



Nigel Mansell says he found the active suspension Lotus GP car 'amazing' at first for the way it refused to pitch or roll. 'You didn't have to wait for the body to move', he says, in a remark which is probably more of a tribute to the speed of the man's reflexes than anything else. The power loss of around five horsepower was a problem in Cosworth car, Mansell says; so he's keen to try active turbo car...

ABOUT THE MOST CRUEL OF ALL rumble strips lives on the inside of Brands Hatch's Druids bend, right at the apex beside the Armcoc. It is made up of little concrete hemispheres, like pimples, which are spaced a couple of feet apart and are supposed to look fierce enough to keep even the most rushed of racing drivers from cutting the corner tighter than the organisers wish.

When Nigel Mansell and I, borne by the active ride Lotus Esprit prototype, hit the most wicked of all rumble strips, we were travelling at near enough to the car's limit of adhesion, two-thirds of the way through the curve, heading downhill towards Bottom Bend.

'And it handles the rough stuff well, too' Nigel was saying. 'See?' He swung the wheel another quarter turn right, the car cut what I thought was a terminal swathe across the concrete pimples. Next stop is to be infield with a busted front-end, my head would have told me if there had been enough time to think it. Peter Wright is not going to be a happy man. This Peter, leading light of the Lotus active ride project and custodian of this well-worn but precious prototype, had read Nigel a little lecture about looking after the car – principally, keeping it below 6000rpm for the hydraulic pump's sake – before we'd taken off, Nigel at the wheel. The idea

was that I should see how the car performed under real, racing cornering loads with a Grand Prix driver in charge.

The upshot of Druids pimples was that we did not stop or even slow. The Esprit took to the concrete as though it had been *built* to negotiate them. There was a rumbling, but of body disturbance or bouncing off line there were no signs. In a second or two we were accelerating down the hill toward the next, faster left-hander, Nigel conversing calmly.

Come to think of it, he conversed calmly – rather one-sidedly – all the way through the laps we did on the Brands short circuit, while the rest of the FOCA circus, gathered for practice before the Grand Prix of Europe, munched on their lunch. 'What you'll feel', Nigel said, 'is a totally different ride, basically.' (SCREECH) 'Feel the difference?' (SCREECH) 'You just put the car... and you can feel quite clearly how it keeps the same ride height under cornering force.' (SCREECH) 'You get a better feel for the car, that's for sure.'

Did the active Esprit have a better standard of steering sensitivity, I wanted to know (in a higher-than-usual voice, my tape recorder tells me). 'Well yeah', Nigel said. (SCREECH) 'You know just how far you can push the car.' (extended SCREECH) 'It's an amazing

machine, this. Considering it's a road car, not a race car. It's quite fast. I mean, we're doing 110 now, just going into fourth for Paddock, and it turns in like a race car. See how smooth it is?"

Then it was down and on, and up, and over the rumble strip.

Peter Wright told me later that the Lotus proto, on its balding NCTs, was momentarily up to 1.5g as Nigel threw it into the dip at the exit from Paddock, just before Hailwood Hill. I've never felt such lateral acceleration in a road car.

I don't believe I've run into a racing driver who was quite so enthusiastic about a road car's suspension, either. Nigel Mansell, who raced Lotus's active GP car at Rio and Long Beach and put many miles in on the Esprit proto, has no doubts about the merits of it for sheer flat out, against the clock driving. "The first time I drove it in a race car I was amazed", he says. "The car had no pitch whatsoever. It kept a constant ride height. And when you turned into a bend there was no roll whatsoever. It took some time getting used to its behaviour; the way it took you up in the lift to the first floor when you started up – and the way it didn't dive under brakes at the end of straights. I found for a while that I was tending to brake early because you didn't get the same sense of speed and stopping that a conventional car gave."

"But I had the feeling that the car was even more competitive than we'd thought, bearing in mind that at the start of the season we were still running Cosworth-powered cars, our Pirelli tyres were new to us, and we had practically a new team. Besides, the car was overweight. Still, it had the potential for much greater things.

"If we'd had more grip, it would have been better. The handling was great. It was as if you could drive the car on tip-toes all the time, without having to wait for the body to lean or lurch first. And it was so adjustable; the engineers could discover what was making us slow in a given place, then just dial it out.

"Of course, the power loss was a problem. We lost five or six horsepower to power the system, and that made us slow down the straights. And in this business, the first 450bhp just gets you around the circuit. It's the last 50bhp or more that decides how fast you're going to go. Out of 50bhp, five or six is a lot to give away. I reckon we lost a few miles an hour because of that."

According to Nigel Mansell, the active suspension GP car's adjustability caused him an unusual problem in practice for the Rio race. "I came in for some extra stiffness on the rear. The car was pitching a bit, too. I asked them to stop it, and how long would it take? "It's done", they said, and waved me out again. Didn't even get enough time for a breather."

"Another time, also in Brazil, I came in and asked them to stop the car rolling so much in this 150mph corner they've got there. So they made it roll the other way. I tell you, that was weird. It was totally alien."

Peter Wright shows little surprise about Nigel Mansell's basic, unfeigned enthusiasm for the machines he calls "computer cars". "He did a very good job for us", Peter says. "He did quite a few miles in the early Esprit, the first version of the car you've



been in today, and back in those days – just occasionally – it used to bite. Something would happen he just didn't have a right to expect.

"In the GP car he showed he was a brave bloke. We were pretty sure the system was OK, but it was still a development project. Nigel'd take the car away from us to the back of the circuit to prove to himself it was safe, then he'd drive it very, very hard."

"Once, in Brazil, we dialled him the wrong settings and they sent him off the road. He reckons the active suspension helped him keep control of the car and keep it unbent. In a conventionally suspended car, he'd have hit the fence. When he got back, he told me we'd built a hell of an off-road car..."

Mansell doesn't disguise his keenness to take to the next generation, turbo-powered active Lotus GP car. He suggests that there might be such a car under him before the end of this season, though Peter Wright won't confirm or deny. It's all a matter for next season's budget, he insists. Both men point out, with caution, that racing has moved on a long way since the beginning of '83 and active ride in a GP car might have to earn its keep all over again. "But if they want someone to drive it", says Mansell with a grin, "here I am."