

CAT ○ ○ ○ ○
DRIVER TRAINING
CORPORATE AND TRACK

as featured in

GTPORSCHE
THE PURELY PORSCHE MAGAZINE

Unless your name is Walter Rohrl, the chances are that no matter how good a driver you are, or think you are, you can probably improve and learn a thing or two. That's where driver training courses like CAT Driver Training come in. The company was started by Colin Hoad, who has a long list of seriously impressive credentials to his name – he has been motor racing since the age of 18, he's a Rolls Royce-trained engineer, he has 20 years of race engineering experience, he's a motor manufacturer trained driver trainer, vehicle evaluator and Nordschleife vehicle evaluator, and if that's not enough, he even worked at a Porsche specialist.

Based at Millbrook, the CAT Driver Training courses are divided up into five different sections, with each one offering a different selection of courses, from advanced road driving and evaluation driver training to a multi-car track experience, and our chosen course, Performance Driver. It's a great all round course that is suited to everyone from evaluation drivers to racing drivers and it aims to help you understand how to become a fast, safe driver and teaches you to understand how a car will behave in any given situation and why. The day is split into sections, each one dealing with a different element of car control, allowing you to build up your understanding, along with explanations of camber gain, camber stiffness, bump steer, roll

steer, steering response brakes, springs, dampers, anti-roll bars and tyres.

Following a briefing, we set off in Colin's Mondeo for the first of the day's activities. You use his car to learn the basics in each section before getting into your own car and applying what you've learned on track. What's good is that even between activities, Colin is always talking to you, analysing how you're driving, teaching you new techniques, which he encourages you to put into practice throughout the day.

BRAKING

The first thing that we start with is braking, trying out different techniques and understanding what the car is doing. It might

seem odd, but we very rarely have to use any form of emergency braking on the road, so our understanding of what a car is doing in that kind of situation is somewhat limited. Colin drives to start with and demonstrates the different techniques that I'll be learning, before we swap over and I get to have a go.

We start with a simple emergency stop, braking as hard as possible before I do something I've not had the chance to experience before – emergency braking whilst using the ABS to steer the car at the same time. It's interesting to try it out and reassuring to know that it works and how it works.

Colin moves on to the threshold braking technique – this involves braking as hard as you

can, but without activating the ABS. While your actual braking force is less – because the braking action is constant, you can actually stop faster. In practice it takes a few goes, mainly because you find yourself being rather more gentle on the brakes than you need to – Colin points out that you're actually more likely to lock the brakes when travelling slowly then when travelling more quickly. To illustrate this, he gets me to perform a threshold emergency stop from 90mph and, as I jump on the middle pedal, the brakes don't show any signs of locking. You have to modulate the pedal as you slow down to avoid locking up and then Colin gets me to work on my pedal exit technique.

As part of the threshold braking exercise, I

have to bring the car to a firm stop, easing off the brakes at the last second so the car doesn't jolt – this helps to keep the car balanced as well as being more comfortable for driver and passenger. It takes some practice, but it's incredibly satisfying when you get it right.

HIGH SPEED DRIVING

With the stopping part of the course taken care of, we can now move onto some driving techniques. Using Millbrook's two-mile bowl, Colin first runs through some low speed manoeuvres before moving on to high speed driving. When faced with a fast-approaching hazard on the road, our natural instinct is to back off or brake, but it's also a good idea to try

Training day

If you want to learn how to be a better, faster and more confident driver who understands why a car behaves the way it does, then CAT Driver Training is what you need.

Words: Sebastian de Latour Photography: Chris Brown



to get around the obstacle. We start off in the slow lane, travelling at 30mph and Colin asks me to perform a quick lane change into the next lane and then back again, all the time keeping a constant throttle. Come off the throttle during rapid lane changes, he points out, and the car will become unbalanced and you'll have a lot more work to do. Trying to steer quickly in two directions while keeping a constant throttle is akin to rubbing your stomach while patting your head, as Colin puts it, and he's not wrong. He then asks me to perform a faster lane change before getting me to really throw the car across the lane and back again. What's incredible is

just how much grip there is and just how violent you can be with your steering inputs with the car remaining stable all the time. Colin asks me to describe how the car feels during the lane changes and what the steering response is like and talks about what the car is doing before we try the same manoeuvre at slightly higher speeds. This is definitely something that you can't practice out on the road, so actually getting the chance to do it gives you a massive confidence boost as you're aware of how the car will react and you know how far you can push it.

With the lane changes out of the way, it's time to build up speed and venture up to the top lane

of the steeply banked bowl. To be honest, it's a slightly unsettling experience – with the speedo hovering around the 120mph mark you can't help but feel nervous as the constant barrier whizzes past your right ear. Throughout the day, Colin has been teaching me that you can't help but steer where you look so therefore you should look where you actually want to go, but up on the bowl this is rather difficult. Instinctively you want to look ahead, but you can't because all you can see is the never-ending barrier, and using Colin's technique of looking as far round the continuous corner as possible is a challenge because you're looking so far ahead. It's

It's fun to try out techniques that you don't use on an every day basis. The advanced techniques Colin teaches help you to be more confident on the road



challenging but satisfying when you get it right and exhilarating at the same time.

CORNERING

Along with the 'look where you want to go' technique, Colin has been getting me to practice single input steering. As with the other car control techniques that Colin teaches, this is yet another way in which you can help to keep a car stable whilst cornering, as you're not making constant adjustments to the steering. The idea is that you look ahead, through the corner to where you want to exit and you should be able to make one turn of the steering wheel which will then carry you through the corner and to your desired exit point. Again, it does take a bit of practice but as the various courses at Millbrook are joined up connecting roads, it

gives you the opportunity to try the technique out away from other traffic. It works amazingly well, though it does take some commitment to stick to one line, but when you do you can feel how stable the car is beneath you, especially when you up the pace. Colin goes through what makes up a corner, the entry point, the apex, the clipping point, explaining the difference between them and the exit point. I also learn about J-turns – not the evasive driving technique but the method of taking a hairpin at speed, about taking a late apex, picking a late clipping point and using the slow-in, fast-out technique to maximum effect.

Finally, we move on to finding and driving at the limit of grip. What this means is learning to read the signs that tell you when you're at the limit of grip, which in turn tells you that you're

driving as fast as you can. Colin calls it climbing grip mountain – you want to be right at the top, pushing the car as hard as you can but you don't want to fall off the other side by overstepping its limits. We use the skidpan for this, and as with some of the other exercises, it's amazing just how much grip there is.

I build the speed up slowly, the Cayman hangs on resolutely and as we approach 35mph I'm ready to stop, but there's still more grip to come. Colin tells me that the human body is designed to feel uncomfortable at around 0.5G, hence why I'm not feeling too happy, whereas the Cayman will be able to reach around 0.8G. This is the first thing you have to overcome in your quest to find the limits of grip – your own body's natural instincts.

Now comes the tyre squeal, it's the first

indication that you're right on the limit and just a little more speed and the understeer kicks in – that's it, there's no more grip left, I've reached the limit of adhesion. Now that I know what it feels like, how the car behaves and what to look for, I should be able to push the car harder, remaining confident in the knowledge that when I'm about to breach the car's limit, I'll know about it before it happens.

PUTTING IT ALL INTO PRACTICE

Over lunch, we chat about what I've learned so far, going over the various techniques before it's time for the fun part – fast laps on the handling circuit and the alpine course.

The outer handling circuit is just 0.86 miles long, but this makes it easier to memorise in such a short space of time and it features a good

selection of both slow and fast corners that really test your nerve. We start out by driving round at a steady pace so I can see all the corners and get an idea of what the track looks like, with Colin pointing out entry points and giving me an idea of what sort of line I'll want to take. I start to up the pace, encouraged by Colin who's constantly giving advice on where to brake, when to turn and how I can improve my lines. The single input steering comes into its own here, keeping the car stable through the faster corners and allowing you to make the most of the available grip, upping corner speed.

After a good number of laps, Colin slows me down to have a chat about how I can go even faster, working on my lines through the corners. The second to last corner is a very fast left-right, which you turn into on a steady throttle to keep

it balanced, but Colin tells me that as I start to turn right to take the second part of the corner, I should squeeze the throttle a fraction. The theory behind this is that by putting a bit more weight on to the back with that tiny bit of extra throttle, the car will take the corner better and faster. I trust Colin completely and do as he suggests and it works – the Cayman fires out of the corner a good few mph faster than before and feels even better for it. It's incredibly satisfying to actually feel yourself doing a faster lap, almost without thinking about it, and being so confident with the car, really working it hard and calling on everything you've learnt during the day, not to mention extremely exhilarating.

It's not over yet though, as it's time to have some fun on the alpine route. Loop one is 1.67 miles of twisting, turning, undulating tarmac,



designed to replicate a selection of Europe's finest mountain roads, and from behind the wheel it certainly delivers the wow factor.

We have less time to drive this course but with the handling circuit behind me, I feel confident to start attacking the alpine course – it's a very different kettle of fish though, and there's a lot more of it to learn. It's great fun, if a little white knuckle inducing at times, as the road falls away and you don't know where it's going, and there are plenty of blind corners to deal with but you just have to trust Colin, and you feel a little like a rally driver as he guides you through the corner with his precise notes of where to position the car.

As before, he's keen to push you and his confidence in you in turn helps you to go faster and trust your own abilities. The alpine course is the perfect way to end a fantastic day and I'm buzzing after almost an hour of fast lapping.

CONCLUSION

If you've never been on a driver training course before, then I can't recommend CAT Driver training highly enough. A lot of what makes it so good is Colin – he really understands cars; how they behave and why they behave like this and by understanding this, it really helps you to feel confident with a car. He's a fantastic teacher, who's always full of praise and never comes out with harsh criticism, instead helping you to use your mistakes to adapt your technique and go faster. He's more than happy to push you to go faster and drive harder, which is great as without someone like him beside you, you just wouldn't have the confidence to drive as quickly or as with much confidence as you can otherwise.

There's a lot to take on board, and Colin can be as technical as you like when it comes to understanding the mechanics of car control and a car's on road behaviour, but it's all fascinating

stuff and it really does help you to understand what a car is doing.

The whole day was excellent, very well organised and above all, fun. It's great that you get to try out techniques that you don't use on an every day basis on the road, and the advanced driving techniques that Colin teaches really help you be more confident out on the open road. Regardless of how experienced a driver you are, I reckon you'll definitely take something away with you from one of Colin's driver training days, not least of all a certificate and some chocolates. With so many different courses to choose from, you're bound to find the one that's right for you – whatever you choose, it'll be money well spent ●

For further information contact:

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Courses starts from £400pp for two to one tuition.

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