



WIN A DAY OF EXPERT COACHING!

RIDE has teamed up with Rapid Training to give you the chance to win a full day of training with an expert riding coach. The training – worth £495 – will identify habits that may be holding you back, along with those elements of your riding style that can take you forward. You'll learn how to consistently carve the late-apex lines you've seen here, plus how to see and interpret detail at speed, how to develop an intuitive response to whatever comes your way and how to handle your bike with precision and ease. All Rapid's coaches are trained to Police Class-One standard and can adapt the course to suit all levels and experience.

You can enter the competition at www.rapidtraining.co.uk/ride-rapid-competition



▼ A late-apex line is perfect for road riding



LEARNING YOUR LINES

Choosing – and maintaining – the best line through a corner opens up a world of swiftness, safety and biking fun

Words Rapid Training Pictures Jason Critchell



▲ Get your lines sorted for safer and more enjoyable riding

WELCOME TO RIDE'S summer masterclass. Over the next five issues, the experts at Rapid Training will guide you through a riding plan that could significantly improve your safety,

enjoyment and, as a result, your speed. Read all five – and practice the tips in between – and you could end the summer riding better than you ever imagined.

The masterclass is based on Rapid's hugely successful road and track coaching program, which combines the knowledge of their British Superbike and TT riders with their team of elite police-trained coaches.

The first topic is cornering lines, which obviously have a huge impact on your safety and speed. Next, we'll move on to steering techniques, throttle control, visual skills and finally, brakes. There are other skills needed to be a superb road rider but, if you master these five, you'll be riding at a level far above most motorcyclists. Let the summer of skills commence...



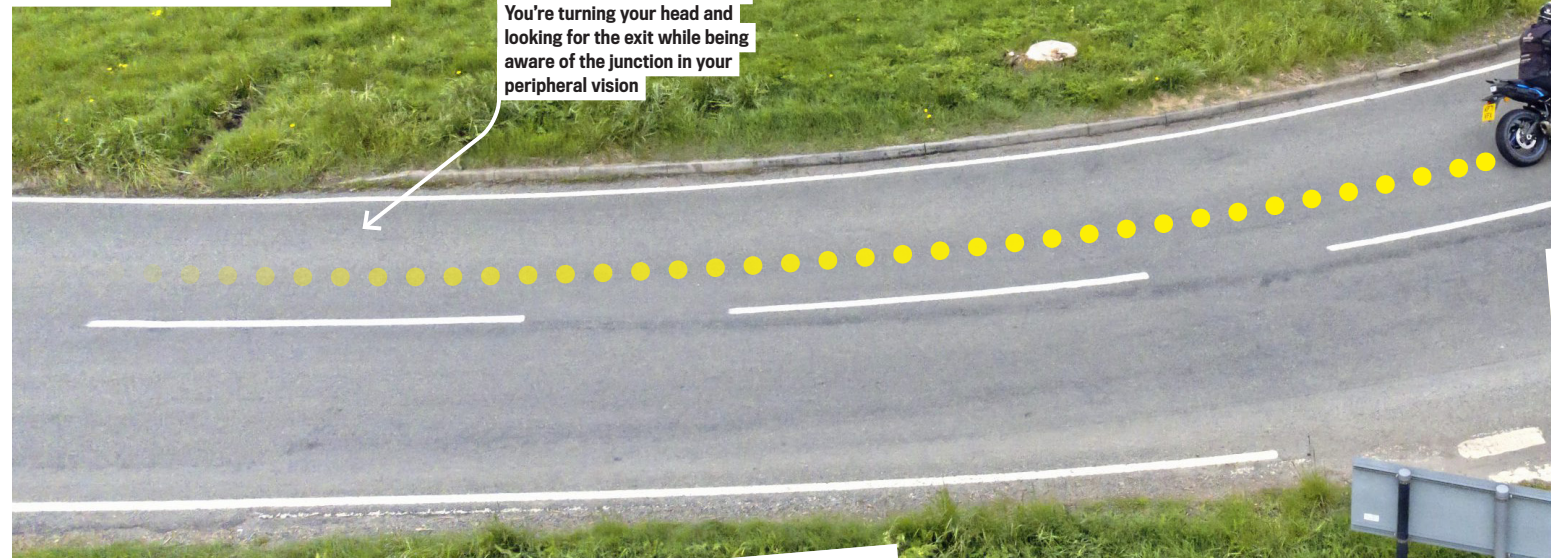
▼ A late-apex line is the best way to approach corners you can't see through

'The classic racing line is usually a really bad idea on the road'

EXIT
As you start to lift the bike up, you can wind on the power. This is where you'll make the biggest gains – not by rushing into the corner. Slow in, fast out is the way to go

TURN IN
When you see the exit, you can make a crisp single steering input to turn the bike towards the corner apex. Once you've made that turn, you can relax your arms and let the bike carve round without you interfering

ENTRY
Here you're positioning the bike to get the best view, which in this case is to the right of the lane. You're turning your head and looking for the exit while being aware of the junction in your peripheral vision



Two types of line

Before we describe the optimum line, let's rule out a very popular alternative: the classic racing line. This turns in early, apexes around the midpoint of the bend and uses the full width of the road (or track) on exit. In theory, it's the quickest way round a corner because it carves the biggest possible arc, so your entry and mid-corner speeds will be maximised. However, as you have probably guessed, the key phrase in that definition is 'in theory'. The road-riding reality is that it's usually a very bad idea.

For a start, most real roads are lined with hedges, trees and walls so if you take a racing line, you'll have to turn in before you can see the exit – you can't just look across the corner like racers do at Silverstone, for example. This means you're gambling on the exit not tightening up as well as there not being a broken-down combine harvester plonked on it.

The other disadvantage is that you spend so much time at full lean. Besides increasing risk – that's the time your tyres are most likely to lose grip – it also means you can't accelerate because your rear tyre's available grip is being used up stopping you sliding sideways. This wasn't such a problem in the old days when bikes didn't have much in the way of acceleration anyway, but it's a major disadvantage on any half-decent modern machine.

So... the racing line is out.

Far better is the late-apex line. The idea is that you go into the corner slightly slower and stick to the outside until you see the exit. If it's clear, you then turn the bike quickly (which is easier to do because of your lower speed) until the bike is pointing at the exit, then lift the bike up and deploy all that horsepower you paid for. It's quicker – and much less risky, too.

Because of the lower entry speed, you might imagine the late-apex line is slower than the classic racing line but it definitely isn't. If you're followed by a mate using classic racing lines, you'll find they gain a couple of bike lengths as they barrel into the corner but, as they continue to arc round with loads more speed, you'll have turned the bike and be upright and the gas. Depending on the speed of the corner, you can easily pull quite a few bike lengths on a classic swooper and be much less at risk, too.



▲ Approaching a left-hand bend, stay wide in your lane

Extending your view

Being faster is all very pleasing but ultimately, the big advantage of the late-apex line is safety. At the most basic level, positioning for bends is about extending your view, and that's what a late apex does.

So, approaching a right-hand bend, you position your bike towards the left side of the road to extend the view into the bend. You remain to the left all the way through the bend until you see the exit and only then do you turn and drive towards the middle of the road (or remain to the left if there's another right-hander). For a left-hander, you position yourself towards the right of your lane to extend the view into the bend and, as with the left hander, stay there until you see the exit.

Well, you do in theory. In the real world, it's rarely as simple as that because of numerous factors, such as:

- Road surface and camber. If there's a stripe of gravel around the edge of a right-hand corner, for example, you'll need to move to the centre of the road. And because then your view is not as good, you'll have to knock off some speed.
- Other traffic. If there's a truck coming the other way on a left hander, you'll need to give it a wide berth. Besides its size meaning it'll probably be closer to the

▲ Once you can see the exit, turn the bike then begin to apply power

centre of the road than a car, there's also the risk that its rear wheels will cut the corner. Like the gravel, you have to sacrifice position and speed for safety.

- The view across or through the bend. Occasionally you will come across corners with no obstructions on the inside, so you can see all the way round. That allows you to carve the perfect late-apex line, as if you were on a racetrack with a view through the corner.

- Your speed. If you're pottering along in a 30mph limit, you probably won't need to get in a position to extend your view because you can stop in the distance you can see to be clear where you are.

- Closing speeds. If you and an oncoming car are both going round a corner at 50mph, the closing speed is 100mph, which leaves little time to make a correction if you're on a collision course. It's better to avoid the risk by sacrificing a bit of view for an increased margin of error (yours or theirs).

SUMMER RIDING MASTERCLASS: PART 1

Ride in your stopping distance

Good vision is the key to safety and speed. It's worth remembering that it is rarely the severity of the bend, the capability of the bike or the quality of the tyres that limit your speed – it is almost always the need to be able to stop on your own side of the road in the distance you can see is clear.

So, let's assume that you want to enter the bend at the highest safe speed possible and use this as your benchmark. This means that if you are halfway around a challenging bend and discover a flock of sheep in the middle of the road, you must be able to stop safely. If you can do that, then dealing with a tightening bend is, relatively speaking, a doddle.

There is no single correct speed for any one bend because your stopping distance depends on a multitude of factors – how good your reactions are, how well you read the road, your machine-control skills, the road surface, plus your bike's brakes, suspension and tyres.

As you develop your observation, interpretation, planning and machine-control skills, you can increase your safe entry speed.

Using the limit point

A useful tool for finding the right speed for your late-apex line is called the limit point (aka the vanishing point). This is the furthest point you can see into a bend, and is where the left-hand kerb appears to meet the far kerb. If you are approaching a bend and the limit point remains static as you ride towards it, the bend is likely to be tight so you should slow down. The longer it stays static, the tighter the bend is likely to be – for a nagdery hairpin, it will stay static until you're almost on top of it. If the Limit Point appears to move away from you as you approach, it is likely to be a fairly loose bend.

The situation you're aiming for is where the limit point begins to move away from you at the same speed as you approach it – that means you're at the correct speed. Once you're in the bend and you see the Limit Point start to move away from you faster than you ride towards it, the bend is opening and you can begin to consider rolling on the throttle.

There's no denying that the limit point is a useful tool in your armoury but it is just one tool. Some riders fixate on it and chase the limit point without using additional information such as signs, road markings and other traffic. Clearly, that's not a good idea... **R**



▲ Once again, with the exit in sight, turn and power out

NEXT MONTH

Advanced steering. How steering quickly and accurately opens up corners to make you quicker and safer.

▼ Approaching a right-hand bend, leave room for oncoming traffic



PUTTING IT INTO PRACTICE

✔ **Use Cross Views**
It's easy to become so focused on the road ahead that we miss valuable clues either side. These are called cross views, where you pick out information by looking across fields, through gaps in trees or over hedges. You might see an HGV approaching the bend ahead, allowing you plenty of time to take a line that gives it a wide berth, or notice that the roadside telegraph poles suggest there are some S-bends coming up. These are the clues that can elevate your riding and make you appear telepathic to mates who are just looking directly ahead.

✔ **Notice the paintwork**
Because there's so much roadside furniture about, it's easy to become blasé about it. But don't forget that when it comes to corners, councils usually only spend money on chevrons, warning

signs and road paint after a nasty crash. The more stuff, the trickier the corner is likely to be...

Slow down!

✔ If you're struggling to master the late-apex line and keep turning in too early (ie before you can see the exit is clear), try slowing down. Especially on right handers, riders often turn in early because they see the hedge/wall/verge closing in and instinctively turn away from it. Knock off 10mph and that worry will disappear and you can carve round the outside of the corner until you spot the exit, then apex and power out.

Anchor with your knees

✔ To hold an accurate late-apex line, your upper body needs to be relaxed, which can be difficult when you're trying a new technique. Instead of bracing your shoulders, neck and forearms, concentrate on gripping the bike with your knees and clamping your core. By some anatomical magic, this makes it difficult to have a tense upper body and – hey presto – you can steer the bike effectively.