

IT'S A WEIRD and wonderful sensation chasing a police motorcyclist with ol' blue eye flashing in front of you for a change, but then so is the whole idea of launching a new bike in as remote and exotic a place as Senegal in West Africa. Halfway between the Tropic of Cancer and the Equator, even their midwinter sun is stronger than the height of an English summer's day. Yamaha, evidently pleased at the reception their Marrakech launch received in 1976, decided to go one better for the super-monster XS1100 and slimline SR500, two motor cycles totally different in concept.

But with over 70 journalists from all over Europe, Yamaha enlisted the help of the local authorities, which included the cooperation of police and the BMW-mounted escort. Can you imagine the West Sussex Constabulary being as helpful to a bunch of tearaways who don't even speak the lingo? Whatever the morals of such an exercise when people were starving in straw hats just one mile away, the guaranteed good weather certainly meant we could put the bikes to good use.

First impression of the XS1100 is that it is so big — XSively so. And fast, very fast. For your

two grand, you'll get a 125mph-plus, 600lb missile that can accelerate so fast it smokes the rear tyre for a quarter-mile. Zapping open the throttle in any gear lifts the bike up on its suspension, a la BMW, and there's just a slight tremor as the rear wheel hops as a claimed 95bhp is let loose. Funnily, it's not arm-jerking, neck-snapping stuff because it's so constant — rather like that period in an airliner just after take-off and the jets are pushing towards the stratosphere.

Top speeds of around 140mph have been banded around for the new breed of megabikes (I read that phrase in *Bike* last month, isn't it nice?), but the last 500 revs in top gear just would not come from the XS1100. Not only that, but the apparently flat and deserted roads out in the Senegalese countryside had a habit of producing craters and old boys on horse-drawn carts from nowhere. These and avoiding the stomach shits were the main hazards of life in the former French colony. The XS would zoom up to 125mph quicker than *Motorcycling Menopause's* hack on his way to the hotel loo, but no way could I get the last few mph.

Ignoring the upper limits of performance, what is impressive about the XS's power is its availability at all revs. Full marks to Yamaha for the press kit which included all the information they wanted you to have, plus some graphs of torque and bhp curves. From as low as 2,000rpm, 42ft/lb of torque is there rising steeply up to 4,000rpm where it levels off a bit with a peak of 66.5ft/lb at 6,500rpm. That's a helluva lot and compares with say, 62.9ft/lb from a Z1-R Kawasaki. The effect on the road is that there's always effortless power available in any gear.

This performance is matched by a riding position BMW would be proud of. Footrests are comfortably placed to give a good weight throw on to the wrists and narrow, W-shaped bars. All the way round, the XS is built for comfort as well as speed with a deeply padded seat, light controls and huge, easily read instruments, one of which is an electric fuel gauge. Holding it WFO for 100 miles was interesting; to see the gauge needle actually dropping as the 5.28 gallon tank emptied. Overall consumption figures for all the bikes worked out at 32mpg, said Yamaha, but that

# NOTHING EXCEEDS LIKE XS

Dave Calderwood, fresh from Yamaha's XS1100 and SR500 launch in darkest Africa, diagnoses a case of split personality.



## NOTHING EXCEEDS LIKE XS

included the posers in the party. Certainly among the Brits, the figure must have been down to 25mpg at times.

Heart of the XS1100 is the massive engine unit which is very similar to the superb three-cylinder XS750 with a single cam chain driving both the overhead cams. This runs between the centre cylinders complete with a slipper tensioner, but otherwise the valves, guides, lifters, pads and springs are the same as used in the XS750. The crankshaft runs backwards with a four-row Hy-Vo inverted tooth primary chain taking the drive to an idler shaft. This has a spring loaded shock absorber and engages with the starter motor through a one-way clutch.

An eight friction plate clutch handles the power easily and is surprisingly light and progressive. The five speed gearbox has a re-engage-type linkage to keep the gearchange lever a good distance from the foot. Normally changes are crisp and quick but at high revs, the clutch must be completely disengaged and a firm prod given to ensure it changes. You're not likely to find a false neutral, just sometimes it doesn't want to change. Final drive is taken through 90 degrees by the middle gearbox through the needle-roller supported universal joint to the BMW-type enclosed drive shaft.

An oil cooler mounted just below the steering head should maintain the cruising temperature at 102 degrees centigrade and is probably essential considering the small — 5.3 pints — oil capacity of the wet sump system. The low pressure oil warning light comes on at a mere 4.2psi which seems exceptionally low as cruising pressure is 42psi.

What makes the XS so excessively heavy apart from the engine is the double loop cradle frame that somehow reminds you of children's playground climbing structures — it's so big that it must do its job several times over. Add to that an electrical system complicated enough to give Marconi the DTs (not 175 Yamahas), plus odd gimmicks of dubious value, and you're on the way to a five and a half hundredweight Behemoth. Gadgets include an ignition cut-off device when you're leaning more than 60 degrees from the vertical (falling off) and an automatic anti-burglar alarm that almost prompted one hack to go walkabout in the bush when his bike's alarm refused to turn off. Mind you, no one wanted to steal it . . .

However, when it became evident I was going to have to ride that bike, a little under-seat mechanicking was deemed necessary. Armed with the extensive toolkit which lives behind a lockable side panel, I loosened two nuts, removed the seat and the bleeping alarm was isolated. Actually, I cut the wires leading to it when Steve Hackett of Yamaha's PR outfit wasn't looking.

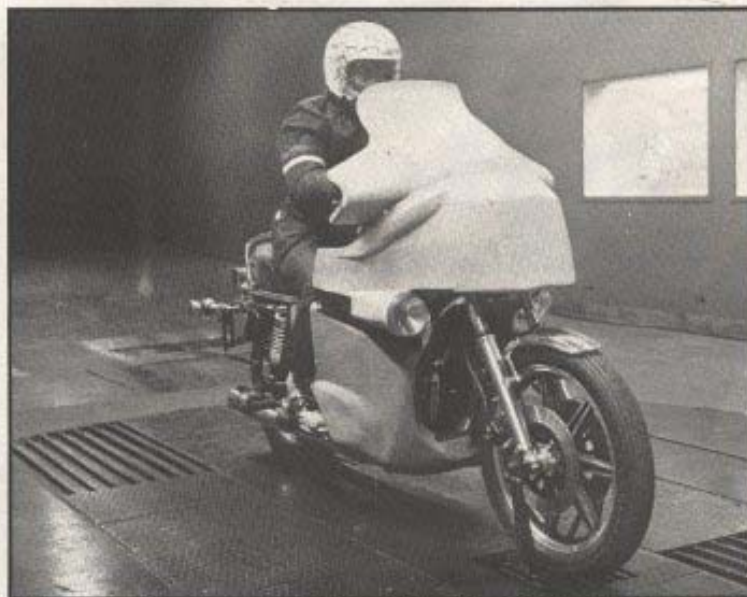
Four fuses and spare live under the right side panel along with the rear brake hydraulic master cylinder. It's a masterpiece of planning, since all the available space is used, but promises merry hell for tracing and fixing faults.

Such things were far from our minds however as we set out on our first ride from the plush Club Mediterranean, a sort of posh French Butlins where Yamaha were feting us. With the super weather and a hangover from French colonial rule still showing in their road signs, it was just like riding the scented South of France corniches.

36 **bike**



Shaft-driven, four cylinder XS1100 is dramatically powerful, but the SR500 single points the direction which bike manufacturers should be taking.



Wind-tunnel testing the glassfibre fairing designed by British industrial designer (and illustrator) John Mockett for the XS1100.

Right: the XS1100's burglar alarm is deafeningly effective.

Below: it's a square world. Note fuel gauge sharing space with the XS1100's futuristic looking tacho. Dog-leg levers are a nice touch.



Mockett's strange fairing is surprisingly slim. Note handlebar and screen section rotates with steering head while the rest of the structure is firmly fixed to the frame.

Scattering peasants from our path, the police escort rode a steady 80-90mph, often no-hands as he signalled cars off the road, and obviously it was no sweat to stay with him on the XS. On an unaccompanied ride however, to the only 'real' corners in Senegal, handling of the XS was shown to be slightly doubtful. While the Kayaba suspension is comfortable for cruising, it gets hot and bothered, along with the worried rider, on the tight, twisty bits that beckon the racer in us all. Twin discs in front and a single at the rear should be enough brakes for most bikes, but after 15 minutes' charging up to bends, hauling on the stoppers, powering round and doing it all again, they began to fade as heat built up.

It was also vital to screw the throttle on from the instant you started laying the bike over or a disconcerting weave would emanate from the rear end. While this technique would normally be followed by fast riders anyway, it should not be essential on a road bike just to maintain stability. What happens, for instance, that day when you meet Ivor Hardon, rampant London taxi driver, doing a U-turn in Kenny High Street?

The final criticism of the big Yamaha's handling will be echoed by all except 20 stone rigger players — its low speed manoeuvrability. No, commuter style traffic weaving is not for the XS and anything as dodgy as turning around in the road needs a steady hand and Rathmell-like balance. This point was borne out by one of the Italian press representatives who claimed he dropped the thing while braking for a dog. Since the subsequent plaster cast covering three-quarters of his torso hid nothing worse than a cracked collarbone, one might assume he lost his balance while putting it on the side stand...

For those who are still interested and don't mind becoming ever more remote from the true sensations of motorcycling, Yamaha NV, the Amsterdam based European HQ, commissioned British industrial designer John Mockett to produce a fairing fit for the fastest tourer on the road. Mockett's final design, aided by David Weightman, is a two-piece glass fibre construction in which the handlebar muffs and screen rotate with the bars while the headlamp shroud and legshields are mounted firmly to the frame.

Twin Cibie spotlamps, a clock and oil temperature gauge come with the fairing as standard. It took eight months to complete from the initial theory stage. Mockett used facilities at Coventry's Lanchester Polytechnic, where he works, to build one-fifth scale models for the first wind tunnel tests. Once the basic concept was decided on, a full-size model was sculpted and tested at MIRA. The benefits of having the handlebar muffs and screen mounted on the bars are that the width and size could be kept down and still use original equipment. BMW's fabulous R100RS fairing, for instance, needs dropped bars to tuck the rider in.

The shape is important, not only to make it slip through the air more easily — drag is reduced by 15 per cent — but also to give extra stability. BMW achieve this by incorporating side spoilers, but Mockett claims his fairing's shape reduces front wheel lift by up to 32 per cent which all sounds very impressive. In fact, the prototype test model had a slight vagueness at 100mph-plus speeds, corroborated by others, which could well have been too soft a fork spring setting.

The real gem of Senegal was the SR500, which at 33bhp and 360lb is not a super

## NOTHING EXCEEDS LIKE XS

scorcher, as XT500 owners will verify. Its star qualities lie in nimble handling, not a little due to its slimline profile, and progressive, taut suspension. The motor pulls cleanly from 2,000rpm upwards but really thuds at around 5,000 which translates to 70mph in fifth gear. A couple of West German and Belgian models were cunningly hidden among the test fleet and these, aimed at a special 27bhp insurance category, were quickly identified and avoided as 'duds'. British models will rev out nicely and only tail off at 95mph, maybe 5mph quicker if you're tucked in.

The test route, despite being police-escorted for the first few miles, was much more interesting on the sohc 500 and included a section of dirt road on the return run. This had longitudinal ridges which tended to set up a weave from the steering, but were otherwise as smooth as tarmac. Once my confidence was established (fools never say die), 90mph was within reach since the suspension soaked up most of the ripples with nothing worse than the occasional twitch.

Back on tarmac, the SR could be hammered through those twisty bumpy stretches which gave the XS such a hard time. There was simply no need to back off the throttle on some of the long winding bends, just hang on in there looking for slippery patches and lean, lean, lean it. The SR is much more than just a road version of the XT500 trail bike with different frame geometry, suspension, riding position, everything. The XT's six-volt electrics have been junked in favour of a 12-volt system which should be able to cope with the bike's performance.

XT and SR crankcases are the same apart from an extra bulge on the timing side where the pointless capacitive discharge ignition is housed. Although better from a maintenance and timing accuracy point of view, it is the real reason for the SR's unenviable poor starting reputation. With a kickstart only, the low speed at which you can turn the engine over means a poor spark is provided. If the piston position, carburation and rider's kicking strength are below par nothing happens. But with practice, and use of a button on the throttle screw which sets the carb's slide to the right opening, first or second kick starts are a reality. Sometimes.

Ancillary equipment of the SR is typically Yamaha. A single disc with floating caliper provides really good dry stopping and is complemented by a s/s drum at the rear. The riding position is comfortable with armchair-type bars which could be exchanged for flat bars for long distance riding. The wide bars aren't bad in town but a bit of a strain on the arms at 70mph. Switchgear includes the ingenious and useful self-cancelling indicators. Both side and centre stands are fitted.

Fuel consumption is around 55-65mpg, which with the 2.6 gallon fuel tank gives you a range between 140 to 170 miles.

Summing up, Yamaha seem to be suffering from a split-personality complex with two totally opposed motor cycle concepts. The XS1100 is an overweight monster which only adds fuel to the escalating machismo theme adopted by Japanese manufacturers. Only Honda seem to be displaying any anxiety about where this is leading motorcycling. Yet, at the same time, Yamaha have come up with the eminently sensible SR500 which unfortunately is not going to be available at a sensible price at £980.



The Yamaha launch made a change for the local Senegalese, too. But no, they're not singing 'bum-titty, bum-titty, bum, bum, bum . . .'



Single cylinder simplicity is appealing. Pity the SR500's price tag is high, at £980.