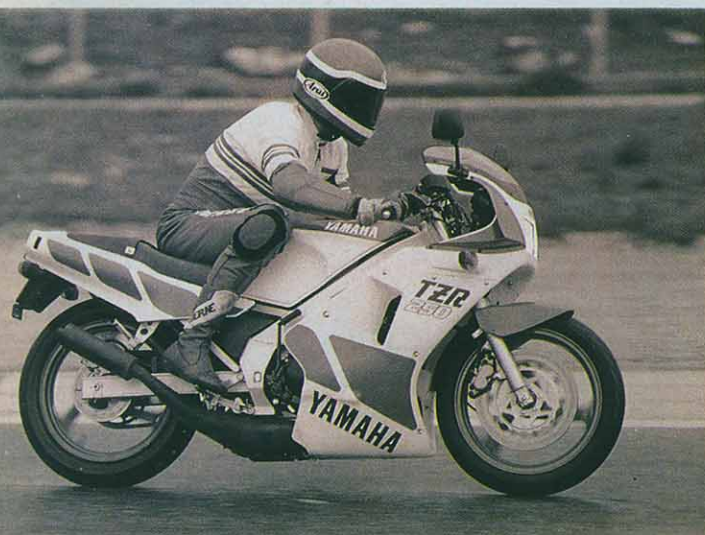


A

S THE STARTING FLAG DROPPED eight identical Yamahas screamed off the grid with a collection of demented European journalists aboard, including myself and three other Brits. The race was on. Earlier we had been told that anyone caught 'racing' around the Circuit Paul Ricard on the FZR1000 would be black flagged, but now we were positively encouraged to race. This was it, magazine honour was at stake so it was death or glory, no quarter given or asked.

In my eagerness to get a good start the front end popped up and the rest of the field disappeared off in a cloud of two-stroke fumes, but suicidally late braking before the hairpin had me back among them and making heavy contact with another British rider's machine as I dived through on the inside. It was neck-and-neck stuff through the next series of bends as we jockeyed for position, aiming vicious kicks at anyone who came alongside and trying desperately to T-bone those in front at the hairpins. After a couple of laps *Performance Bikes*

**With the new FZ750, FZX750 and TZR250, Yamaha now have something for everyone**  
**Tom Isitt**



JAN HESE

and a mad Greek had broken away from the pack leaving *Motorcycle International*, *Superbike*, *Bike* and a kamikaze Jap to battle it out for third place. Several slides and one off-road excursion later I finished third by dint of being more of a bastard than the rest of them, but failed to make it to the final.

Despite the fact that this was do or die racing in the true Pro-Am style, it was conducted amid much

# full house



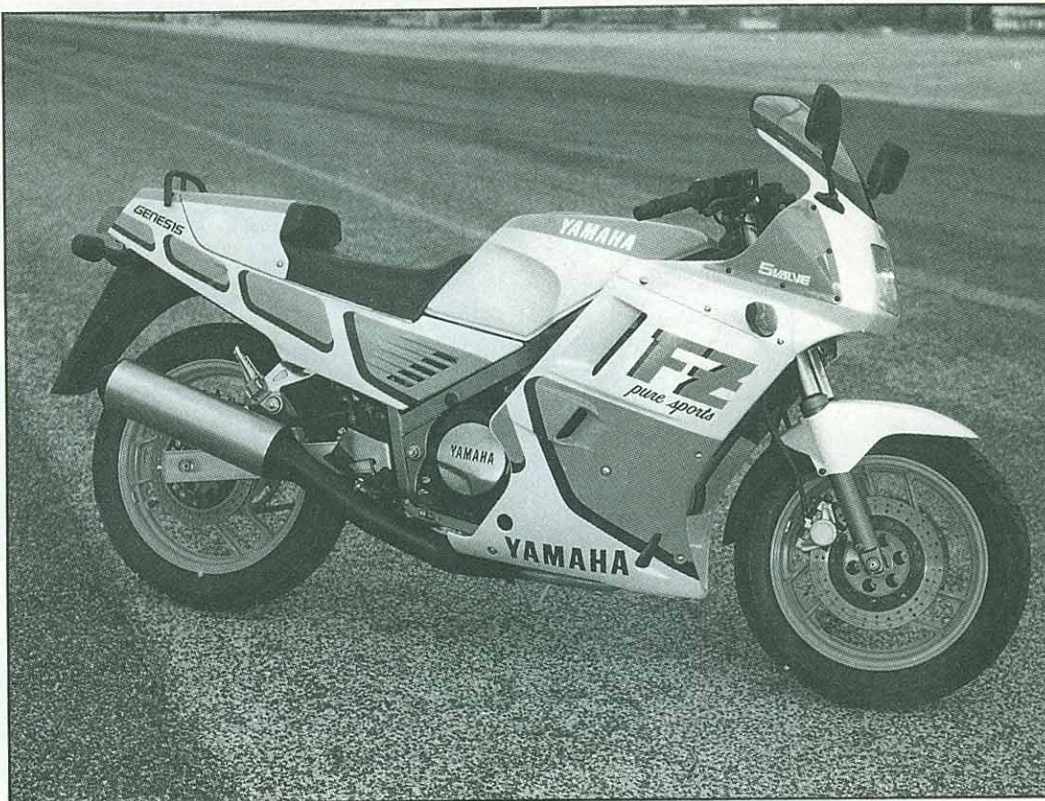
hilarity because the race was held on Ricard's go-kart track aboard Yamaha YSR50s - miniature GP replicas restricted to around 40mph and sporting rear-sets, clip-ons, Monocross back end, 12-inch wheels and a seat height in the region of 22in. Even though I'd been privileged to ride Yamaha's finest hyper-sportsters over the previous couple of days I had most fun on the YSR. I crashed twice in practice without even scuffing my leathers or hurting myself, and the sight of the World's motorcycle press in full racing gear racing YSRs round a kart track was pretty comical.

Yamaha say they'll be importing a dozen or so YSR50s, probably in the 55mph, unrestricted form, but it's unlikely that they will be homologated for road use. Damn shame, 'coz I can't think of a more fun way of getting to work than on one of those.

However, the real purpose of our visit to Ricard was to test the new FZR1000 and the latest street bikes for '87, not to spend our time bugging around on the kart track. Last month you got the full SP on the FZR1000, so this month you're getting the low-down on the '87-spec FZ750, FZX750 and TZR250.

After 20 rain-soaked minutes on the Genesis I swapped over to the latest FZ750, tore off down the start/finish straight and got it completely sideways coming out of the first chicane. Coming to within a gnat's franger of chucking it away on the very first lap was an unwelcome reminder of the FZ's awesome low-down power, one that took a lap and a half before my pulse rate returned to something approaching normal. After that I lapped with considerably more caution, allowing the superbly flexible motor to pull me round at a more sedate pace.

This year's FZ is fundamentally the same as it ever was, but with a few significant mods. The 750's 20-valve in-line four motor has always been the nicest thing about the FZ, so the only changes Yamaha have made to it is a slight modification to the exhaust camshaft to give a wider spread of torque. There has also been much lightening of internals like con rods, pistons and rings to give a claimed 13 per cent reduction in the engine's reciprocating mass.



The other advantage of using thinner piston rings is a drop in internal friction and this, coupled with a new four-into-one exhaust system, is claimed to give a 5hp increase in power over last year's FZ. Without an '86 FZ to use as a yardstick it was difficult to detect that horsepower increase on the track, but when we get one on Motodd's dyno we'll be able to see if these claims are true.

If the motor is the FZ's *piece de resistance*, the suspension certainly isn't. The front end on the '86 model was too soft and would chatter alarmingly under heavy braking; this year Yamaha have done away with the air assistance altogether which should make matters even worse. It doesn't. Although they haven't said so, they seem to have uprated the fork springs because the chatter wasn't nearly so intrusive as on earlier models. At the back end there's also been some 'weight saving' (read Yen saving). The rear shock is now only adjustable for preload, not rebound

damping, but again it's difficult to know if it's going to have any adverse effects without riding it on normal roads. The linkages are also different, giving 10mm more wheel travel.

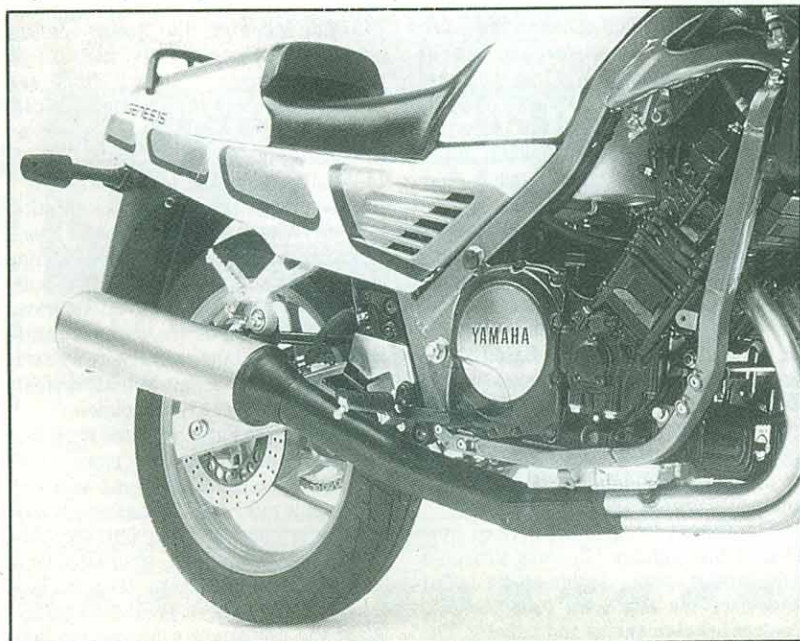
The most obvious difference between this year's and last year's FZ is the fairing. The '86 FZ came out of the factory with a half fairing and belly pan, but UK importers Mitsui had full fairings made up and fitted. Now the FZ gets a full fairing from Japan as standard, and a definite improvement it is too. The new fairing's screen is an inch and a half taller than before and now features moulded-in hand

**full house**

#### YAMAHA TZR250

<b>Price</b>	Around £2600
<b>Motor</b>	Liquid-cooled 2-stroke twin with direct crankcase induction
<b>Displacement</b>	249cc
<b>Bore and stroke</b>	56.4 x 50mm
<b>Compression ratio</b>	6.4:1
<b>Maximum torque</b>	26ftlb (3.6kgm) @ 9750
<b>Maximum power</b>	49.3hp @ 10,000
<b>Carburettors</b>	2 x 28mm flat slide Mikunis
<b>Transmission</b>	Gear primary, 6-speed box, chain final
<b>Frame</b>	Double cradle aluminium Deltabox
<b>Rake</b>	26°
<b>Trail</b>	96mm
<b>Front fork</b>	39mm telescopic with adjustable preload and variable damper
<b>Rear suspension</b>	Rising-rate Monocross with adjustable preload
<b>Brakes</b>	
front	320mm floating disc with four-pot opposed piston caliper
rear	210mm disc with opposed piston caliper
<b>Tyres</b>	
front	110/80H17 tubeless
rear	120/80H18 tubeless
<b>Wheelbase</b>	54.1in (1375mm)
<b>Seat height</b>	29.9in (760mm)
<b>Width</b>	26in (660mm)
<b>Weight</b>	282lb (128kg) dry
<b>Fuel capacity</b>	3.5 gallon (16 litre)

*New-look FZ gets full fairing, reduction in engine weight, increase in power and four-into-one pipe*



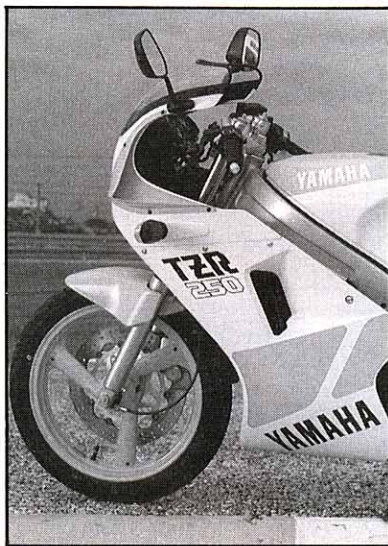


session there was one loony |who| led a field of FZR1000s and FZ750s for several laps on a Fazer before their top end speed got the better of him.

Having done my duty testing all the mundane (?) Yams, it was now down to the serious fun...the TZR250. To my mind the most fun you can have riding on a track is on a small stroker, and small strokers don't come any better than the TZR250. Without exception, everyone who rode the TZR, either in the wet or dry, came back to the pits with large smiles on their faces and full of praise for the little demon.

Yamaha have been at the forefront of two-stroke development for several decades and the TZR shows just how well they can build them. The engine is a completely new design from previous RDs. Displacing 249cc it has a bore and stroke of  $56.4 \times 50$ mm, a compression ratio of 6.4:1 and features direct crankcase reed induction. This direct induction system has the advantage of not only having been proven on their TZ racers but also being more efficient than the piston porting of the RDs. Carburation is handled by a pair of 28mm flat-slide Mikunis and the good old Yamaha Power Valve System is tucked in there altering exhaust port height according to engine revs.

With a high-revving stroker such as this there can sometimes be a problem with heat build-up around the exhaust port, and to combat this Yamaha have cast a coolant channel below it to dissipate some of the heat. Another refinement on the TZR is dry sump lubrication of the gearbox via an oil pump driven indirectly from the




crankshaft. This system lubricates the gears without having to run them in an oil bath and thus minimises drag.

The frame is the ultra-horny looking double-cradle Deltabox similar to that on the FZR1000 which gives excellent rigidity without the weight of a steel frame. At the front are 39mm variably-damped forks which are adjustable for preload and at the back is the usual rising-rate Monocross system with adjustable preload. Wheels are both 17-inch, hollow spoked alloy and there is a 320mm floating disc at the front with a rigidly mounted 210mm one at the back. Both are gripped by opposed piston calipers.

Trampling several other journo's underfoot in the stampede for the TZR I shot off

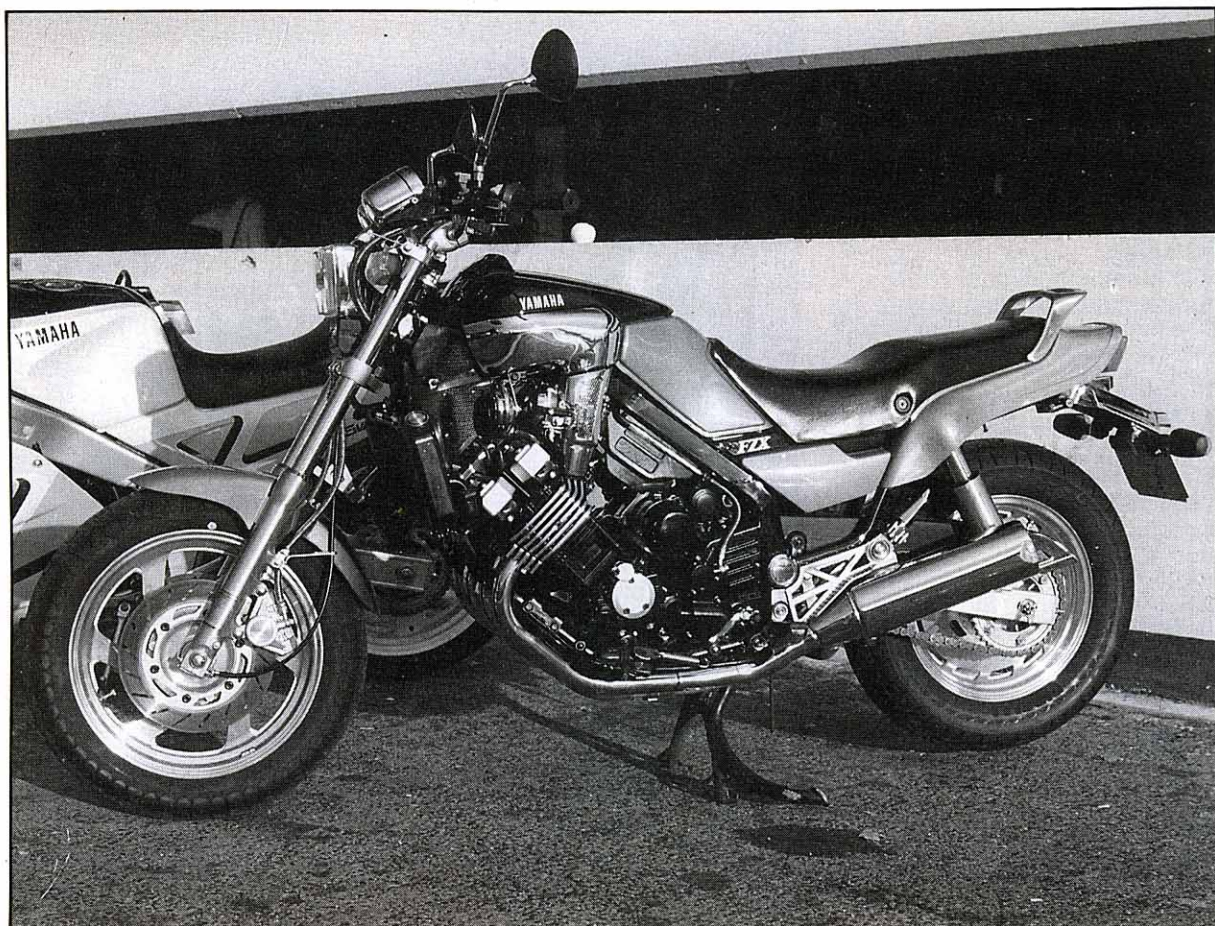
down the pit lane and prepared to run it until the petrol ran out. It ran out a lap later, and I had to fight off the hacks all over again while it was refuelled. In its power delivery the TZR is like the 350 Power Valve in that not a lot happens until the revs get up to 7000rpm. The only difference is that it's more gutless below seven grand and then when the power does come in, it does so much more dramatically. In order to get the TZR to really fly you have to keep it revving above 8000rpm, and in doing so you'll be rewarded with stunning acceleration and a top speed of around 120mph.

Although well down on top end compared to the FZR1000 and FZ750 the TZR had no problems staying with the bigger bikes through the bendy bits, and I spent several laps locked in a bitter struggle with someone on an FZR. The handling of the TZR is almost faultless, the 17-inch wheels make the steering perfectly neutral and the front stopper is incredible. On the race track or the open road it's an utterly wonderful machine, but with little below 7000rpm it's not going to be a whole lot of fun round town. But who really cares? I read somewhere that Yamaha sold 20,000 TZRs in the first six months they were on sale. It doesn't surprise me one bit, I can't think of many other ways I'd prefer to spend \$2600.

Looking at Yamaha's range of bikes for this year it strikes me that they really do have a full house. They have some world class machinery in virtually every type of bike as well as a healthy attitude to model longevity that other, more fickle manufacturers should note. 

*The TZR250 is the most fun you can have without laughing—that's official*



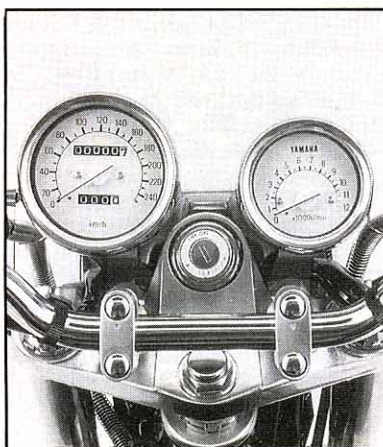


The FZX750 Fazer's looks may not be everyone's cup of tea but it's a good all-rounder. Clocks look like Virago surplus

protectors, both additions affording significantly more weather protection. Wind blast is still considerable as you whistle down the Mistral straight at 150mph, but you don't have to tuck down quite so low anymore.

Yamaha have an admirable policy of uprating bikes over a number of years, the Power Valve being a case in point, and this is what they've done with the FZ750. More power and less weight make the motor

	YAMAHA FZ750	YAMAHA FZX750
<b>Price</b>	Under £4000	Under £4000
<b>Motor</b>	Liquid-cooled DOHC 20-valve in-line four 749cc	Liquid-cooled DOHC 20-valve in-line four 749cc
<b>Displacement</b>	68 x 51.6mm	68 x 51.5mm
<b>Bore and stroke</b>	11.2:1	11.2:1
<b>Compression ratio</b>	57.8ftlb (8.0kgm) @ 8250	56.4ftlb (7.8kgm) @ 8000
<b>Maximum torque</b>	105hp @ 10,500	92.7hp @ 9500
<b>Maximum power</b>	4 x 34mm Mikunis Gear primary, 6- speed box, chain final	4 x 34mm Mikunis Gear primary, 6- speed box, chain final
<b>Carburettors</b>	Double cradle, box- section steel	Double-cradle, box- section steel
<b>Transmission</b>	25.5°	28.75°
<b>Frame</b>	94mm	116mm
<b>Rake</b>	39mm telescopic Rising-rate	38mm telescopic Twin de Carbon shocks adjustable for preload
<b>Trail</b>	Monocross with 5- position preload	
<b>Front fork</b>		
<b>Rear suspension</b>		
<b>Brakes</b>		
front	2 x 267mm discs with opposed piston calipers	2 x 267mm discs with opposed piston calipers
rear	267mm disc with opposed piston caliper	267mm disc with opposed piston caliper
<b>Tyres</b>	Pirellis 120/80V16 130/80V18	Pirellis 110/90V16 140/90V15
front		
rear		
<b>Wheelbase</b>	58.6in (1490mm)	60in (1525mm)
<b>Seat height</b>	31.5in (800mm)	29.5in (750mm)
<b>Width</b>	29.7in (755mm)	30.9in (785mm)
<b>Weight</b>	452lb (205kg) dry	449lb (204kg) dry
<b>Fuel capacity</b>	4.6 gal (21 litres)	2.8 gal (13 litres)



even more of a gem and the new fairing is a nice touch. Unfortunately, the one thing that needed upgrading more than anything else was the suspension. Instead they've downgraded it. Whether the loss of air assistance at the front and damping adjustment at the back will adversely affect its road manners remains to be seen. It won't have done it much good, that's for sure.

Harping back to that magnificent FZ powerplant yet again, Yamaha have used it to power their FZX750. The FZX isn't a new model as such, but it will be new for the UK this year and is basically the same as the 700cc US-spec Fazer. Based on the looks of the V-Max, the Fazer uses a down-tuned FZ motor, the only differences being rubber engine mounts, revised carb settings and altered gearing to produce stump-pulling acceleration in the 'power cruiser' tradition.

The Fazer's frame is not derived from that of the ordinary FZ, being instead a high-tensile steel, double-cradle affair that uses the left down tube to route coolant from engine and radiator. The

right down tube is removable to facilitate engine work. In keeping with the power cruiser look, the Fazer has twin gas/oil de Carbon rear shock absorbers which, although *non-rigueur* by today's standards, actually work very well at keeping the bike on its intended course. The shocks are mounted in an inverted position and are five-way adjustable for preload. Front suspension is by 38mm, air assisted forks.

Yamaha claim 93hp at 9500rpm for the Fazer, 12hp less than the FZ at 1000 fewer revs. The power delivery is smooth and strong all the way from 3000rpm up to 10,000 and the bike would grunt up to a top speed of 135mph on the Mistral. At those speeds it's not a lot of fun, though, because the high, wide bars and forward-set pegs make high-speed riding very tiring for more than a few minutes.

Again following the power cruiser image, the Fazer adopts the use of miniscule wheels - 16-inch front and 15-inch rear - and the rear one is a cast alloy, solid dish item (like those used on pukka drag bikes) running on a 140/90 Phantom. Add to the foregoing a small rectangular headlight, clocks that look like Virago surplus, chromed mock air intake scoops and very swoopy styling and what you have is a weird looking motorcycle. Aimed directly at American tastes, the styling on the Fazer is rather appealing in a strange way. There's no way I'd call it handsome, but at least it steers clear of looking like a tart's boudoir.

At Ricard the Fazer acquitted itself well. It has an abundance of power with which you can hustle it round at a very respectable rate. The suspension is good enough to cope with all but the most horrendous bumps and, unusually for a bike of this type, there is actually a reasonable amount of ground clearance. When the Americans went out for their