its Pro-Link single-shock system. Both, curiously, were shaft driven, with the Honda offering triple discs, the Yamaha two rotors up front and an old-school drum in back. Both were expensive, too, retailing for just a tick under the \$5,000 mark-nearly double the price of a good

middleweight and many hundreds more than a competent literbike.

In action, the Honda was the quicker of the two, but both were still mired in the mid-12s and quite a ways behind the 11-second literbikes then available. Turbo lag was a headache, with the editors writing, "Dealing with turbo lag is the main challenge in riding these bikes swiftly." When ridden beneath each bike's boost threshold (roughly 4,000 rpm), they were surprisingly lethargic, their weight (581 pounds for the CX-T and 565 pounds for the Seca) and smaller displacements conspiring to make them feel even slower than the non-boosted middleweights from which they sprang. Both bikes proved reasonably comfortable, and their fairings made them above-average tourers, though windshield turbulence and

Although the North American P51 Mustang—this one owned and flown by Darren Moore out of Van Nuys airport—is supercharged and not turbo-charged, it remains, like the Japanese turbos of the early 1980s, a throwback to abnormally aspirated high-speed machinery. With the Mustang making somewhere in the neighborhood of 1,400 hp, let's just say there was plenty of horsepower in Moore's hangar that day.



knee/fairing-clearance issues were noted. Each proved a reasonably good handler but, again, turbo lag, excess weight, soft and underdamped suspension, and fade-prone brakes made them less than happy when ridden hard. Mileage was poor, too, dipping into the 20-mpg range at times.

The staff chose the Honda narrowly over the Yamaha, but its overall verdict on the '82 turbo bikes-and turbos in general-was not what the two OEMs were hoping for or what the public expected. "The turbos are great as engineering exercises," Karr wrote, "and they're definitely eye-catching, but functionally they're a bad compromise, particularly when you consider price." Friedman agreed: "What we've got here are two motorcycles that are no faster, lighter, simpler, or otherwise superior to normally aspirated bikes displacing more and costing less."

The almost utopian idea that turbos would make lighter, smaller-displacement motorcycles as fast as literbikes

was clearly not being realized-so far, at least. Was the idea flawed or was the execution to blame?

In '83, Suzuki joined the turbo ranks with its XN85, which used the aircooled, 673cc inline-four from its GS650 and was considerably sportier than the Honda and Yamaha. (The "85" denoted 85 bhp, according to Suzuki.) With its sharply angled clip-ons, 16-inch wheels at both ends, and racy bodywork, it certainly looked to be the most serious sportbike of the threesome, and its engine performance mostly backed up the impression, the XN getting into the 11s at the dragstrip. Excellent back-road handling helped too. Magazine tests pooh-poohed the XN85's price (\$4,700), lack of cornering clearance (its exhaust grounded badly), handlebar shape, andagain-turbo lag. But as Cycle editors wrote in the December '82 issue, "If you want a turbo, go for the Suzuki. There's more to this [one] than meets the eye."

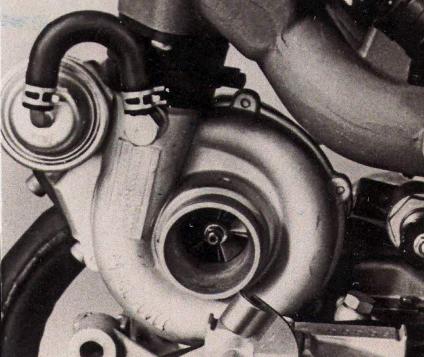
In a shocking move (or maybe not

so shocking given Honda's aggressive posture and the new-model craziness of the early 1980s), Honda introduced a new turbo model just a year after launching its CX500T. For '83, the CX500T would be replaced by the higher-displacement, faster, and more refined CX650T. In either an obvious admission that they'd gotten it partly wrong the first time or because engineers for '83 had a 650cc version of the CX engine ready for production for the CX650 Custom, Silver Wing, and Interstate (likely a little of both), the '83 T-model got 674cc, a stronger crankcase, a simpler computer, revised gear ratios, and numerous other refinements, all of which made it a much better motorcycle.

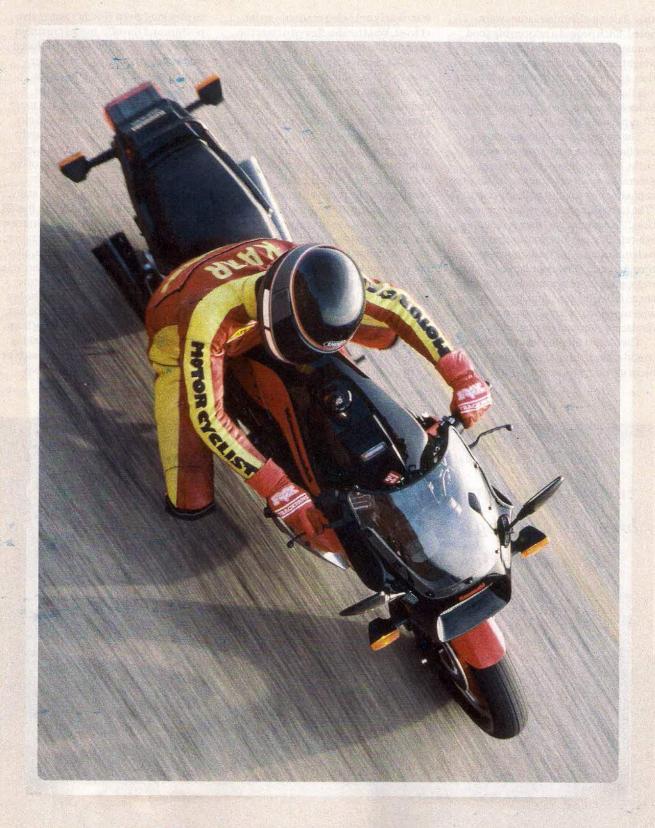
"The 1983 Honda CX650T," wrote Cycle's editors, "fulfills the promise last year's turbos couldn't keep. Honda has come a long way toward defeating limp off-boost power and turbo lag, making the 650T a splendid Grand Touring bike that thrives on back roads as well as

The 1980s Japanese turbo wars comprised a brief but exciting period in motorcycling.





Collector Steve Haddad's Kawasaki turbo shows just less than 7,000 miles, but when that tach needle rips past the 5,000-rpm point, you'd better be holding on tight. A turbocharger designed for a motorcycle engine must spin as high as 150,000 to 250,000 rpm to deliver high output pressure or "boost."



Longtime Motorcyclist staffer Jeff Karr was impressed with the GPz turbo but knew the genre was a dead end. "You could tell the turbo phenomenon was going nowhere," he says today, "but the whole thing was still pretty fun!"

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highways. Last year, the 500T's attraction was the *idea* of a turbo; this year, the 650 delivers."

If the functional, Grand Touring-esque excellence of Honda's CX650T shined a softer, gentler light on the entire turbo movement, the folks at Kawasaki were about to melt the entire turbo community with a sustained blast of its laser cannon. Because, at that very moment in early '83, Kawasaki was putting the final touches on its own turbo model, the '84-spec GPz750 Turbo. Eighteen months earlier, Kawasaki had shown a KZ750-based turbo prototype at the 1981 Tokyo Show, and while it was a bit cobby looking and never productionized as planned, something Kawasaki's head of engineering said at the time about the project would prove prescient: "Horsepower comes first," enthused Takahito Aoyama. "We want the fastest motorcycle!"

With the '84 GPz750 Turbo,
Kawasaki got what it was after and then
some. Because if you boil down the
last 33 years of perspective, magazine
features, personal accounts, and motolore regarding the turbo movement
into its essential elements, you are left
with an indelible imprint: The GPz
Turbo was, without doubt, the meanest,
fastest, and most potent production
turbo bike ever built.

It wasn't particularly comfortable. Or quick steering. Or light. But it was fast, running 145 mph on the radar gun and high 10s at the dragstrip, becoming the quickest, fastest streetbike in the land in the process. It was also dead stable at speed, offered great brakes (for the time, anyway), and proved an amazing tool for high-speed back-road or racetrack work. It was swoopy, beautifully finished, and sexy, too, and when you jumped aboard

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They wanted
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and felt the boost hit you like a jump to lightspeed, the goosebumps ran heavy and deep.

"Kawasaki didn't set out to build merely the fastest turbo," Karr wrote in this magazine's September '83 road test. "They wanted to build a landmark. They succeeded."

"Until this year I was completely underwhelmed by the turbos I'd ridden," Friedman wrote in the same issue. "What we are getting now are honest-to-goodness fire breathers. [On the GPz Turbo] I was quite literally struggling just to hold on."

Of course, the turbo phenomenon wouldn't last—and couldn't, really, especially once the motorcycling public and press got a taste of another high-end sportbike that Kawasaki launched that same year and had ironically developed right alongside the GPz Turbo: the legendary 900 Ninja. The Turbo blew writers' and enthusiasts' minds for a short time, but as soon as the equally fast, beautifully sculpted,

slick-handling, reasonably affordable, and lag-free '84 Ninja's DNA leaked into motorcycling's bloodstream, the turbo experiment—for Kawasaki and the other OEMs—was finished. Forgotten. Kaput. The Ninja, along with other naturally aspirated bikes like the '84 and '85 Yamaha FJ1100 and FZ750, Suzuki GSX-R750 (and, a year later, the GSX-R1100), represented a new generation of lighter, more powerful literbikes and 750s, all of which made the need for turbocharged middleweights a moot point. Suddenly, the need for technological Band-Aids had disappeared.

Steve Haddad, a Southern California collector who owns the five turbo bikes we photographed for this story (all of which were wonderfully restored by turbo guru Greg Goss of Escondido, California), says the turbos' uniqueness made him a fan. "They're different," Haddad says. "They're odd. And esoteric. I like stuff that's unique. And these things are definitely that."

His favorite? "Probably the Honda 650," he says, "because it's fast, smooth, refined, comfortable, and handles pretty well. But the GPz is right there. It's so fast and so beautiful. It's actually hard to choose between them.

"For me," Haddad adds, "the turbos are time machines. The concept may have crashed and burned in a few short years and been nothing more than a technological bridge between oldschool and more modern sportbikes. But those are years I love to remember. And when I jump on one of these things and feel the turbocharger kick in and yank my arms straight, well, there's nothing quite like it."

Which is surely the feeling Japan Inc. was trying to achieve all along. M