

RVF

HONDA

FORMULA ONE RACING IS NO EASY RIDE.

Have you ever wondered what it must feel like to compete in a Formula One race? To experience the excitement of building up to speeds of 170 m.p.h. while shaving hundredths of a second off your lap time?.

In Honda RVF you can. For the game is a realistic and faithful simulation of this Formula One racing bike.

Using the same controls as on a real bike, you're given the opportunity to master this powerful machine. Like all racing champions you start by competing at club level, eventually graduating to national events and then to the international circuit.

Famous race tracks such as Donnington, Hockenheim and Salzburgring are accurately simulated here. Use your skill to negotiate the trickiest bends and avoid oil slicks. Adopt clever tactics to gain vital points in the championship. Take pride when you become the winner, the leader of the pack.

- Highly accurate Honda RVF motorbike simulation
- Excellent graphics
- Fully realistic controls
- Digitised engine sound
- Various levels of difficulty
- Famous race circuits
- Championship points system
- Suitable for 1 player, or 2 players using 2 computers

Micro Style

©1989 ED HICKMAN

MicroProse Software, Unit 1, Hampton Road Industrial Estate, Tetbury, Glos. GL8 8LD. Tel: (0666) 54326.



RVF

HONDA

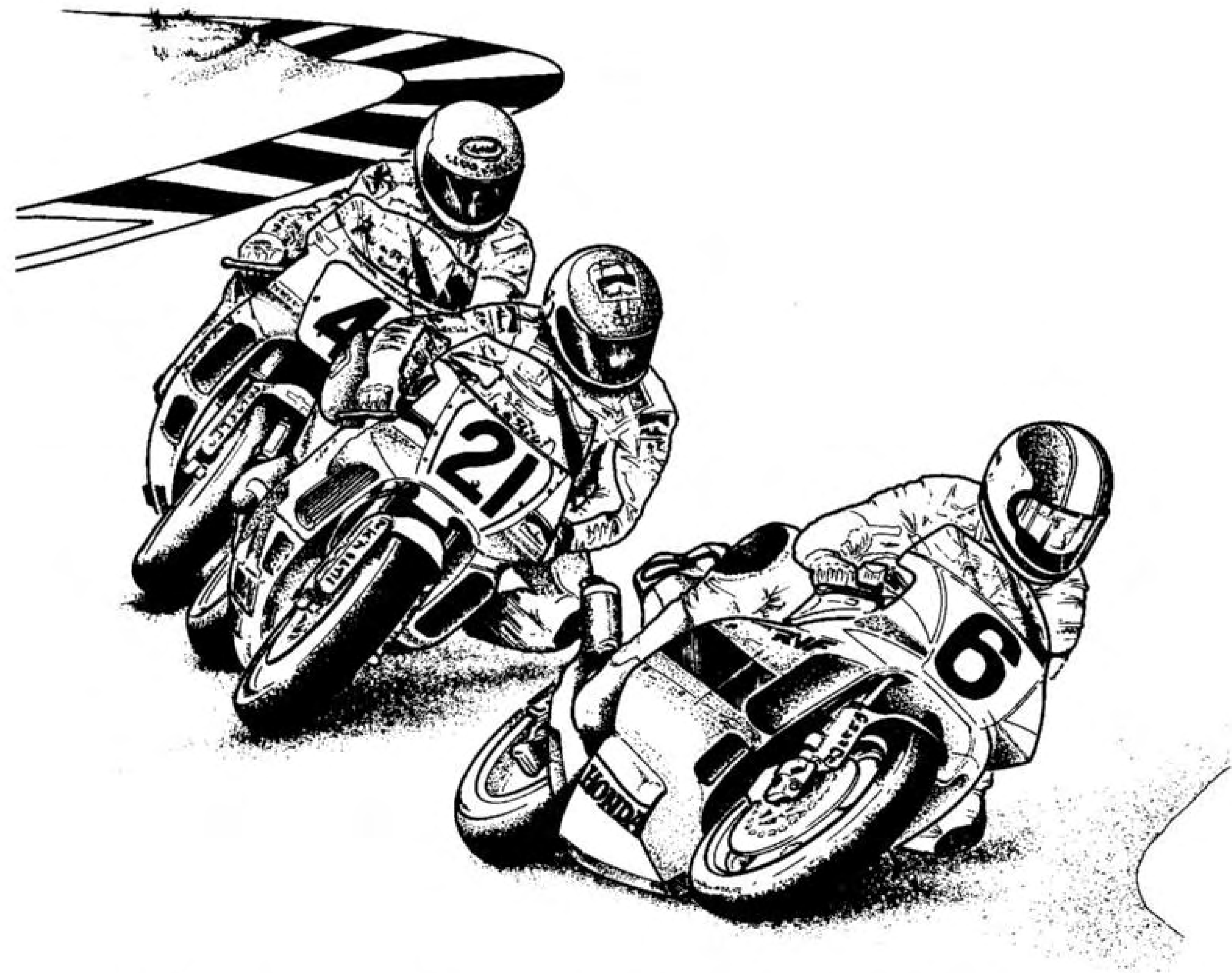


Micro Style

A Thrilling Motorbike Racing Simulation.

RWF

HONDA



**GAME CHARACTERISTICS DESCRIBED IN THE DOCUMENTATION
MAY VARY ON SOME COMPUTERS**

GAME COPYRIGHT© ED HICKMAN 1989

MANUAL COPYRIGHT© MICROPROSE SOFTWARE 1989

2 MARKET PLACE,

TETBURY, GLOUCESTERSHIRE, GL8 8DA

TEL: 0666 54326 FAX: 066654331 TLX: 43422MPS UK G

FORWARD

The startline at Donington Park, on a hot and dry English summer's day. It's the last race of the toughest Formula 1 season you've ever been through. All year long you've been mixing it with the best, tucked under the screen on 175mph straights, banging fairings on flat-out sweepers, diving into hairpin bends with the front tyre squealing... You can't remember a time when the racing was as hard than this.

And now, it's come right down to the wire at Donington. Any one of a dozen guys could take the title - including you. Right now though, warming up your **Honda RC30** on the grid, things don't look too rosy. You're riding the best machine, 750cc's of finely-honed race technology, but practice hasn't gone well. Your best time wasn't good enough to put you on the front row. You're going to have to ride the wheels off your bike just to stay alive. Winning the race as well is going to take some kind of superhuman effort. Are you good enough?

No time for doubts now. There's the red light...inch forward on the clutch...bring the

revs up...green! Suddenly, a deafening, blinding cloud of tyre smoke as the howling horde of death-or-glory riders screams off the line, front wheels airborne, leathered knees and elbows pushing, flailing, barging for those precious inches of space for a clear run down to Redgate Corner.

Your **Honda**'s high first gear drops you back in the pack; the **Suzuki**, **Yamaha** and **Kawasaki** pilots all have the edge on the drag race down to Redgate. You can claw it back during the race, of course, just so long as you can get your act together well enough to exploit the **RC30**'s roadholding advantage. Into Redgate, as deceptive and dangerous as ever, leaving the braking as late as you dare and moving over early to the inside. No way is this the 'right' line for a right-hand turn, but nobody goes for a classic apex here. Much better to take the slow line, round the inside. That way, nobody on the classic racing line can get past. Sneaky? Maybe. But, anything goes at this level. If you can't outspeed the other guy, then outsmart him.

You pick up a couple of places

FORWARD

round Redgate, and one more slow starter comes into your sights as you take an early chance, running over the edge of the track and onto the rumble strips to take him on the outside. You can rely on the **Honda**'s supple suspension to soak up what might otherwise be potentially lethal bumps without knocking you off line. Yes! You've got him! He seemed pretty surprised to be passed there. He'll be rattled now. One up to you...

Up through third, into fourth for the downhill right swoop into Craner Curves. The distinctive flat bark of your **RC30**'s V-4 motor sounds relaxed, but the revcounter needle is moving quickly past the 11,000rpm mark. Yank the bars to tip the bike into the left sweep; it's a big effort, all the weight is on the front wheel, and you have to be careful not to unload the tyres though too-sudden weight transference. Short-shift up into fifth, running out to the right edge of the track before heaving the bike upright once more for the approach to the Old Hairpin.

This is a downhill entry righthander with a well-defined apex. A distant twinge of pain brings back memories of an old

injury as your right knee grazes the kerbing. The bike drifts out to the left edge of the track. You move your weight back onto the seat and gas it to the max through the dip on the bumpy uphill exit. Even an impeccably-mannered machine like the **RC30** squirms and corkscrews under this kind of provocation, but there's no time to think about the consequences of a highside spill right now. Keep pouring the power on, changing up through the close-ratio gearbox, timing the changes to keep the **Honda** well inside its powerband.

Shift your weight across to the left as the **Honda** moves over to the right side of the track, so that you have a clear view of the long lefthander under Starkeys Bridge. Accelerating hard in fifth, crank it over, switching back to the left side of the track in readiness for the negative-camber McLeans righthander. Drop down two or three cogs and take an early apex here, blocking the route for anyone thinking about sliding up on the inside. Through the rough patches on the exit - hey, whose front wheel is that? - you outgun the **Suzuki** rider snapping at your heels.

FORWARD


Feel the characteristic grating of the **Honda** engine as it climbs back into its powerband once more for the flat-out squirt up the rise to Coppice, a notorious righthander whose entry point is completely hidden by the hill. Tip the bike in blind, hoping you've remembered it right. The back tyre slides as the horsepower feeds in all the way around Coppice, spinning still until the bike is completely upright on Starkey's, Donington's longest straight.

Up into sixth gear, under the bridge. The front wheel lifts clear of the deck as the track takes a sudden dip. A 200yard marker board flashes by, then the 100, then it's hard on the brakes for the slow chicane leading into the new Melbourne loop. On the edge of traction, the tyres scrabble for grip, first on the left, then on the right. Up through the gears, hitting fifth before cramming on the anchors again for

the first gear righthand hairpin.

The front wheel aviates in first and second coming out of the hairpin. Move over to the right side of the track. Third, fourth, back down to third, then second for the final hairpin. This one's faster: careful on the exit, then whack the throttle wide open. Third, fourth, fifth, sixth, max revs in every gear, across the finish line.

You're moving up the field, slowly edging ever nearer to that elusive Formula 1 world championship. But is disaster lurking around the next bend? Have you fitted the right gearing? Will your tyres last the course? What about fuel? Is there enough? What about that weird engine noise you thought you heard coming out of Coppice?


More to the point : can you stand the pressure? You're about to face the ultimate test. 

Only the strong survive...

INTRODUCTION

Being a successful, winning **Formula 1** race ace isn't just a matter of having the fastest or sharpest handling bike. The best machine in the world is useless in the hands of an amateur rider. Bravery is important, of course, but a fully-functioning brain is the most valuable tool in the racer's make-up. He must know the best line around every corner, the best places to overtake, the best gearing set-ups for each circuit, and the best technique for getting his bike around a track

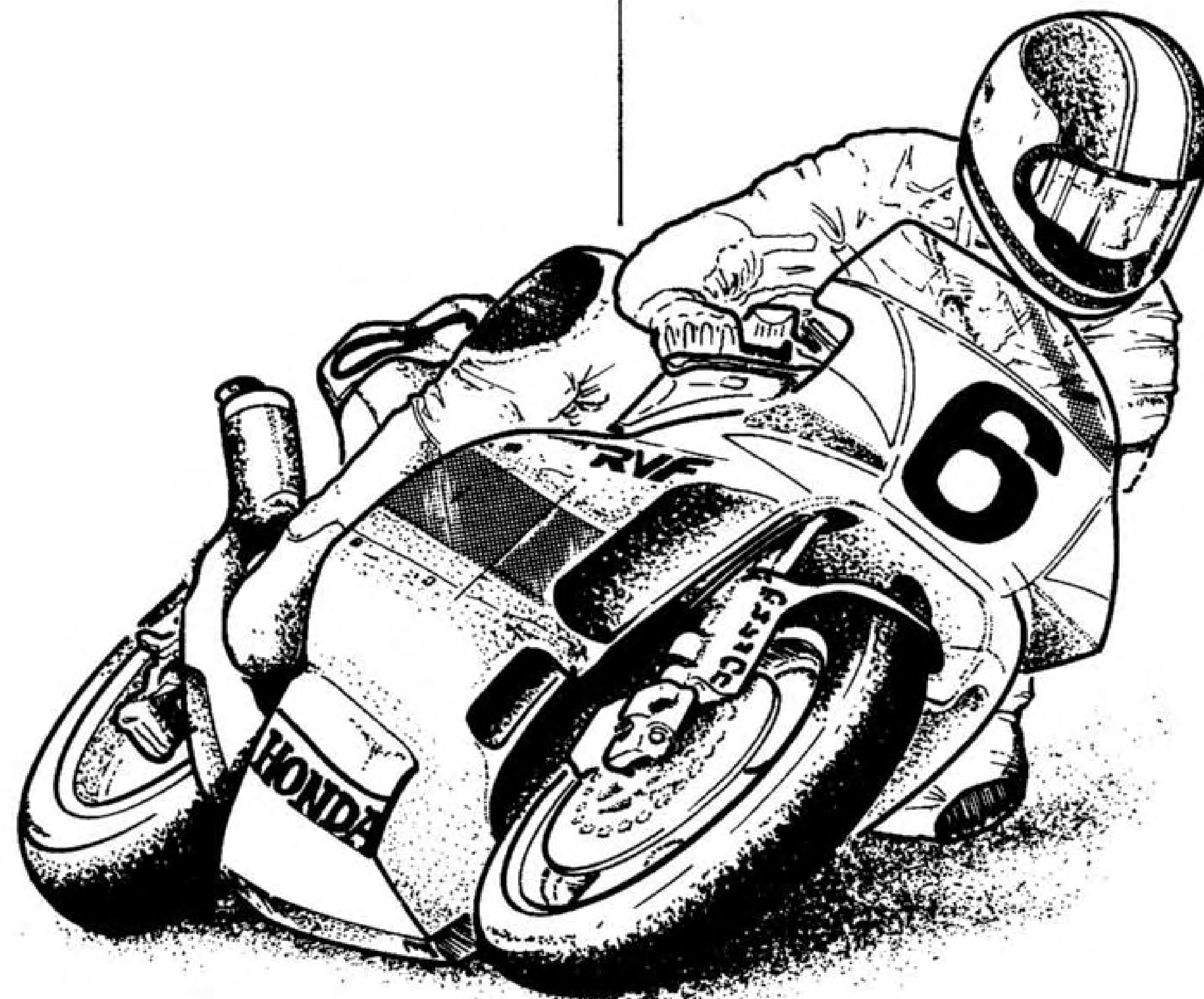
that's awash with water or oil.

You'll gain race savvy the hard way in your early track outings, and there'll be plenty of painful lessons along the way too. But to ease the pain a little, and to stop the other guys sniggering behind your back in the paddock, here are a few pearls of racing wisdom. You'll probably ignore them to start with - most headstrong young lions do. But maybe you'll have time to read this section when you're laid up in casualty with your leg in plaster... 

CONTENTS

FOREWARD	2
INTRODUCTION.....	5
LOADING INSTRUCTIONS.....	7
RIDING PROFESSIONALLY.....	16
TRACK DATA.....	23
FORMULA ONE RULES	57
MOTORCYCLE DATA.....	58
RIDER PROFILES.....	60
GLOSSARY.....	62

LOADING INSTRUCTIONS



HONDA RVF LOADING SECTION

LOADING INSTRUCTIONS

Atari ST

Insert the Honda RVF disk and switch on the computer - the program will Auto-Load.

Amiga

If your computer has KickStart in ROM, insert the Honda RVF disk at the Workbench prompt, the program will Auto-Load. If your computer does not have KickStart in ROM, load Kickstart as normal, insert the Honda RVF disk at the Workbench prompt and the program will Auto-Load.

PC

Boot your computer using a DOS disk. At the "A:>" prompt, insert the Honda RVF disk and type RVF followed by Return; the program will then Auto-Load.

Getting started

When the game has finished loading you will be presented with the program credits screen. Hit fire on the joystick and you will be asked a question from the *World Motorcycle Federation*

entry examination; answers are found in the Honda RVF handbook. After you have given the correct answer you will move onto the rider selection list. Push up or down on the joystick to move the green highlight over one of the empty name slots and then hit Fire; a vertical cursor will appear at the bottom of the screen. Type in the name you wish to give your rider, if you make a mistake the backspace key can be used to edit the name. When you are ready, hit Fire or Return and the rider's name will be added to the list. As a new rider he will be issued with a clubman racing licence; after a short pause you will go on to the main menu.

The Main Menu

Rider degrees History

This screen gives the following cumulative details for the current rider:

- Number of race starts*
- Number of race crashes*
- Number of race wins*
- Number of lap records held*

LOADING INSTRUCTIONS

Change Rider

This returns you to the rider selection list to choose or enter another rider. To select an existing rider, push up or down on the joystick to move the green highlight over the required name and then hit Fire twice. To enter another rider follow the instructions in the 'Getting started' section. **WARNING!** If you change the name of an existing rider all his details will be lost. Don't go turning a Champion rider back into a Clubman!

View Tables

Selecting this will give you the following options:

Championship table

This screen gives details of where you stand in the current championship. It shows your overall placing, what position you finished at in each round, how many rounds you have entered and championship points accumulated. Points awarded for first to seventh position are: 15, 10, 6, 4, 3, 2, and 1 respectively.

All riders table

If several people are using the

simulation at the same time, this screen gives similar information to the championship table, but serves to reflect how the performances of individuals compare against each other.

Lap records table

This screen gives details of timings and lap record holders for all the tracks in the current rider's class. Lap records are automatically saved to disk along with championship details at the end of each race.

Restart Championship

This option allows you to end an unfinished championship and start a new one. It also clears the championship and 'All riders' tables. However, the lap records remain intact. If you select this option by mistake you can rectify the situation by choosing the 'Load new details' option from the same menu. Do this before entering another race or the details will be lost permanently.

Load new details

This option allows you to reload rider, championship and lap record data from disks. These details are automatically saved to disk after each race, either to

LOADING INSTRUCTIONS

the RVF disk or any other disk you have placed in the drive. This is a useful feature that means you can keep more than one championship running, you may wish to keep a separate data disk for use with a particular group of friends. If you use a data disk, make sure there is nothing important on it as the RVF data would probably corrupt it! Ideally, use a blank formatted disk.

Start season / next round

This option allows you to practice or take part in a championship race - more on this later!

Set Defaults

Speedo in MPH / KMH

Toggles the calibration on the RVF's speedometer.

50 hz / 60 hz Scan rate

Defaults are set at 50hz for Europe and 60hz for USA. However, some monitors can handle both rates so a toggle is provided.

No. of laps per race

Hitting Fire will cycle the number of laps needed to complete a race.

Test Race

This option gives you the opportunity to take your Honda for a non-championship test race. You are able to race on any track from your level or the level above you. Be warned, if you select the level above you it is likely you will be outclassed. Pay your dues by entering the championship! Always practice before entering a race.

Datalink (Some versions only)

If Datalink is implemented on your version of RVF it will appear as the last item on the main menu. Datalink allows two people to race against each other on the same track using two similar computers, connected by a special cable.

How to use Datalink

Both computers should be turned off and then joined using the datalink cable. Load RVF into one computer making sure the other is still switched off. Once RVF has loaded, for Datalink purposes this computer will be the master computer, the only one able to make selections from within the Datalink menu. Now

LOADING INSTRUCTIONS

turn on and boot the other computer using the RVF disk, this computer will now be the slave unit, not capable of making selections from within the Datalink menu. Now select Datalink from the main menu on both computers, the master unit will now enable you to select which track you will race on. Pressing the Escape key during a race will exit Datalink Mode.

Controlling the motorbike

The Honda RVF can be controlled from the joystick as follows:

Accelerating

Pushing forward on the joystick opens the throttle, the longer you keep the stick forward the harder the RVF will accelerate. The optimum time to change up a gear is when the rev needle enters the orange section - changing up earlier will produce a more sluggish response as the bike will not be within its power band. However, read the section on professional riding as regards 'short-shifting' as this may prove to be desirable on certain corners.

Changing gear

To change up a gear press Fire while the joystick is pushed forward; to change down a gear press Fire while the joystick is pulled back. Changing gear at the right time is crucial for a good racing performance. If you find that your motorbike is accelerating poorly you are probably in a higher gear than is needed; change down until the motorbike responds properly.

Braking

Pulling backward on the joystick applies the brakes; the longer you keep the stick back the more the RVF will slow down, if you need to brake very rapidly then change down at the same time.

Cornering

Moving the joystick to the left or right leans the motorbike to the left or right. The longer the joystick is held over the harder the motorbike will corner. If you allow the joystick to return to the centre position while cornering, your rider will return to the upright position.

Championship progress

There are three progressively harder levels to the simulation.

LOADING INSTRUCTIONS

They vary in difficulty of track and standard of opposition and are as follows:

CLUBMAN

To be promoted to National Level, you must compete in, and win, the Clubman championship. As a holder of this licence you will be eligible to race on the following Club level circuits:

Tetbury, Harrogate, Ladbroke Hall, Chiswick, Nutford Place, Manton Park, Waddesdon Manor and Donington Park.

To be promoted to National level you must compete in, and win, the Clubman championship.

NATIONAL

As a holder of this licence you will be eligible to race on the following British circuits:

Mallory Park, Cadwell Park, Knockhill, Scarborough, Donington Park, Oulton Park, Silverstone and Brands Hatch.

To be promoted to International level you must compete in, and win, the National championship.

INTERNATIONAL

As a holder of this licence you will be eligible to race on the following International circuits:

Salzburgring, Imola, Assen, Paul Ricard, Donington Park, Laguna Seca, Hockenheim and Suzuka.

The ultimate goal in this class is to gain first place in the international championship, thus winning the status of World-Champion.

Once you become World Champion you are entitled to enter championship races on any class of circuit so, if you wish, you can return to the Clubman or National tracks and compete in a championship. This time however your opponents will be International class riders.

Damage

If you crash or drop your bike during a race or practice session it is likely to cause damage to the motorcycle. This may range from broken instrumentation to the loss of a gear or impaired steering.

LOADING INSTRUCTIONS

Pit Stops

The pit area is represented by a series of large red and white markers set back from the track, normally near the start line. If your RVF is damaged during a race or practice, you can have it repaired by making a pit stop. Ride your motorcycle in to the pit area and stop between the pit markers and the white edge of track lines. When your rider's feet touch the track, the motorcycle is deemed to have been repaired. Rev up, hit Fire and get back to the race as soon as possible! Making a pit stop will often be a tactical decision. If the damage is minor and you are near the end of a race, the time spent in making a stop may not be worth while. If, however, you have sustained heavy damage at the beginning of a long race, not stopping for repairs may slow you down enough to lose a race and maybe even the championship.

Practice laps and grid positioning

Practice laps serve two main purposes. Firstly, they allow you to familiarise yourself with the track without the hindrance of other riders and race hazards.

Over several practice sessions you can find out how fast you can push the machine around a particularly tight corner. Secondly, the practice laps determine your position on the starting grid when you enter a race. If you equal or break the current lap record you will get pole position. If not, the nearer you are to beating the record, the further up the grid you will start. To exit a practice session press the Escape key on your computer, you will then be informed of your grid position and be given the option of racing or more practice. *Note: it is not possible to set a lap record during a practice session.*

It is good form to practice before each race!

Starting the Race

Firstly identify your motorcycle: your riding colour is red; the opponents riding colours are green. Midway on the right hand side of the screen you will see the starting lights for the race. When the red light goes out and the green light comes on the race is under way. While you are waiting for the green light you should repeatedly rev up the motorcycle (see 'How to control the motorcycle'), trying to keep the revs

LOADING INSTRUCTIONS

between eight to ten thousand RPM. When the green light appears, hit Fire to engage first gear. If your revs are not high enough when you engage first gear you will accelerate slowly - if your revs are too high you will do a 'wheelie', losing valuable time while you gain control.

On Screen Information

Lap:
(followed by time in minutes, seconds and hundredths of seconds) Gives the time taken for the last lap you completed.

Lap:
Gives the number of the current lap.

Gap:
Gives the approximate time delay between you and the rider behind you, this time is normally updated when your rider looks over his shoulder during the race, this usually happens when braking or during hard cornering.

Pos:
Gives your current placing in the race.

Record:
Gives the lap record for the current track.

Time:
Gives the elapsed time for the current lap. This resets after every lap.

Race Order:
Gives you the race positions for other riders. This is extremely useful when deciding on tactical racing during a championship. For instance, if you are lying close to the front of the pack in a race you are able to identify who is in front of you. If the riders in front have more championship points than you, you may decide to take the extra risks involved in trying to pass them. If, however, they are unlikely to affect your overall position you may decide to race steadily and earn fewer championship points, but retain your current standing.

Best:
Gives the best lap time you have achieved during the current race.

Corner Markers

On most tracks there are count-down markers for the sharper corners, as you begin to approach the bend you will see a group of three white placards, nearer still a group of two, and just as you enter the corner a single placard.

LOADING INSTRUCTIONS

Track Hazards

Water
On rainy days water may collect in pools on the track. If you ride through them the motorcycle will slow down slightly, losing you valuable time.

Bumps
On many tracks you will find rough patches on the racing surface, at best these will slow you down, at worst they may cause the motorcycle to slide from underneath you.

Oil
During a race oil deposits may appear on the track, these will almost certainly unseat the rider. You will be very lucky indeed to ride over them and remain upright!

Other Riders!
Bumping into other riders will cause you to slow down significantly. This practice should be avoided!

Remounting the RVF


If your rider falls during a race then he will have to bump start the motorcycle. He will do this automatically. However, the

effort with which the rider pushes the motorcycle can be increased by 'wagglings' or 'stirring' the joystick.

Quitting a race

Pressing the ESCAPE key during a race will end the race immediately. You will be registered as not completing the race and if you were taking part in a championship round no points will be awarded.

Pausing the program
Pressing the SPACEBAR will pause and restart the program.

Disk access
RVF saves data to disk after each race. If a disk is write-protected or not present then the screen border colour will change momentarily; the program will then proceed as normal. 

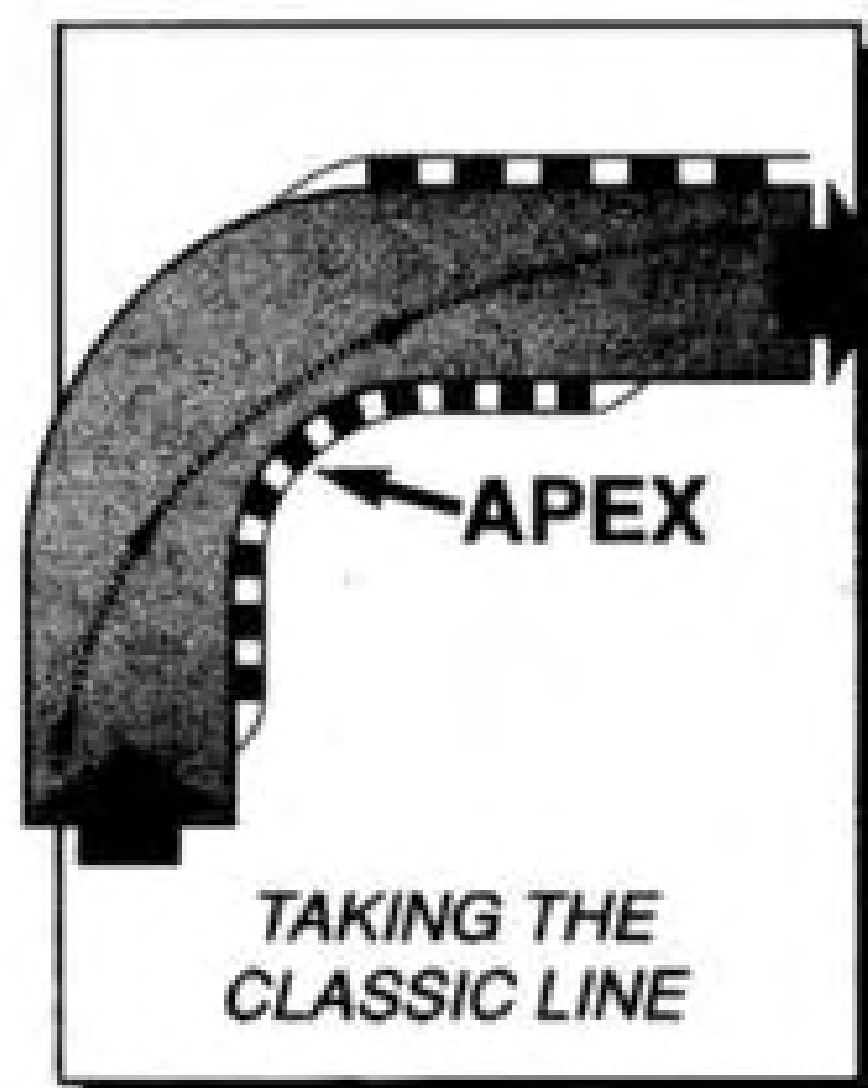
RIDING PROFESSIONALLY

Cornering & Lines

Though it takes a fair degree of courage, it's true that the safest place to be at the first corner on a racetrack is in the lead. With nobody ahead of you, there's not much chance of being brought down by falling riders.

It's not always possible to get to the corner first, unfortunately. Especially if your bike has a high first gear, when its relative inability to accelerate quickly from a standing start will allow other riders to beat you to the bend.

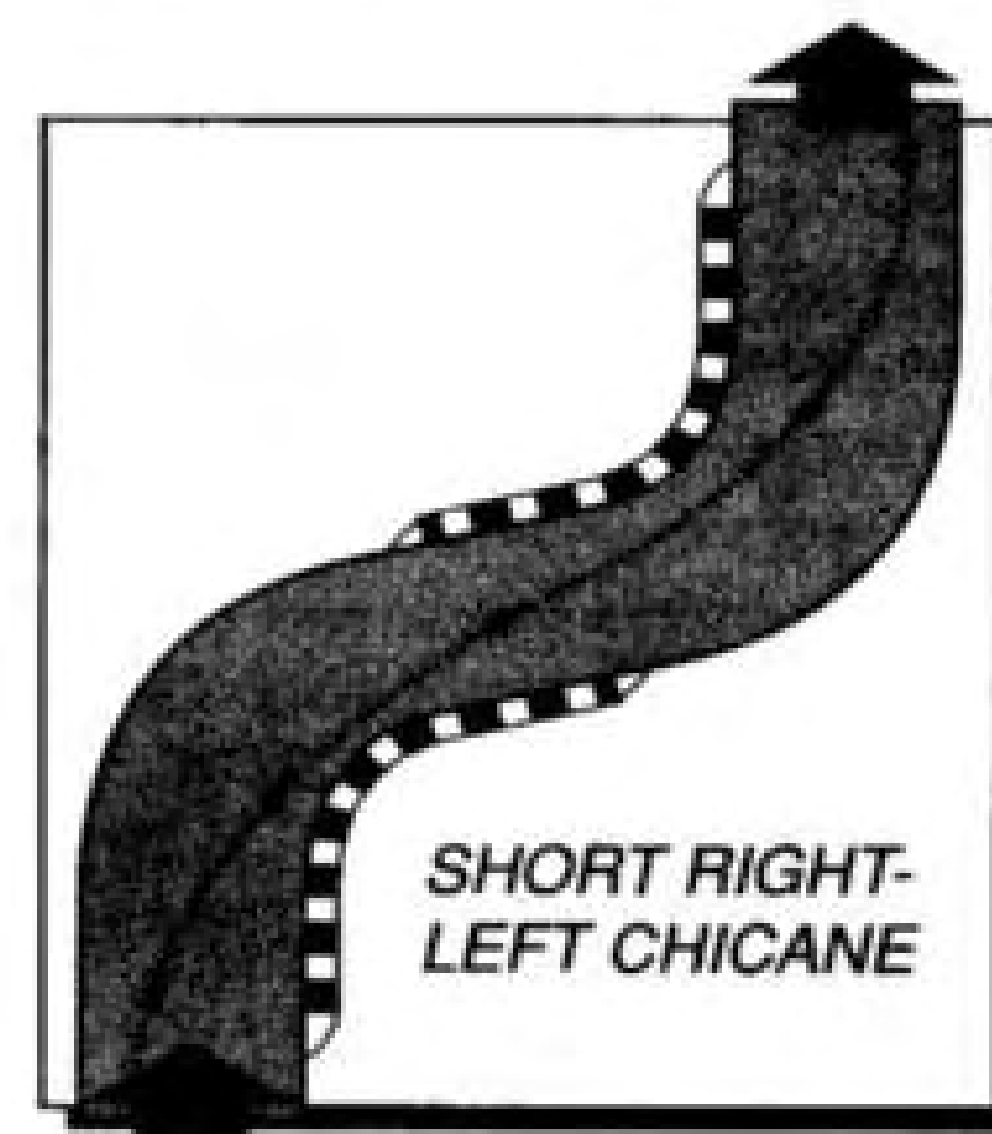
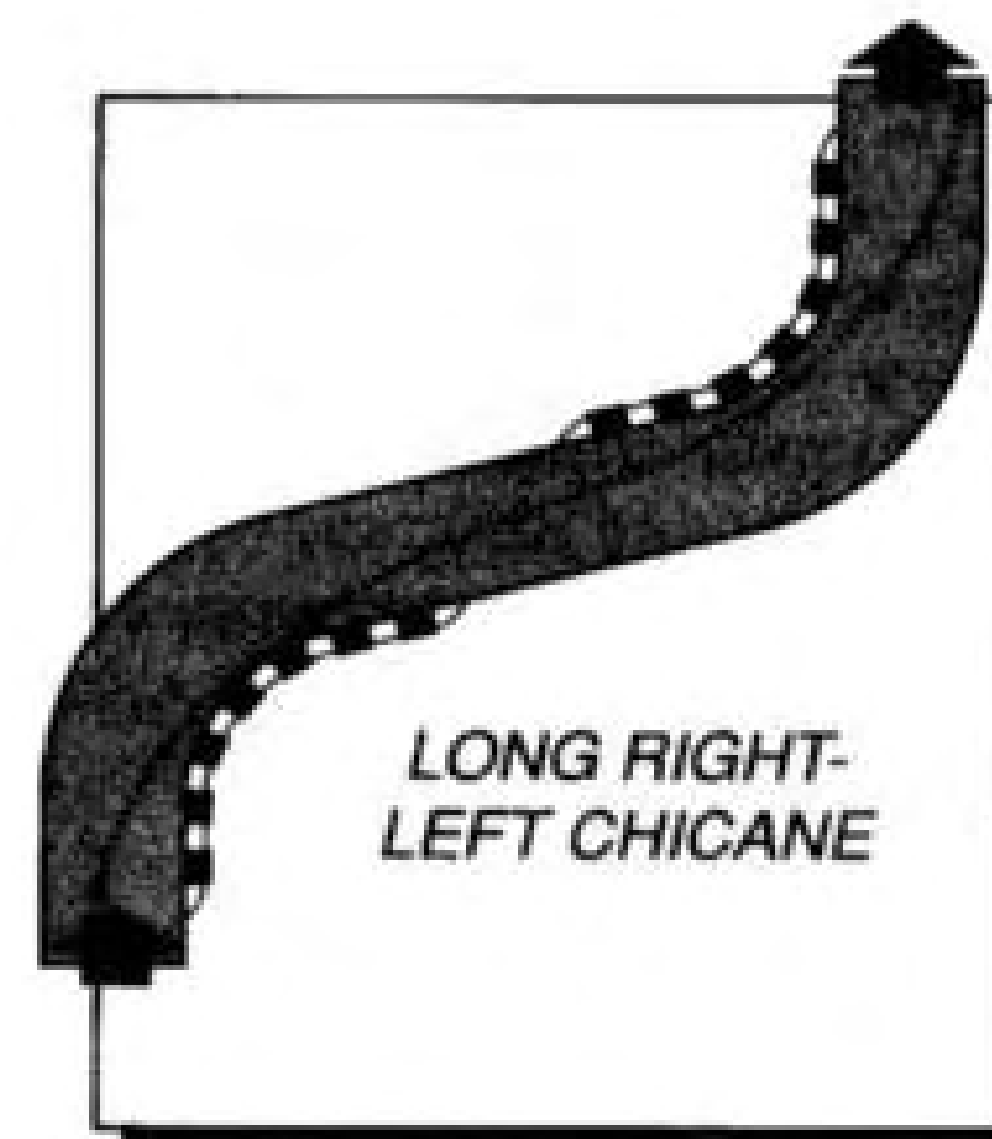
There is a classic line through a typical, straightforward, constant radius bend. This line is usually the shortest route through the bend, achieved by riding deep into the bend before turning in, aiming to 'clip' the inside apex before opening the throttle for maximum drive out of the corner and onto the straight. Try to hold as tight an inside line as possible, within the constraints of getting plenty of power down to the ground after the apex. That way, you'll always have a spare few feet of tarmac into which you can drift if you find you're travelling a little too quickly.



Left-right or right-left *chicanes* should also be apexed. In some cases this might be achievable simply by steering a relatively straight course through the *chicane* complex. Usually, however, the track designer makes things a little more difficult. It's often necessary to flick the bike over onto its most extreme lean angles, very quickly, first one way and then the other.

Timing is all important here. A little late or early on the first flick, and your line for the second part of the *chicane* will be all wrong. Bad timing on the second flick will almost certainly have you off the track surface, eating dirt in the runoff areas.

RIDING PROFESSIONALLY



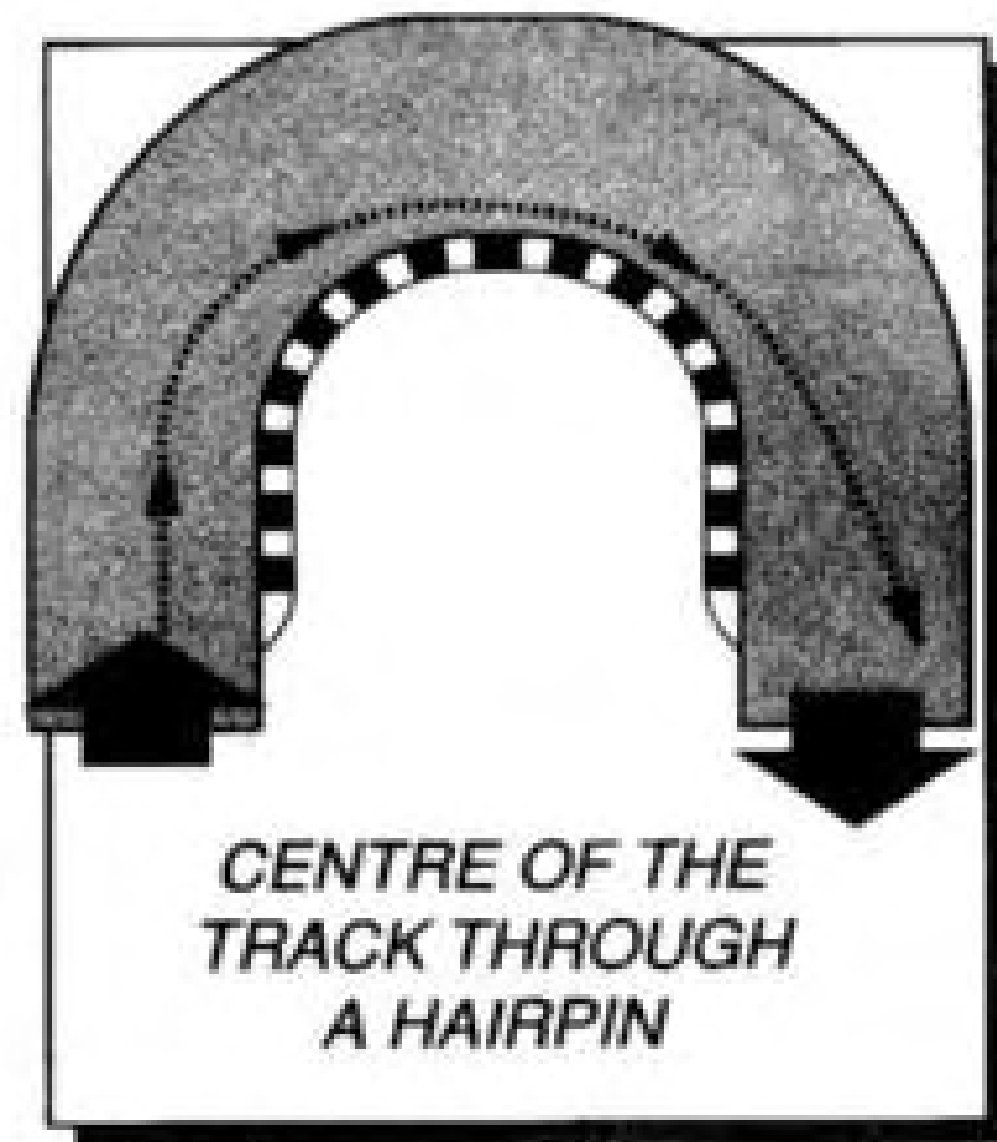
On tighter corners and hairpins, it doesn't always pay to take the classic racing line, ie going deep into the corner before turning in and clipping the apex. On a busy racetrack, it's better to go in earlier and slower, tak-

ing the tight inside line most of the way around the turn. If you don't, and somebody else does, you may find yourself baulked and obliged to slow down by such riders who have already taken up 'your' piece of track.



A subtle variation on this play is to ride in the centre of the track. Should any rider wish to overtake in this situation, he will either have to take the risky outside line, which requires more speed and hence a greater angle of lean, or he will have to attempt to sneak through on the inside. In either case, you can move inside or outside as the occasion demands, 'shutting the door' or forcing the would-be overtaker off the track on the

outside. It might not be Marquis of Queensberry rules, but with a Formula 1 championship at stake, there are no rules.



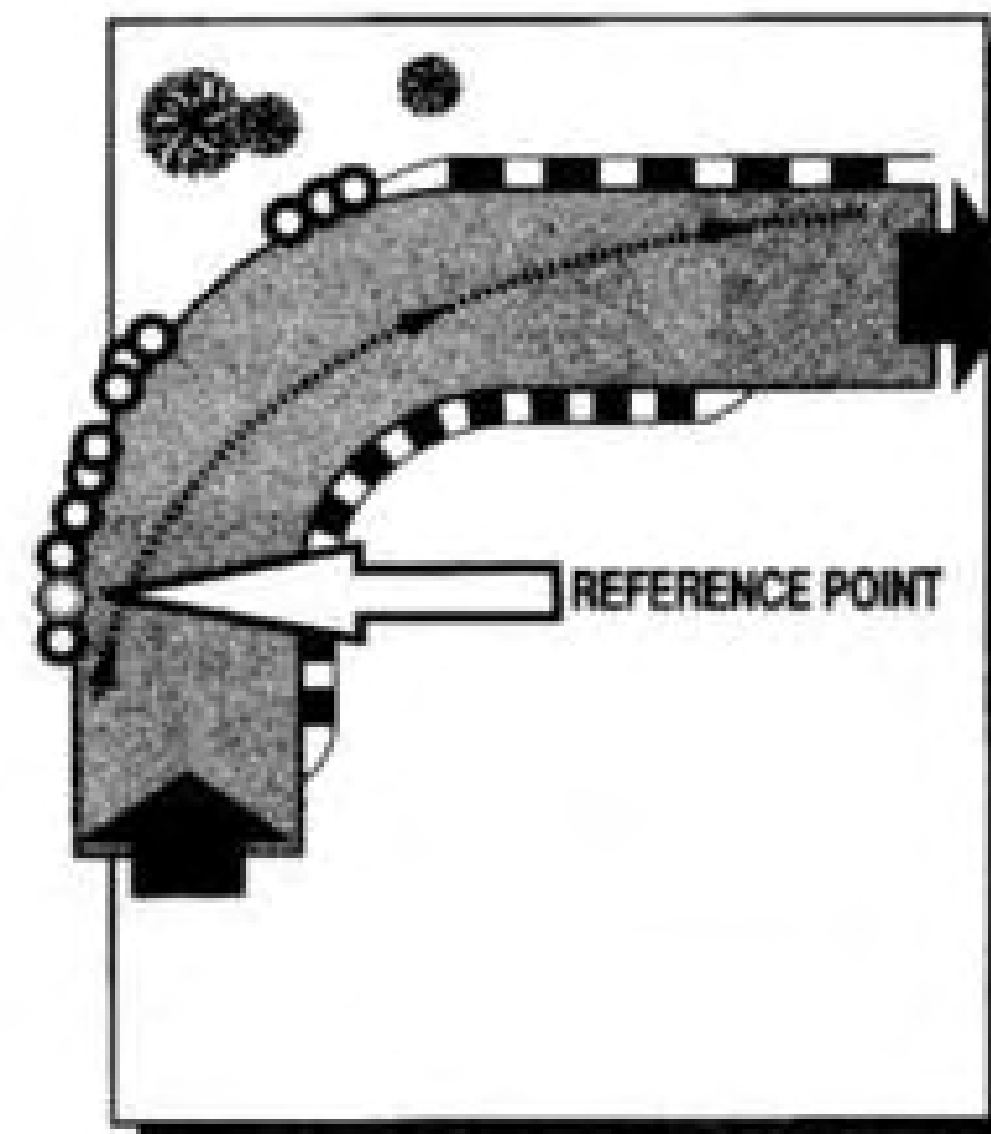
Adverse or off camber turns are tricky, because the bike tends to be drawn towards the outside of the bend by the slope of the surface. The best technique in such bends is to keep as steady a throttle as possible.

Dips in the middle of a bend can be made into less of a problem by opening the throttle in the dip, extending the suspension and thus giving your bike the extra ground clearance it needs.

For any type of bend, and especially for braking, reference points or landmarks by the track-side can be particularly useful.

They may be large and obvious, like a purpose-built marker board, or small and insignificant, like a stain on the track or a tyre with a blob of paint on it. Professional riders make careful mental notes of all such reference points, using them extensively to determine when to change gear, apply the brakes, or crank the bike into a turn.

Ground clearance can be a problem for the ten-tenths rider. Cranked right over, there's not much margin for error. Neither is there much daylight between your bike's footpegs / exhaust / bodywork and the track surface skimming underneath. An unexpected bump can take up those last few millimetres of space,



bringing the bike into contact with the road. Such bumps may be sufficiently severe to bounce the bike clear of the deck, an undesirable situation to say the least, since it's difficult to control a motorcycle that isn't in contact with terra firma. The consequence could be the dreaded 'highside' accident (see later this section for explanation).

On a smooth corner, it's perfectly possible to ground the machine, or your knee, without having an accident. In fact, kneesliding is an accepted part of modern motorcycle racing. It acts as a useful yardstick of your angle of lean. Having said that, excessive grounding-out will scrub off valuable speed, and could eventually develop into a highside scenario. Don't overdo it!

Tyre slides are also becoming commonplace in Formula 1 and Grand Prix racing. American riders are particularly adept at the controlled rear wheel slide, broadsiding the back end in a skilful display of machine control in order to keep rear wheel rotational speed up and the engine in its powerband for maximum drive out of curves.

Obviously, this technique is not without risks. The throttle must be kept open when the

wheel steps out of line, even though the natural reaction would be to shut the throttle at the onset of a slide. In fact, such a course of action would almost certainly result in the highside crash previously referred to. On closing the throttle, the excess power that was spinning the back tyre disappears, causing the tyre to find grip once more. This sudden grip wrenches the motorcycle violently back, away from the direction of the slide. The rider is then pitched unceremoniously over the 'high side' of the bike. Only the very few highly experienced riders can save highside situations, and even for them, success is far from guaranteed.

Overtaking/ Slipstreaming

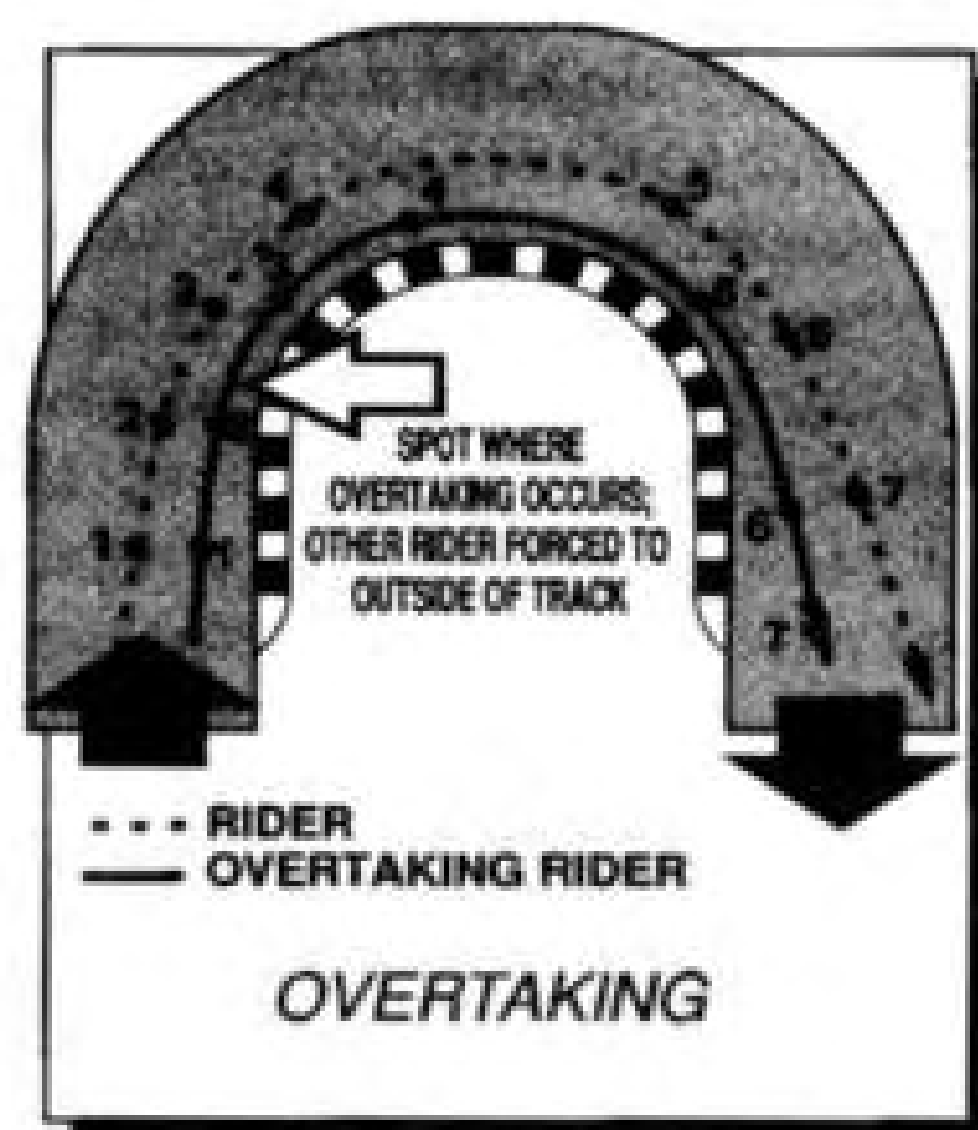
The golden rule about overtaking is that the overtaker should always be in control of the situation. The rider you're trying to pass may not be aware of your presence or intentions - all the better if he isn't - so you must always ride accordingly, expecting the unexpected, making allowances, and giving yourself at least one option for escape should things go wrong. Not everyone on the track is as good as you!

By the same token, you

shouldn't worry too much about whether there's someone on your tail trying to zap you. Just ride your own race; let the other guy worry about how he's going to get past.

Generally speaking, it's always safest to overtake on the inside on bends. If the rider you're trying to pass overdoes things in his own efforts to get around the curve, the likelihood is that he'll slide away toward the outside of the track. Apart from anything else, the inside route is shorter. Overtaking on the outside should only really be attempted when there's no other option.

You may find yourself in a race with riders on bikes that are as fast as yours down the straights. Maybe you chose the



wrong gearing for that circuit. Everyone makes mistakes! You certainly can't change gearing mid-race; there's not enough time. The only way you can overtake bikes of equal top speed potential is by slipstreaming.

Common in car racing for a long time, slipstreaming is now becoming increasingly important in Formula 1 bike racing, where many of the bikes do possess very similar top-end performance. The idea is to stay as close to the back tyre of the guy in front as seems humanly possible - a matter of inches at speeds of up to 175mph. Nobody said slipstreaming was for wimps! If you can stay in that position, your bike will be using less power to go at the same speed as the fellow you're slipstreaming.

Why? Because his bike is using valuable horsepower just to push a huge weight of air out the way. You, meantime, are sitting in the 'quiet zone' kindly being created by your adversary, and there's not a thing he can do about it (short of weaving across the track to try and shake you off).

All you have to do at the end of the straight is use your extra power to zip past. This technique works even better if you

can time your run so as to move into, and then straight out of, the 'quiet zone' for a slingshot effect that will catapult you past your enemy with an even greater advantage.

One thing to remember about slipstreaming. It's no good passing someone halfway down a straight, because if you can zap him, he might well be able to return the compliment at the end of the straight - if he's a good rider. To stop him, always leave your overtaking manoeuvre till the last possible moment.

Braking

It's a common misconception that the fastest bike will always win the race. In fact, a skilful rider on an inferior bike can win through, against the odds, by being less slow than the opposition through critical corners.

To achieve this condition of being 'less slow', ace riders try to optimise the braking phase of their performance. The trick to demon braking is not necessarily leaving it to the last minute - the so-called 'last of the late brakers' technique. You might be able to overtake a rider going into the corner by using this method, and you could even hold a temporary

advantage by barrelling through the turn on the tight, non-classic line.

But your lap times are more likely to be improved by adopting a different technique, whereby you might make more of an effort to smooth out your corner entry speeds by getting your braking sorted out before turning the bars. Exiting on a smooth flow of power, with the bike's suspension settled in advance of the corner, will be easier on you and the bike, and help build a good rhythm around the course.

Don't be frightened to use your Honda's brakes. They're incredibly powerful. You'd be amazed at what you can get away with if you're really determined to be the last of the late brakers. Creative braking has won championships before now. It will help to win them again.

Gearchanging and Gear Ratios

The purpose of a gearbox on a racing motorcycle - or any other motorcycle - is to allow the rider to keep his engine spinning in its optimum powerband. When changing up, the gaps between your gearbox ratios should be constantly borne in mind. You

RIDING PROFESSIONALLY


should always know the optimum point on the rev-counter for gearchanges, in order to drop the engine back into the meatiest part of its powerband.

Gear ratio selection is important. Different gearboxes can be fitted to your Formula 1 Honda, as can alternative front and rear final drive chain sprockets. Independently or together, these modifications have pronounced effects on the bike's acceleration and top speed. Gearing can be used to 'set the bike up' for the widely varying conditions found at the world's major racetracks.

Each track is different. Some are twisty, with few long straights and plenty of tight corners or *chicanes*, demanding 'short' gearing for quick acceleration; others feature long straights, requiring the fitment of 'tall' gearing to give your bike the high top speed it will need to keep up with the opposition. available, and make the rider's job a whole lot easier in poor conditions, but they do not permit anything like the same angle of lean - and hence, nothing like the same speed - through a bend as is made possible by racing slicks in the dry.

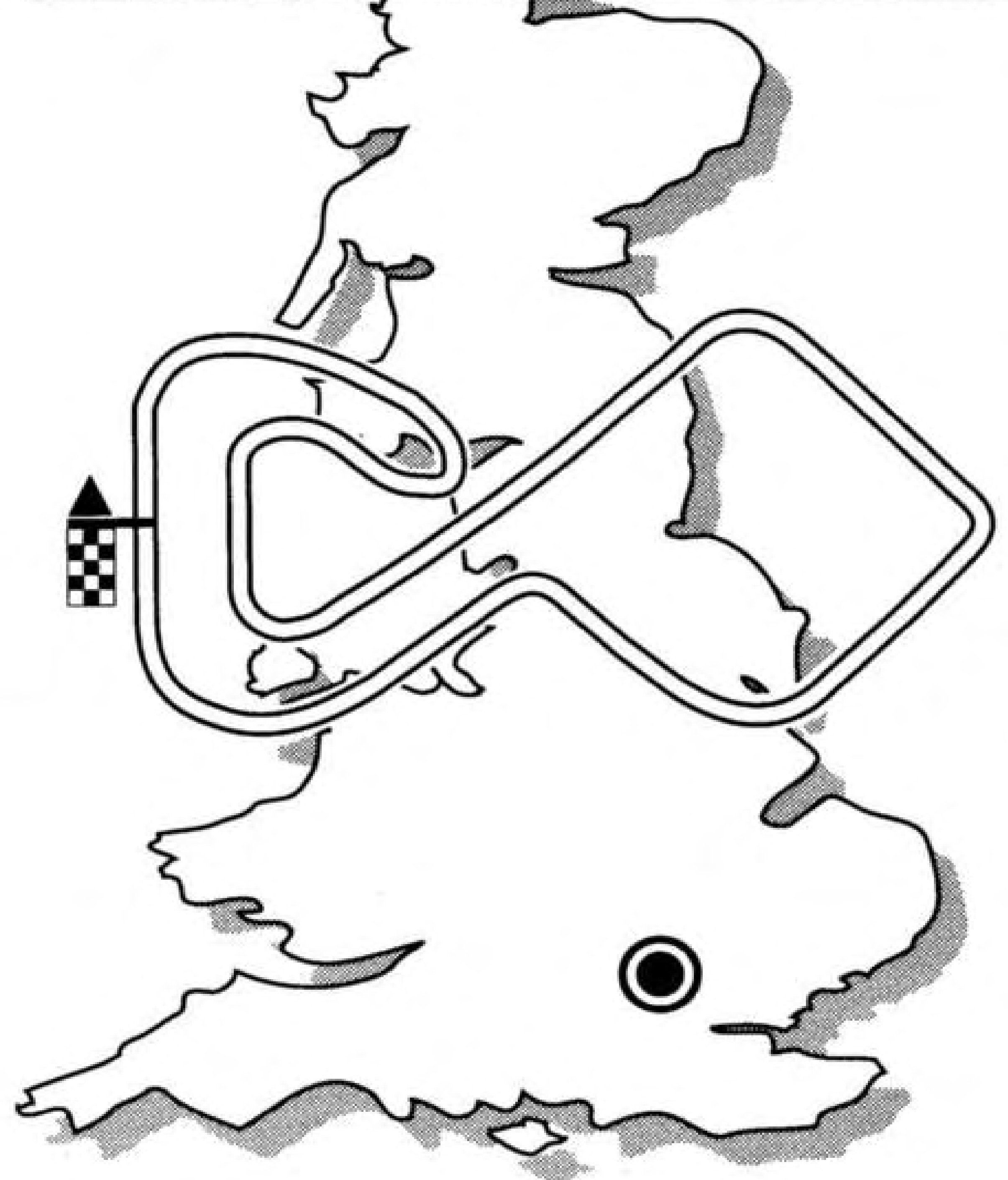
Moderation at the throttle is essential in such situations, both in terms of the speeds it is prudent to attempt and in terms of the rates of acceleration attempted when exiting curves.

Braking in the wet is an even more delicate art, since the chances of losing the heavily-braked front wheel are greatly increased when there is a sheet of water building up between the all too narrow contact patch of your tyre and the surface of the track. There may be additional cause for concern on some tracks which may have been used for other, non-racing activities such as commercial tyre testing. These tests inevitably coat the tarmac with an invisible film of rubber granules and other debris that cause the track to take on the characteristics of a skating rink when rain hits it.

Again, your only hope lies in moderation. Never brake violently in wet or slippery conditions. Try to 'straightline' bends as much as possible, in order to minimise your angle of lean. Brake well in advance of bends, finishing your braking phase well before tipping the bike in so that the machine is already nicely balanced for carving through the turn. Avoid the kind of jerky inputs at the throttle or brake controls which upset this delicate balance. 

We hope you've learned something from these simple maxims of life in the fast lane. Just remember: use your brain as hard as your throttle hand, and you could end up occupying that coveted number one spot on the Formula 1 rostrum...

TRACK DATA



SALZBURGRING

LOCATION

Salzburg, Austria

Set in a spectacularly wooded and green valley, overlooked by rocky highlands, Salzburgring is one of the world's most dramatic circuits. Race spectators line the steep valley sides to create a unique ambience, while the circuit itself is extremely fast - and dangerous. Most of the bends are flat-out affairs, others are lacking in adequate runoff areas. If you want to win here, you can't afford to compromise.

The first righthander on the main straight is actually little more than a gradual direction change, negotiated at peak revs in sixth gear, leading into a flat-out left kink. Then it's hard on the brakes for the large-radius banked hairpin, exiting in second gear and changing up whilst still cranked over. The next section is a long uphill lefthander, flanked on the left by one of the valley sides. Top riders can

hold the throttle hard against the stop in sixth through here, and through the subsequent slight right, before easing off for the final lefthander of this series.


Down two or three gears (depending on the gearing selected) as you swoop downhill for the testing right at the end of the Salzburgring's back section. Keep a tight inside line, drifting out left as the bend opens out. Still on a down gradient, come down one or two more gears for the slower right over the bridge. There may be time to change up

one on the exit, before

slowing again for the left-right chicane. The

righthand element is more severe than the left, so care and restraint are needed here to avoid

building up too much speed through the chicane.

The last lefthander onto the start-finish straight is also potentially dangerous, rear wheel slides being the order of the day for any rider opening the throttle too early before the exit. 

TRACK DATA

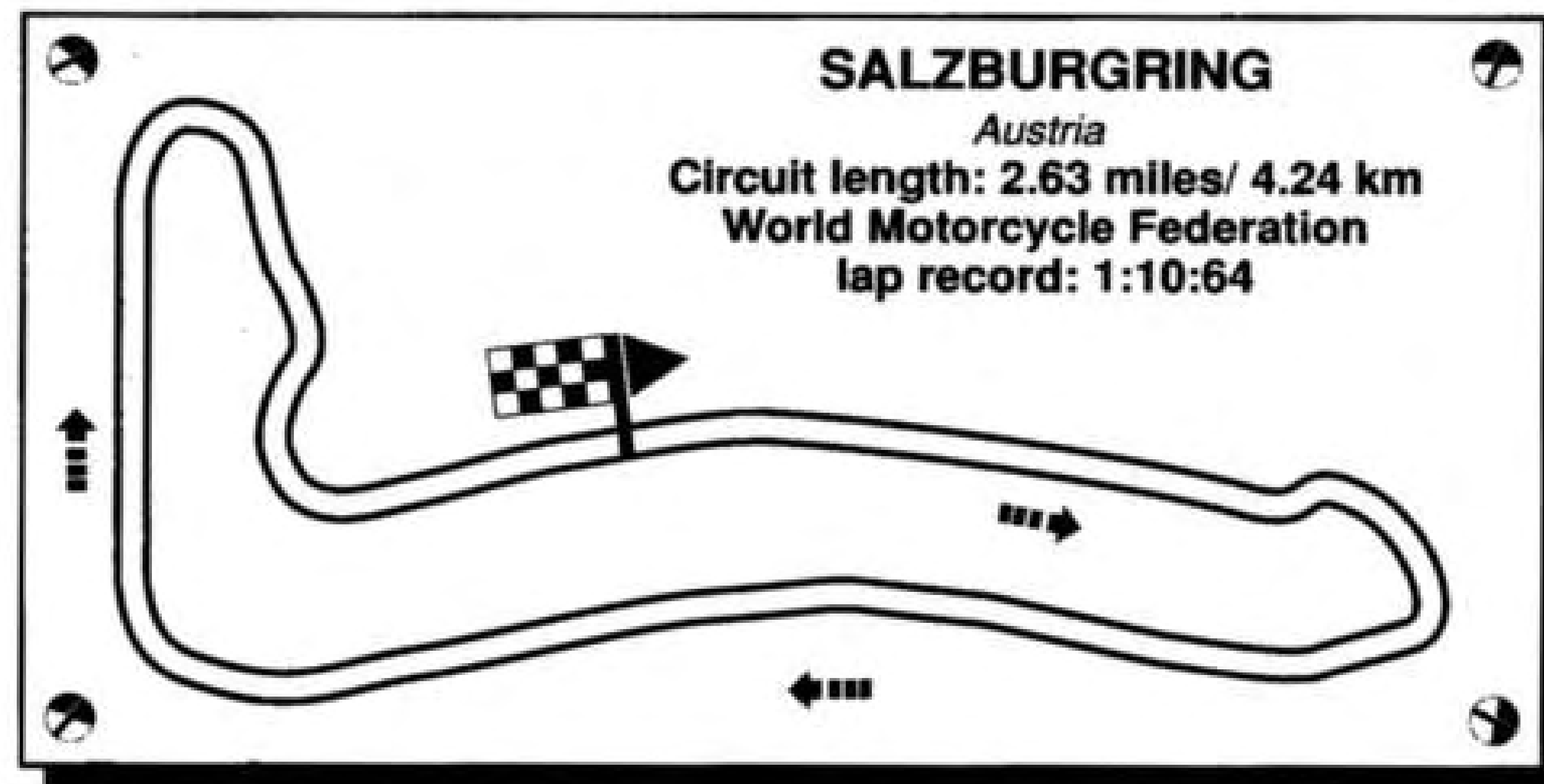
SALZBURGRING

Austria

Circuit length: 2.63 miles/ 4.24 km

World Motorcycle Federation

lap record: 1:10:64



Special bike requirements: high gearing to take full advantage of the track's speed.

Tips: be patient through the chicane; usually, the second half is slower than the first

IMOLA

LOCATION

Near Bologna, Italy

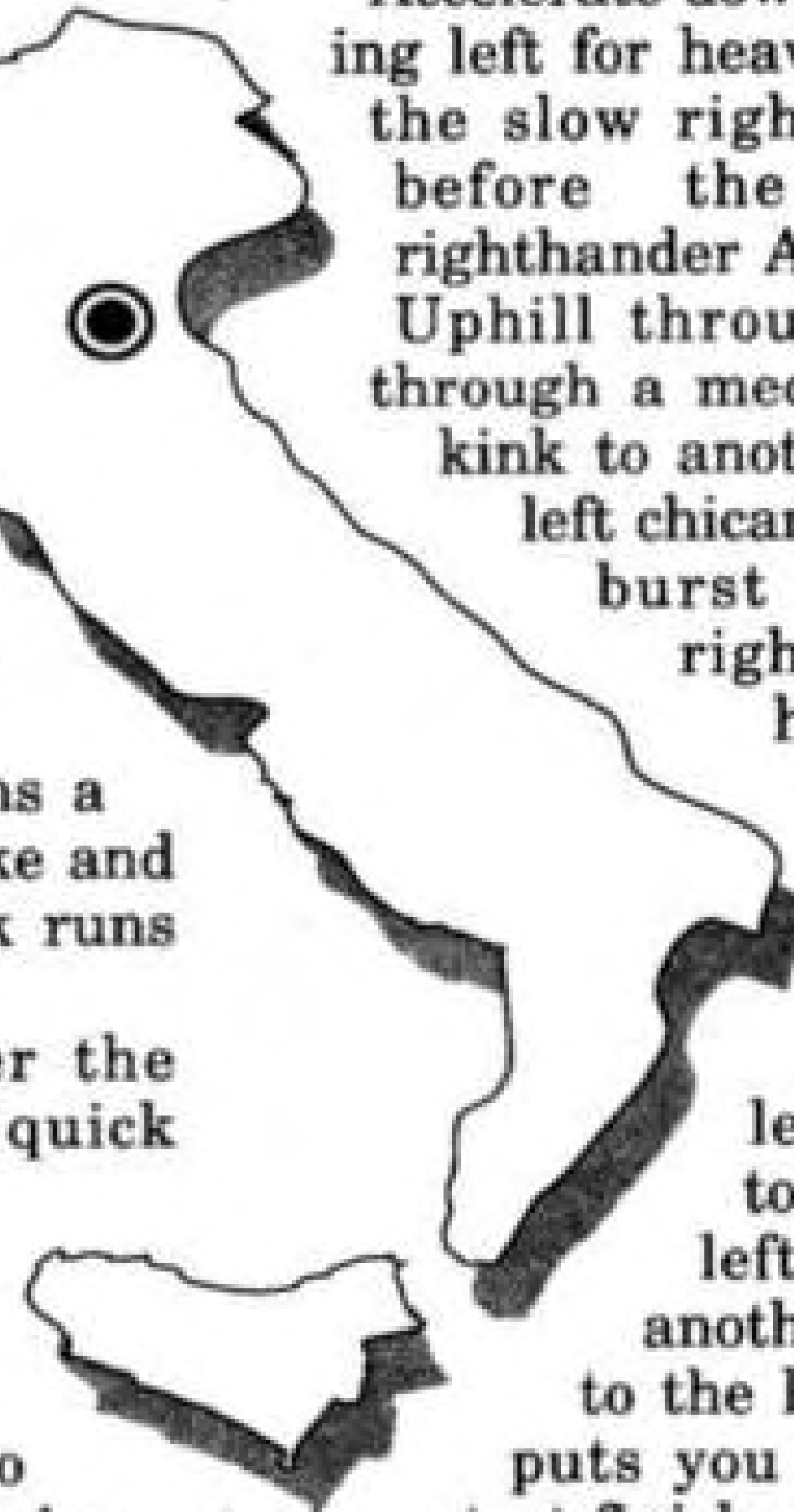
Imola's long-standing reputation as a classic racing circuit has been diluted in more recent times by the need to 'tame' some of the faster and more dangerous sections through the addition of new chicanes and runoff zones. As a result, the course has lost much of its flow, especially in the second half, which is heavily punctuated by chicanes.

Nevertheless, it remains a spectacular test of both bike and rider. Unusually, the track runs anti-clockwise.

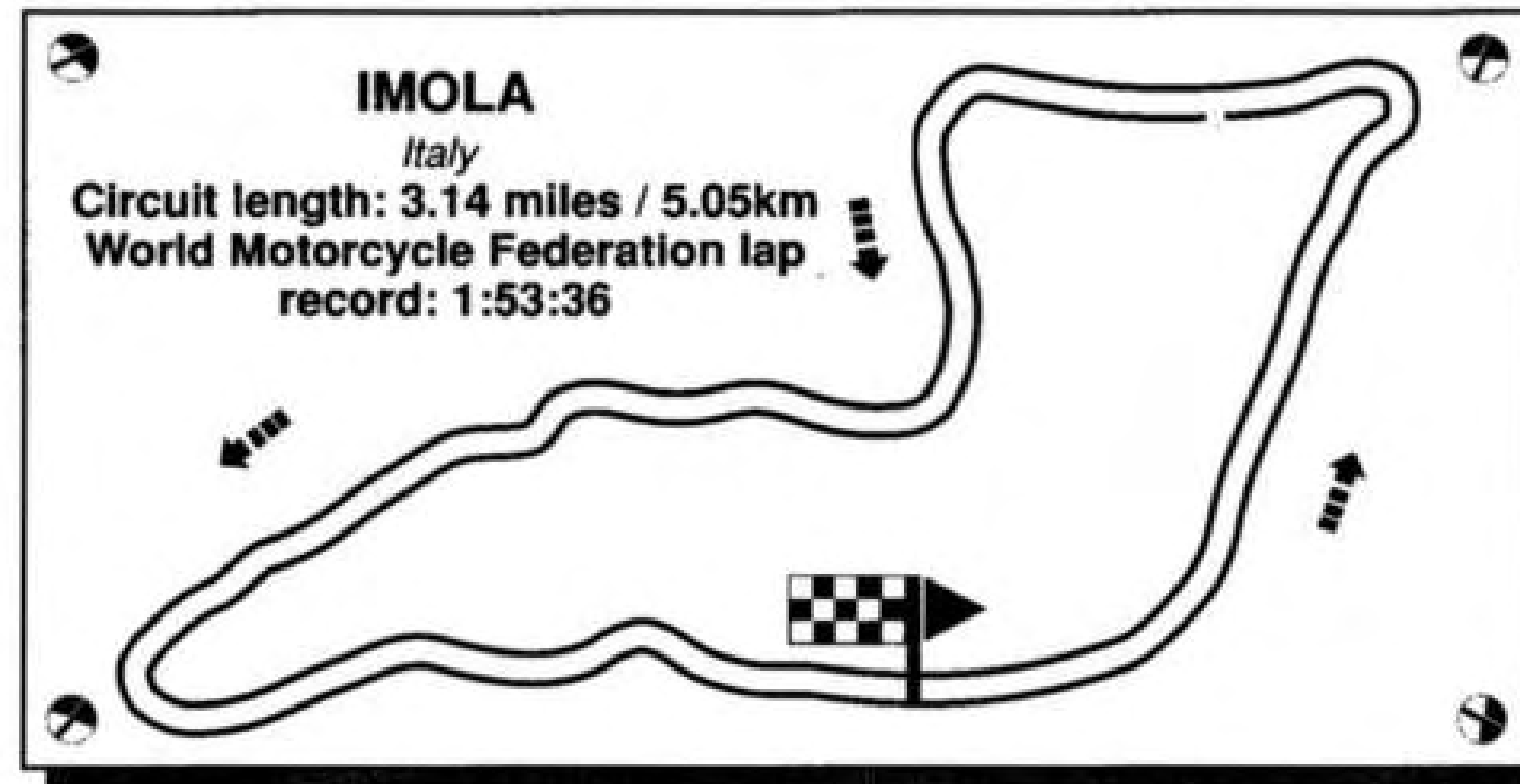
First lefthander after the start is the notoriously quick double-apex Tamburello. On a flying lap, you should be in sixth gear soon after the exit, ready for the long drag down to the Tosa lefthand hairpin,

which (following track safety improvements) is now preceded by a slowing-down right-left chicane. Negotiate Tosa in second gear, waiting until you can see the uphill exit before cracking open the throttle for the straight leading to the 90° Piratella lefthander.

Accelerate down the hill, bearing left for heavy braking into the slow right-left chicane before the late apex righthander Acque Minerale. Uphill through the gears, through a medium-quick left kink to another slow right-left chicane, then a short burst up to a left-right, then downhill through a right kink to a ninety left. That's followed by a more open left, leading on to a faster right-left chicane, then another short squirt to the left-right which puts you back onto the start-finish straight. 



TRACK DATA



Special bike requirements: though the circuit diagram makes Imola look fast and open, the proliferation of chicanes brakes up the rider's rhythm. Jaking up the rear end of the bike or fitting a smaller front wheel would speed up the steering and the bike's ability to make quick direction changes.

Tips: road surface quality is variable in the extreme, as a result of the many track repairs and changes that have been made over the years. The track is treacherous in wet weather.

CIRCUIT VAN DRENTHE

LOCATION

Assen, Holland


Another long-established track on the European circuit, Assen has fallen behind the times a little in that its track width is barely adequate even for motorcycles to be able to pass one another in safety. Nonetheless, over 100,000 avid race fans regularly crowd its terraces to watch their two-wheeled heroes do battle.

From the start line there's a right-left kink running under a bridge, then it's down to second for the 90° Haarbocht right-hander. Changing up to fourth for another left-hand kink in the straight running down to another second gear ninety right, back up two gears for the right-left-right section of swervery, then back down to second for an increasing radius right.

Heading back towards the

pits and startline, the track streams under a bridge before bearing right into the entry of De Strubben, a very long lefthand hairpin. The next section is the nearest thing to a main straight at Assen; in fact, there is work to be done at the handlebars all the way down to the next sharp righthand corner, which is the circuit's slowest.

Another left-right kink takes you to a tightening 100° left and then to two easier banked righthanders. Up into third for the 45° right leading onto a short straight, which ends in a long, fourth gear, double-apex left (Ramshoek) in front of a grandstand. The spectators there can also watch

your line through the following right-left-right flip-flop chicane, which delivers you back onto the main start-finish straight. 

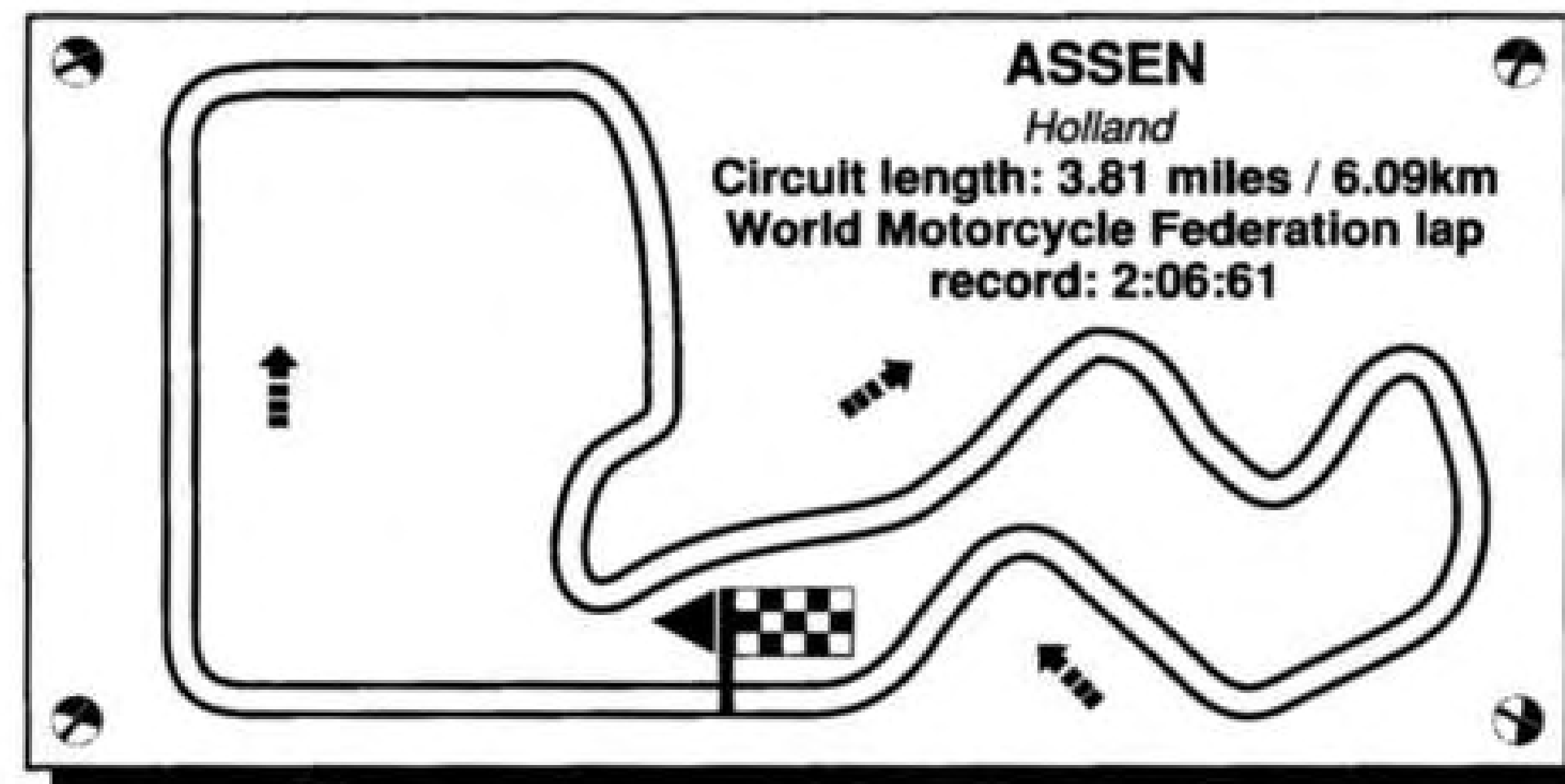


TRACK DATA

ASSEN

Holland

Circuit length: 3.81 miles / 6.09km
World Motorcycle Federation lap record: 2:06:61



Special bike requirements: Top speed is less important at Assen than manoverability. Sixth gear may be used just once, at the end of the pit straight, so choose short gearing.

Tips: prone to bad (read 'wet') weather. Final chicane can be slippery even in good weather.

PAUL RICARD

LOCATION

Marseilles, Southern France

Basking in the hot sun on the French Cote d'Azur, Paul Ricard is the ultimate 'holiday' circuit for European motorcycle race fans. Its ultra-long, ultra-fast Mistral straight tests machines to the limit, and demands high gearing if you want to keep up with the pack.

From the startline it's a straight drag race through the gears to sixth, before snicking down two for the left-right Verrerie esses. The exit onto the next short straight can be bumpy. Stay on the left hand side of the track for the best entry into the slow right-left chicane. Heel the bike over right, then flick it hard left and accelerate as soon as you see the corner opening up onto another, shorter straight before the Ecole hairpin. Stay in a low gear, optimising your lean angle and using the whole of

the track on the exit.

Up through the gears to Sainte-Beaume, a tight-entry increasing radius right-hander. Stay tucked in to the inside so that you can pour on the power whilst cranked over. Correct any drifting before the crucial left kink onto the Mistral; an untidy line through this apex will affect the time it takes to get down the straight.

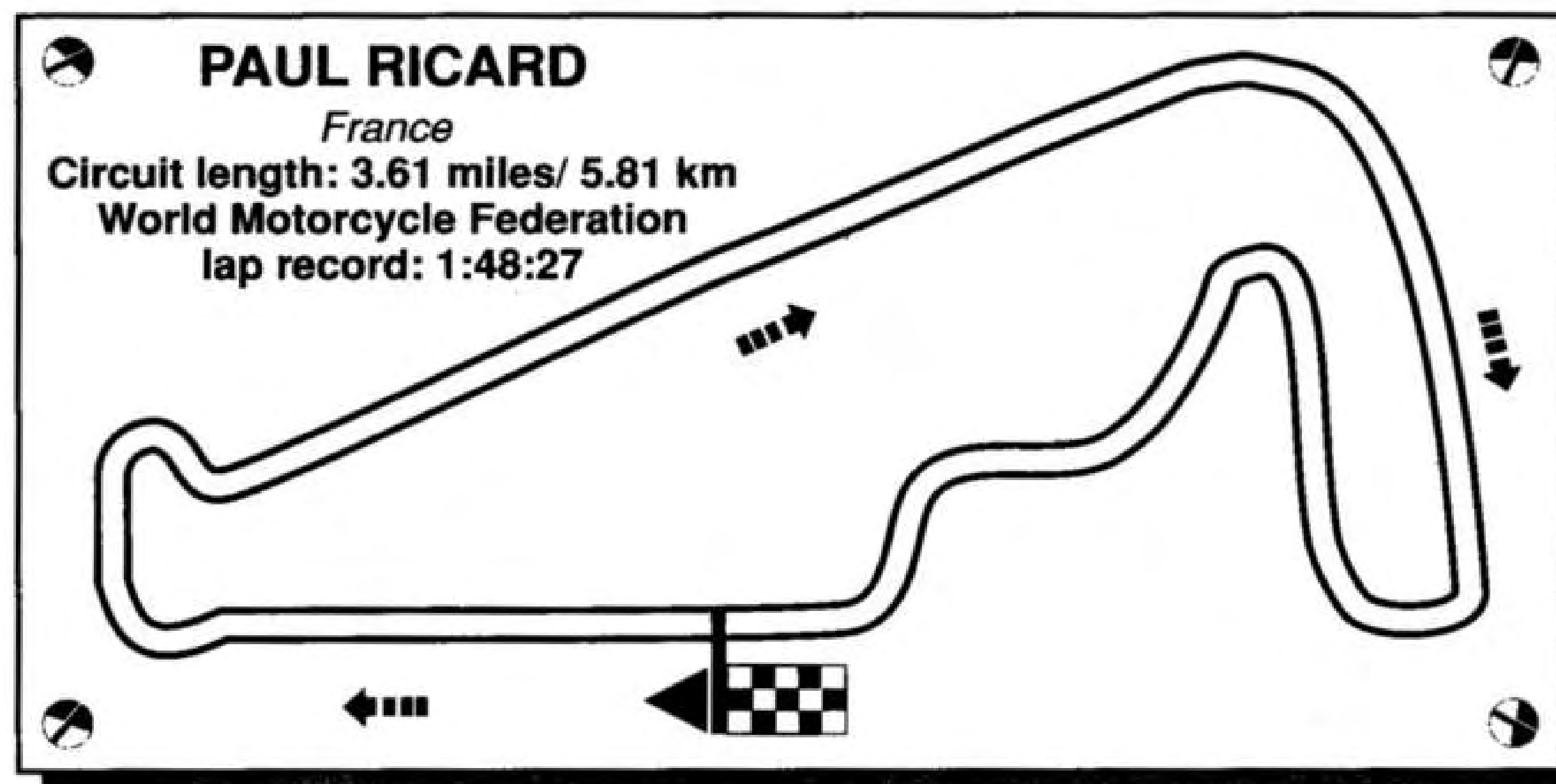
As the end of the Mistral approaches, pick out a landmark for the start of your braking sequence.

Drop down two gears for the fast and challenging Signes right-hand sweeper. Notch back into fifth for the short straight before braking and changing down

for Beausset, a long, low gear, double-apex loop. Back up to third, then slow down a little for the right-left entry into a 90° left (L'Epingle).

Short shift up through the gears to keep the back tyre biting through the long right hand

TRACK DATA



sweep into the Virage complex, a short left running up to the final sharp right onto the start-finish

straight. Accelerate hard across the line ...

Special bike requirements: high gearing for speed on Mistral straight.

Tips: optimise engine speed and gearing to start of Mistral. Optimise braking at end of Mistral by selecting later braking points.

DONINGTON PARK

LOCATION

Derbyshire, England

Donington is a beautifully landscaped and historic circuit laid out on the grassy contours of a private estate in the heart of England's Midlands. It is a popular circuit with spectators and riders alike. Comprehensive track resurfacing, allied to the provision of generous runoff areas, allows a bold rider plenty of scope to 'go for it' without worrying too much about the consequences.

The lap begins with a straight rush to Redgate, a wide but awkwardly tightening righthander. Many top-grade riders have made embarrassing mistakes here. Redgate opens out into the first element of the Craner Curves, a right-left complex which tests a rider's ability to switch direction whilst accelerating down a quite severe downhill gradient.

An apparently straightforward 110° right, the Old

Hairpin, terminates the Craner system. The apex is straightforward, but the mid-corner bumps demand the rider's full attention. Accelerating up an incline to a fast sweeping left past the old bridge, possibly the most challenging part of the circuit, it pays to use the full width of the track on the right so as to get a good straight run up to the approach of McLeans. This is a 90° right with an adverse camber and a prominent inside kerb, against which it's all too easy to ground out your motorcycle (or, worse still, your right foot).

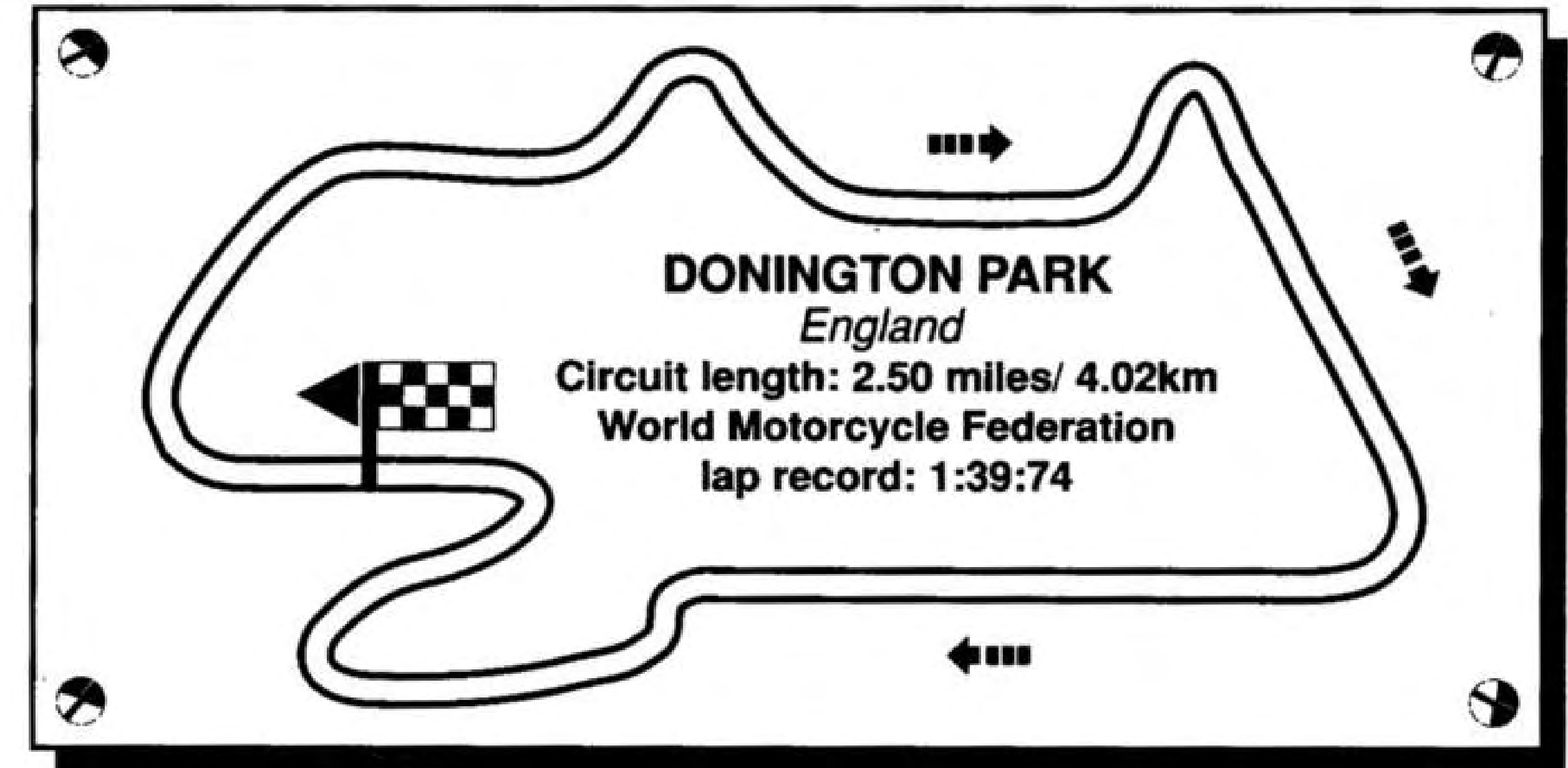
The front wheel can lift on the exit from McLeans, depending on the gear selected.

A short straight runs uphill to Coppice, along and wide righthander that leads on to Starkey's Straight. Your speed down this straight depends

on your speed through Coppice. That depends on how successfully you negotiate the blind entry to the curve, obscured as it is by



TRACK DATA



the gradient. Coppice is a favourite spot for rear wheel slides.

After the bridge on Starkeys Straight, the track falls away suddenly, causing the bike's front wheel to go light or to leave the deck altogether. Braking hard for the new left-right chicane, bikes must be banked over to maxi-

mum lean on both sides in the space of a second or so. Then it's a simple blast out to the slow righthand hairpin on the new Melbourne loop before rejoining the start-finish straight after a tricky twin-surface lefthand hairpin - another potentially embarrassing Donington hazard.

Special bike requirements: Tyres that will grip and last on the super-abrasive track surface. Excellent brakes.

Tips: Take inside line round Redgate and McLeans. Take care on entry to Coppice.

LAGUNA SECA

LOCATION

Near Monterey, California, USA

Laguna Seca has only recently come into prominence as an international racetrack, following major extensions of the circuit to make it comply with FIM regulations. The new part of the circuit is superbly smooth and well safeguarded by big runoff zones, but these new sections only serve to highlight the bumpiness of the old sections. Despite its Californian location, the weather at Laguna Seca is notoriously fickle, with a surprising amount of mist and rain adding to the riders' problems.

An uphill start leads across a blind lefthand brow and into Turn One, the first of the new bends. It's a simple lefthand hairpin, opening into a short straight and a 90° right. As this leads into another, faster, right (Turn Three), you can stay on

the left side of the track. The next straight is one of Laguna's faster sections, ending in an uphill single-apex left which leads back onto the old circuit.

The uphill gradient continues under a bridge to Turn Five, a narrowing 90° left with a depression on the apex. Continuing still further uphill, the bike is still pulling hard through a slight right at the top of the incline. Still cranked over, it's time to hit the brakes hard for the infamous 'Corkscrew'

left-right turn. After the first left, the track drops away vertiginously, losing in the space of fifty yards much of the height gained in the previous two thousand.

The immediate right, equally precipitous, is made more difficult yet by the track's extreme bumpiness.

This uneven surface carries on right the way round a longer down hill left, making the subsequent right seem relatively easy. A quick charge along a short



TRACK DATA

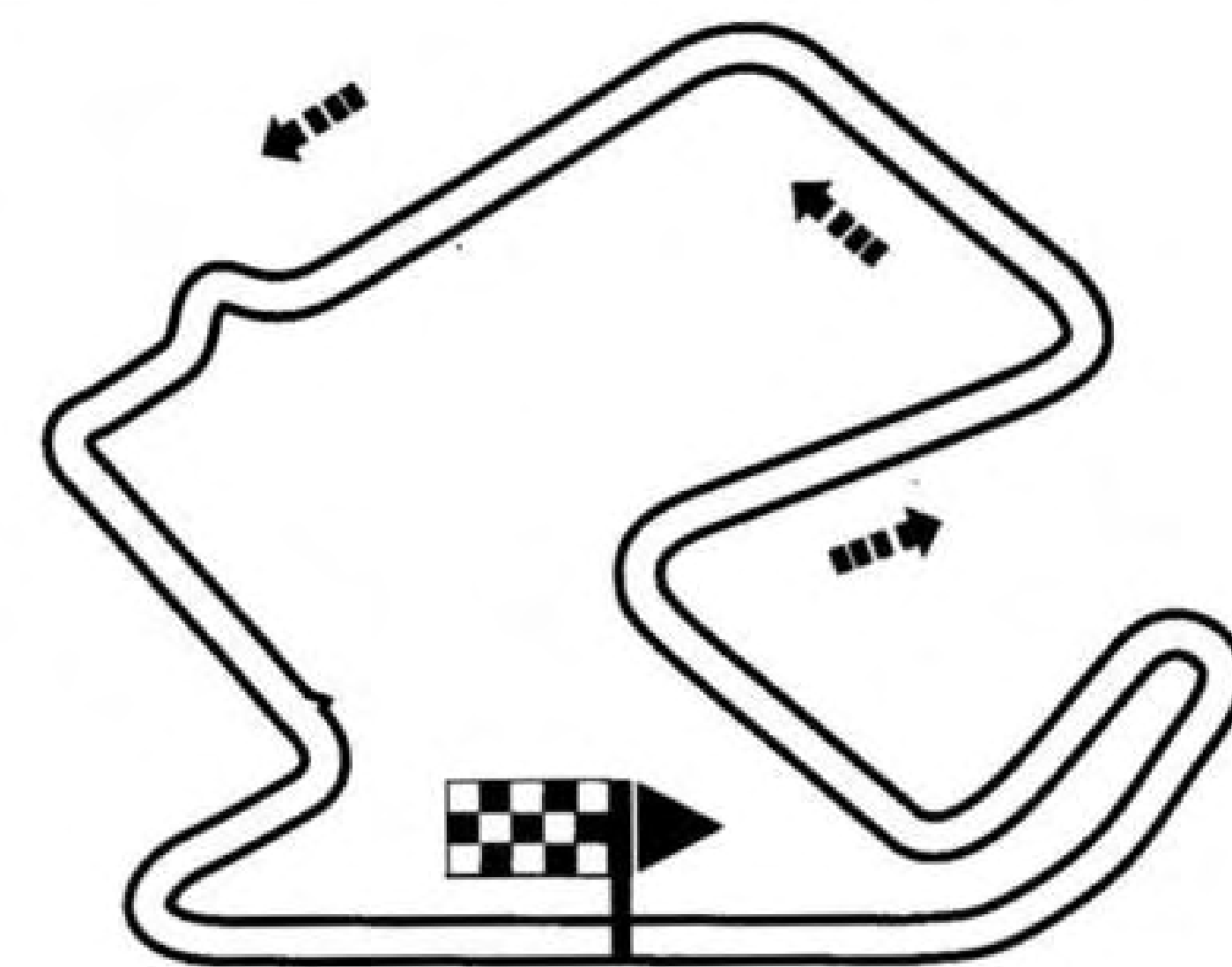
LAGUNA SECA

USA


Circuit length: 2.19 miles/ 3.51km

World Motorcycle Federation

lap record: 1:34:64



straight, and you're into the final turn before the main start-finish straight. A solid wall flanks the outside of this turn, and the quick riders often get perilously close to it too. Wheelies on the

exit are almost unavoidable. Then it's up through the gears again and across the finish line, trying not to throttle off over the blind left - another quick part of the track. 

Special bike requirements: set the bike up to suit the worst rather than the best aspects of the track. A good stiff chassis and well damped suspension are essential here.

Tips: be prepared for damp track conditions.

HOCKENHEIM

LOCATION

Near Heidelberg, West Germany

Another fast, heavily wooded track in the Salzburgring tradition, Hockenheim differs in that it is a 'stadium' circuit. Five corners and a chicane are visible to spectators sitting in the main grandstand on the start-finish straight, but this section represents perhaps less than a quarter of the full circuit length. Most of the track is actually hidden in a forest; several changes in the leaderboard can take place among the trees, before the riders reappear in the stadium complex. A mighty roar then goes up from the crowd if their favourite is in the lead.

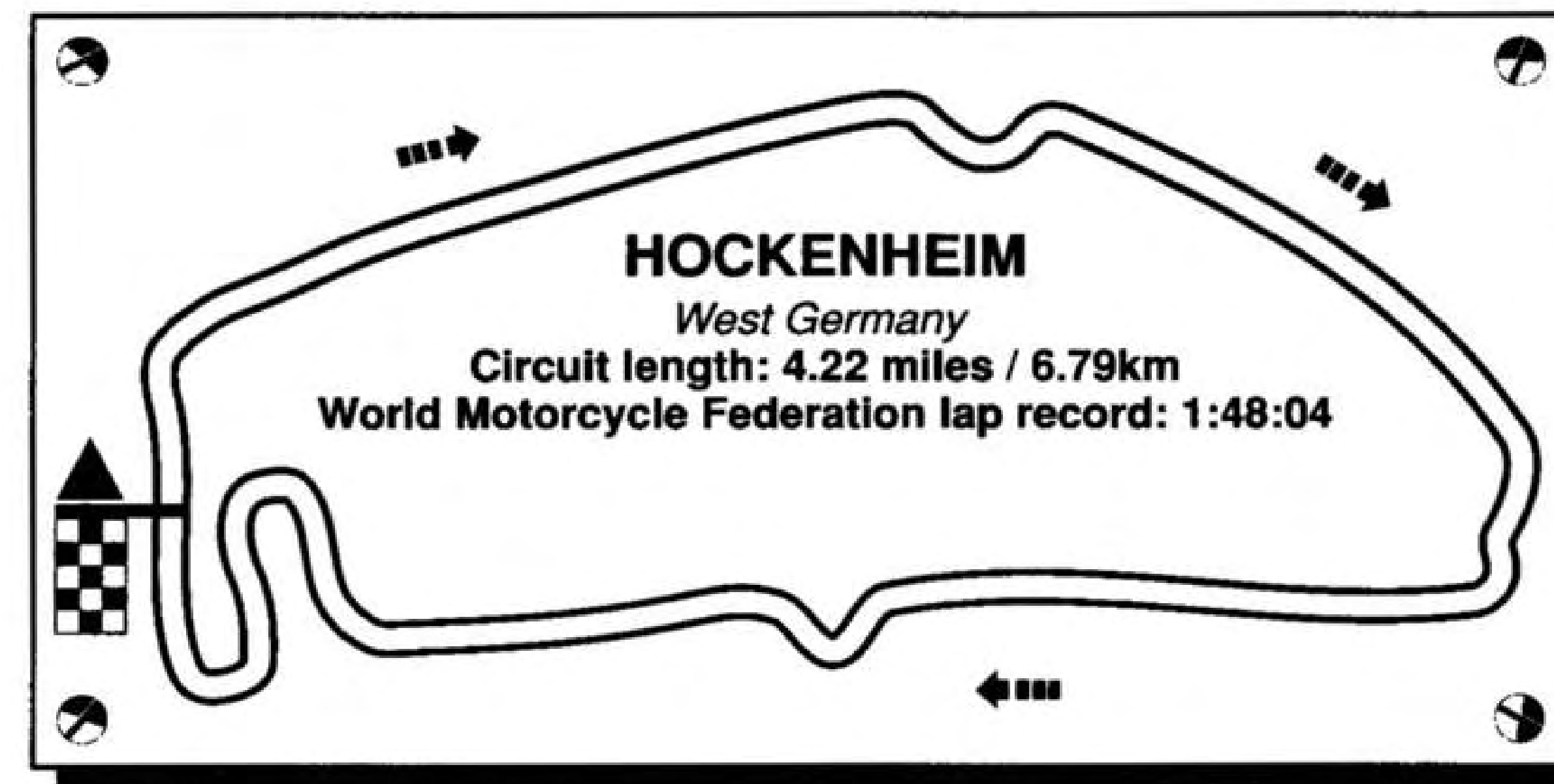
After the start, there's a not-quite-90° right leading onto a straight. One-third of the way along this straight, the track becomes enveloped by trees. The

first Bremskurve is a fast left-right chicane approached by a slowing righthander at the end of the straight. Exiting the chicane in third gear, it's hard acceleration through the gears on a long, sweeping right curve that can be treated as a straight.

On the approach to the Ostkurve, come down two or three gears on the brakes. This 160° righthand bend is effectively a long hairpin, with a more or less constant radius and a good top surface, so the bike should be at maximum lean all the way round. Another straight leads to Bremskurve 2, practically a mirror image of the first chicane, braking left off the straight before heeling the bike right and then left on the exit.

The last major straight takes you back into the stadium, the crowds coming into view as you crank hard right into the medium fast Onkokurve. A short squirt to the second gear left hand Sachskurve hairpin, followed by

TRACK DATA



a taxing right hand kink leading into the Elfkurve/Opelkurve complex, an enormous double-apex right with a slower second element. Acknowledge the

cheers of the crowd as you use all the track on the exit right in front of the main stand, before blasting through the gears to begin another lap.

Special bike requirements: because of the high oxygen output of the trees in the dense forest section, bike may seize through running too weak a mixture. Big carb jets will overcome this, but only at the expense of over-richness in the stadium section which may cause relatively poor performance, here.

Tips: the infield sections of the Hockenheim track are used for independent tyre testing. The residue from this activity coats the road surface, making it exceptionally slippery when it rains. Use extra care - and the best weather tyres.

SUZUKA

LOCATION

Suzuka, Japan

Owned by the Honda Motor Company, Suzuka is a purpose-built track with an interesting layout. It incorporates just about every type of bend, hairpin and straight, and even crosses over itself on the back straight. After a few early complaints about the shortage of runoff areas on some bends, the Japanese authorities instigated a programme of track improvement which has established Suzuka as arguably the finest race facility in the world.


Heading off clockwise from the start, the first test is a kind of widened righthand hairpin. Clipping the first apex takes your bike to the outside of the track, where you stay for a brief stretch before diving into the second right-hand element.

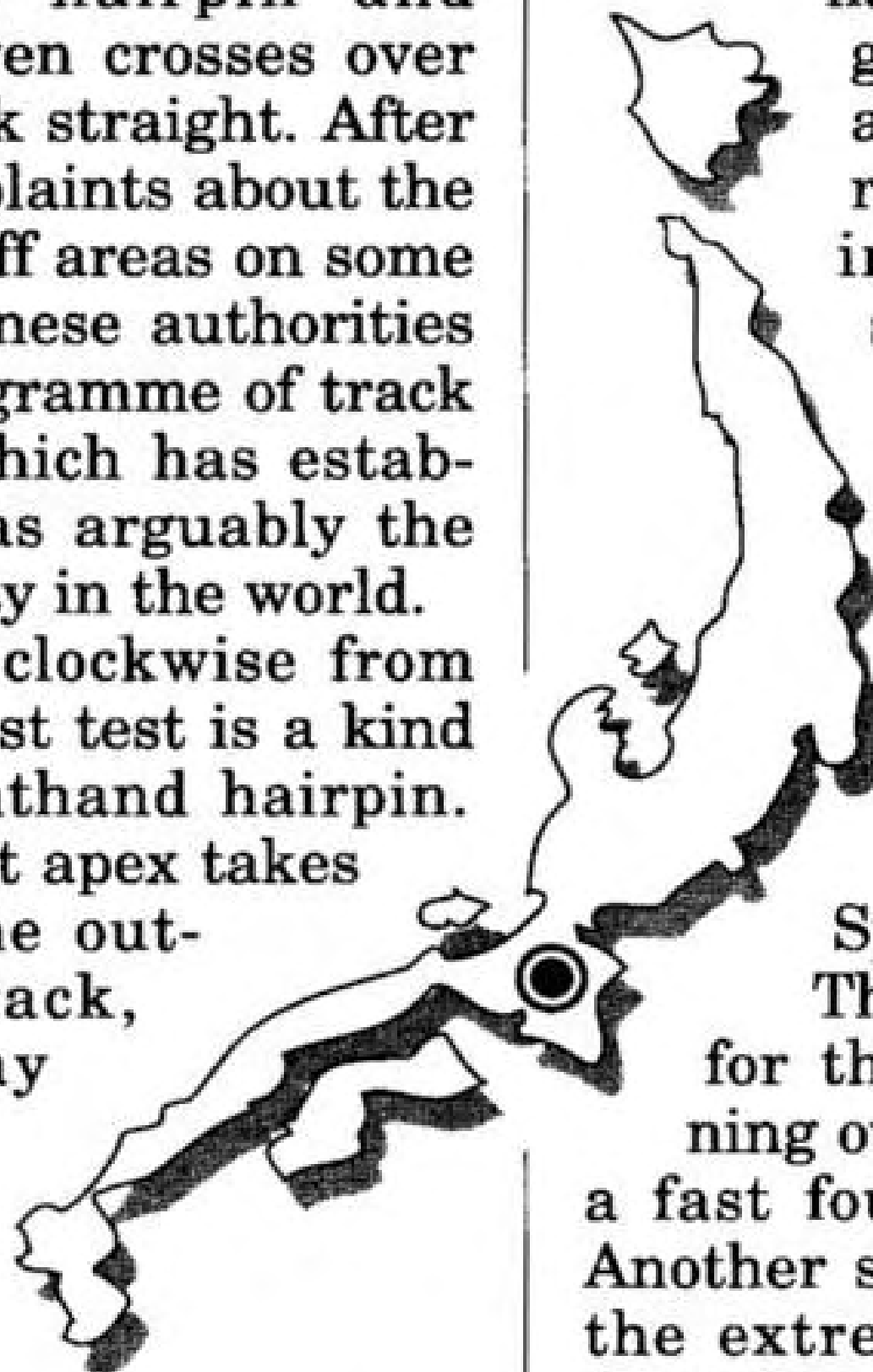
Up two gears, then changing down one for the first in a series of uphill lefts and rights. The second right puts you onto a short straight before the entry

to a fast and very long third gear left sweeper.

This terminates in a still-fast right kink, and another right under the bridge, drifting wide to the outside of the track before cutting across the apex of a right kink, on the approach under braking to a slow uphill lefthand hairpin. Up through the

gearbox, all the way along a long gentle right which opens out into another Suzuka-style expanded hairpin. The lefthand entry bend is quite sharp, but a late apex will keep your bike on the right line for the surprisingly bumpy, increasing radius Spoon lefthander.

Then it's hard on the gas for the back straight, running over the bridge and into a fast fourth gear lefthander. Another shorter straight brings the extremely tight right-left Casio Triangle chicane into view. Through there, then shortshift up the 'box along the gentle but tricky adverse camber downhill righthander that takes you back onto the start-finish straight. 



TRACK DATA

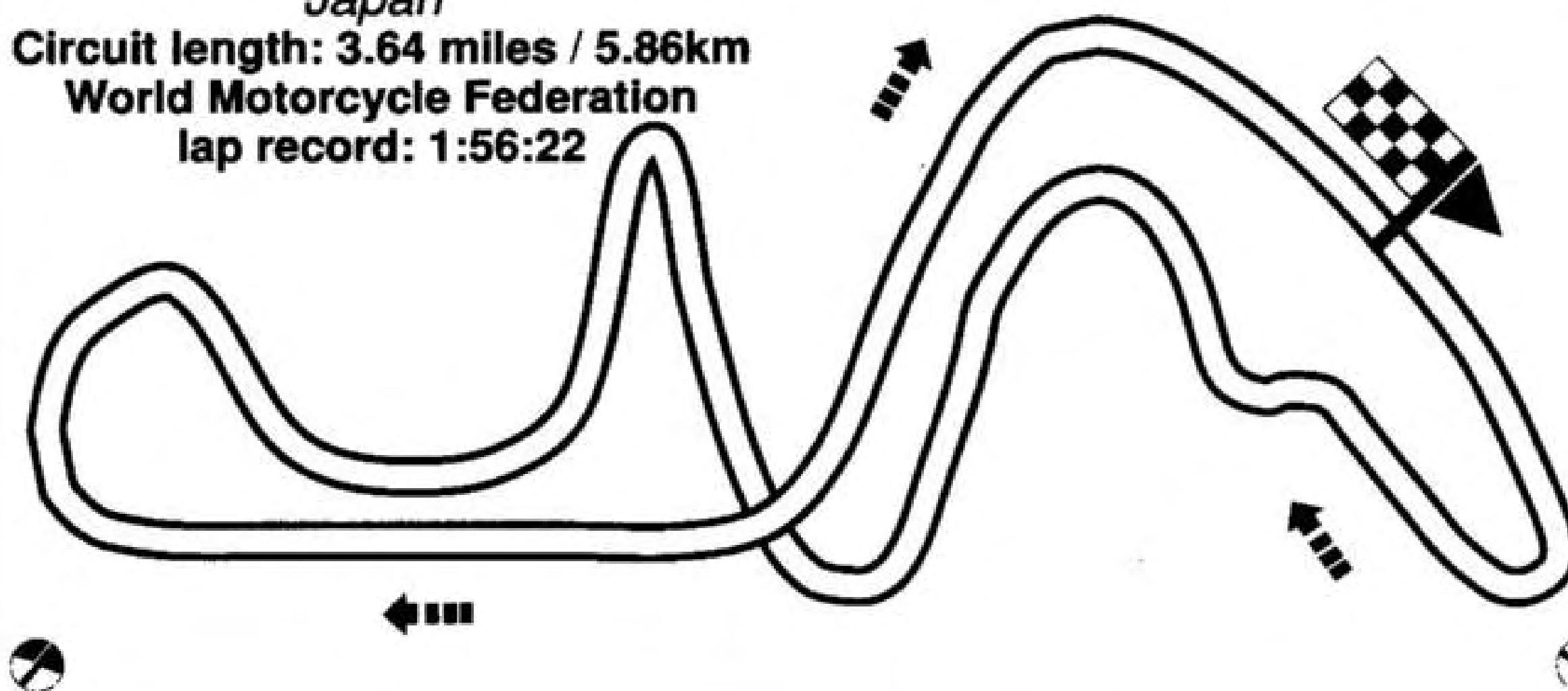
SUZUKA

Japan

Circuit length: 3.64 miles / 5.86km

World Motorcycle Federation

lap record: 1:56:22



Special bike requirements: Everything has to be special on your bike for this circuit!

Tips: Finding the ultimate line around Suzuka is very difficult. Common accident spots are at the chicane, and on the downhill charge from the chicane to the finish line. The weather can be cold and wet too.

MALLORY

LOCATION

Kirby, Mallory, Leicestershire,
England


A former grass-track venue, Mallory Park is another race circuit situated in the centre of the English Midlands, a legacy of the once-proud British motorcycle industry that used to be based in the same area. Relatively featureless in its layout, two infield lakes notwithstanding, the circuit still presents one or two interesting challenges.

The startline is at the beginning of Kirkby Straight, so there's plenty of room to build up speed through the gears right from the off. Under the footbridge, then move over to the left and drop down a couple of gears for a wide entry into Gerard's, one of the longest lefthand bends on any circuit anywhere. Though it would appear from the circuit diagram to be an impossible curve to apex, the deep entry

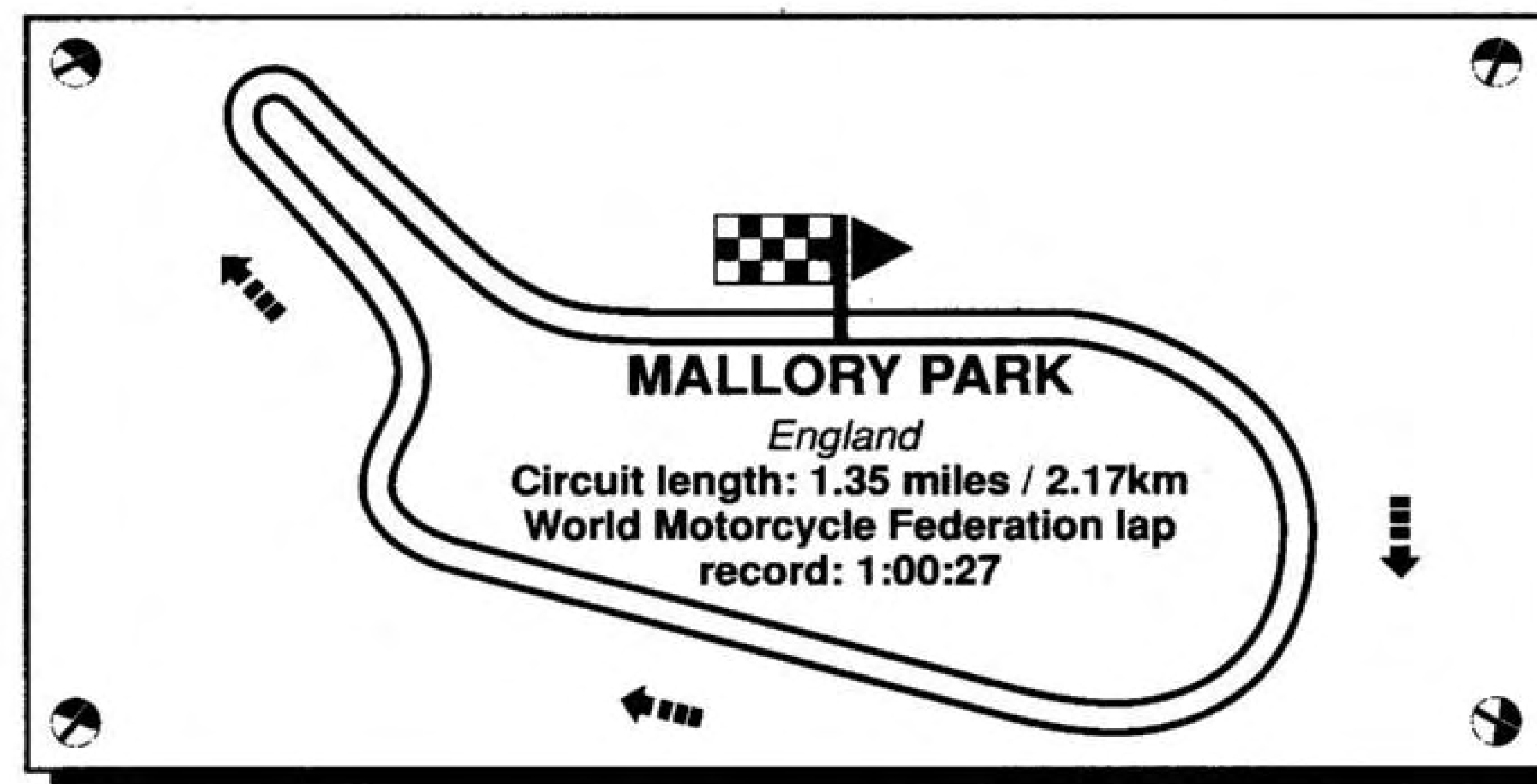


you made into the corner should allow you to come pretty close to the grass on the inside, halfway round Gerard's in third or fourth gear.

Using all the road on the exit, bring the bike upright for Stebbe, the back straight, where you should be maxing out in a high gear before coming down two gears and cranking right into the Esses. Though the track is wide enough here to tempt you into trying a straight line through this complex, the best route is simply to follow the line of the road so as to be well placed on the exit for the run up the hill to Shaw's, the famous Mallory hairpin.

Braking is important here, if you want to avoid ending up in the High Street of the village nestling next to the racetrack. See 'Tips' for the inside gen on negotiating this corner. Shortshift down the hill to Devil's Elbow, a dangerous off-camber righthand sweep back onto the start-finish straight. 

TRACK DATA



Special bike requirements: Well set-up forks and powerful brakes are worth their weight in gold for the hairpin alone. Sloppy chassis and suspensions will be exposed on the fast, negative camber Devil's Elbow righthander. Turn that steering damper right up!

Tips: Keeping your speed up around the hairpin by taking a wide 'classic' line will stand you in good stead for the drive down to the start-finish straight. Don't worry if someone nips up the inside on the 'spoiler's' line; you should be able to repass him easily with your extra speed on the exit

CADWELL PARK

LOCATION

Lincolnshire, England

Draped across an untypically scenic and hilly site in the traditionally flat north-east of England, Cadwell is the favourite track of a surprisingly large number of racers. Though narrow in parts, the track is smooth and inviting, with open corners and ample runoff areas. Things get a little more claustrophobic in the wooded 'mountain' section on the main course, but bad accidents are thankfully rare.

From the startline, riders can get on the gas all the way up to the steeply graded Coppice left-hander, cutting across to the outside of the track for the still-uphill entry into Charlies. This is a righthander connected to another righthander by a semi-straight that runs blind over a rise. Apex the final righthander before drifting out onto the outside of the main back straight, which

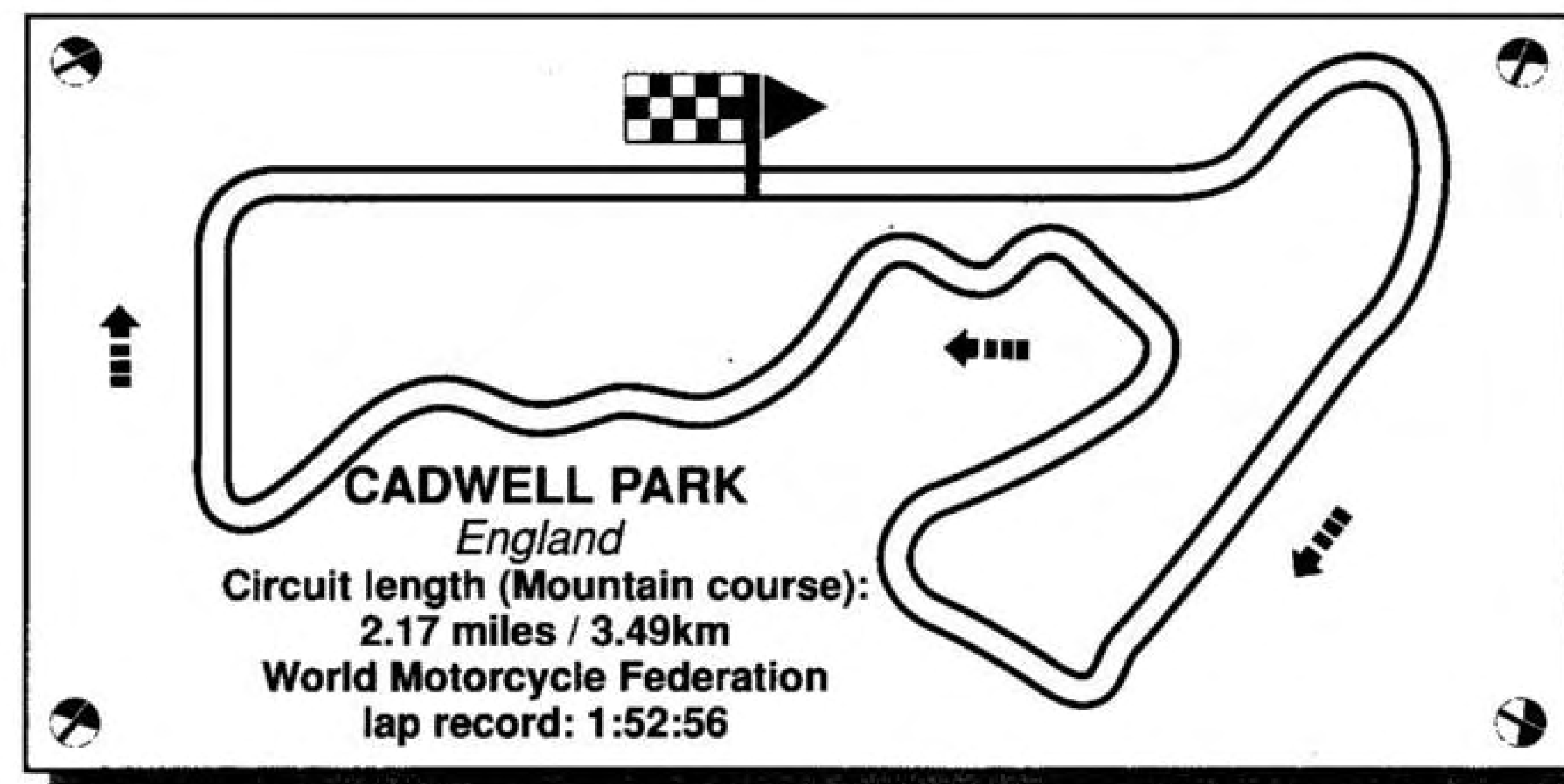


dips in the middle before rising quite steeply again on the approach to Park, a severe-looking right which can actually be taken pretty quickly with the bike on full lean.

The exit to Park puts you on line for Chris Curve, a tight-entry right that opens up into a gentle sweep. Accelerate around here to maintain your angle of lean, before tapping off for the right-left Gooseneck chicane, the exit of which plunges downhill to a hard-braking left hairpin (Mansfield).

Keep the throttle reasonably steady through the following right, before thrashing through the gears around a left sweeper that is flanked on the left by a steep grassy bank. A 90° left takes the track sharply uphill once more to a gentler righthander. Crest the rise, front wheel high in the air, then plunge into the left-right-left-right-left complex leading under the bridge to a

TRACK DATA



sharp righthand hairpin.

Back downhill to the medium-

quick Barn righthander, then up through the gears to cross the line.

Special bike requirements: none.

Tips: The apex of the first lefthander into Charlies can be slippery. Pick out a reference point for a good entry into the blind centre section here

KNOCKHILL

LOCATION


Fife, Scotland

Situated on the northern banks of the Firth of Forth, north-east of Glasgow, Knockhill is Scotland's premier racetrack. It is unusual in that a large proportion of the spectating public are accommodated on the inside of the circuit, as well as more conventionally on the outside perimeter.

From the start, bikes accelerate under the spectator access bridge to a fast medium-gear righthander, dropping down via Duffus Dip and through a faster left before coming back a couple of cogs for the tight-entry McIntyre, a 90° right.

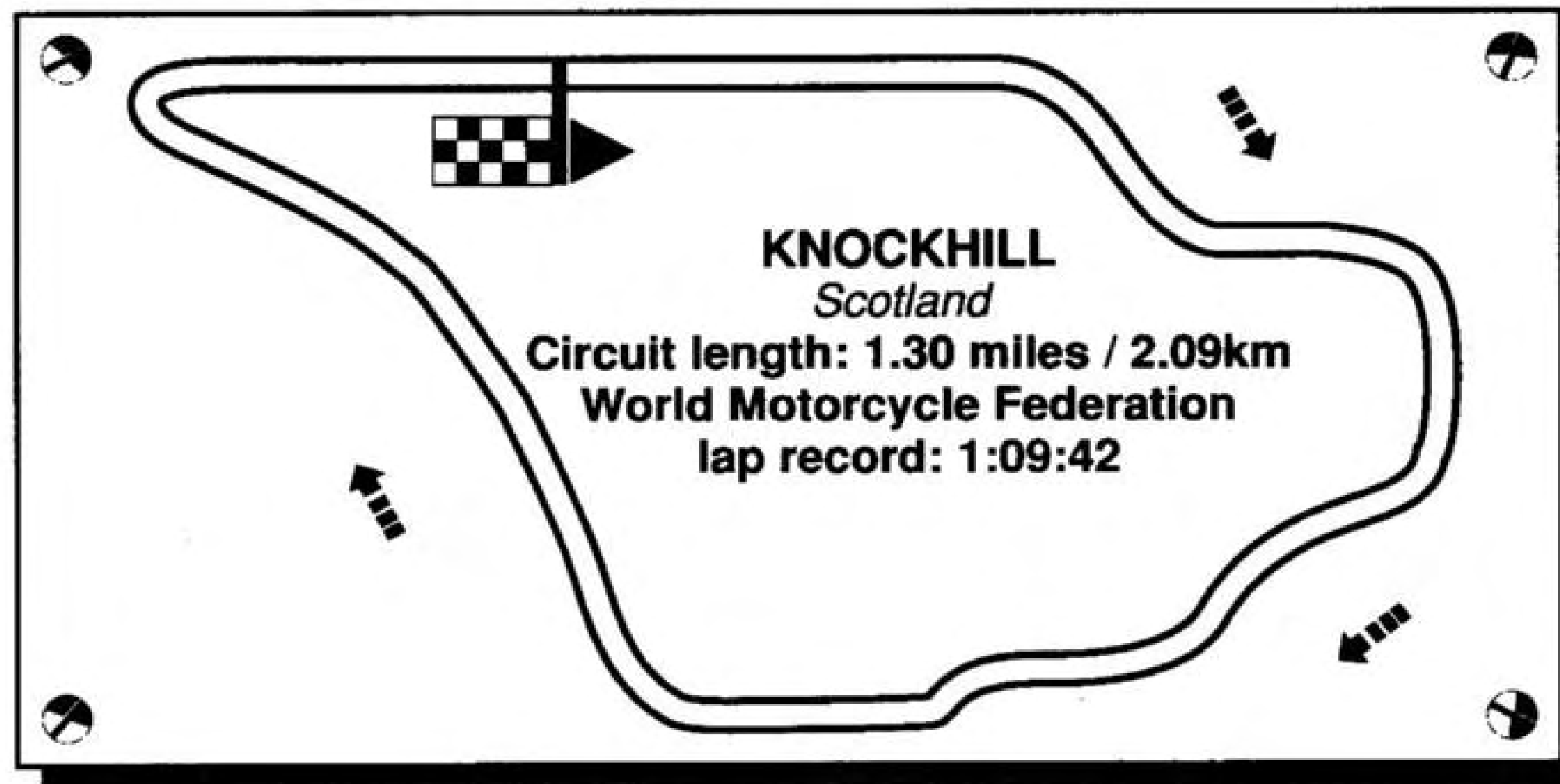
Up one gear on the exit, revving out through Butchers (a 45° right) and then braking for

the left-right chicane before opening up onto the shortish back straight (Brabhams). Brake, and back down a gear for Clark, a difficult medium right whose exit carries your bike to the outside of the track, which is by then curving left at the start of the Railway bend.

Shortshift up the 'box until the bend straightens out, then give it full wick - but only for a second, because then you'll have to brake hard for the ultra-slow Taylors righthand hairpin which leads back onto the start-finish straight. 



TRACK DATA



Special bike requirements: Knockhill is a short course, without too much in the way of a main straight, so gearing can be low here for good pickup out of the corners.

Tips: Rain and cold winds from the North Sea are a constant threat at Knockhill. Keep those wet weather tyres handy!

OULTON

LOCATION

Cheshire, England

Attractively located in the green Cheshire countryside, Oulton Park has plenty of length and variation to interest riders and spectators alike. The tarmac surface is generally good, but can become slippery in hot conditions (unfortunately all too rare in this part of the country).

From the start, the track runs more or less straight to the medium-fast 90° righthander at Old Hall. Bring the bike back from the outside to the inside of the track for Cascades, a decreasing radius right at the end of a fifth/sixth gear straight. The flat-out run from there along Lakeside takes you to the hard-braking Island Bend righthand hairpin on the intermediate length circuit.

Hoisting the front wheel under acceleration on the exit

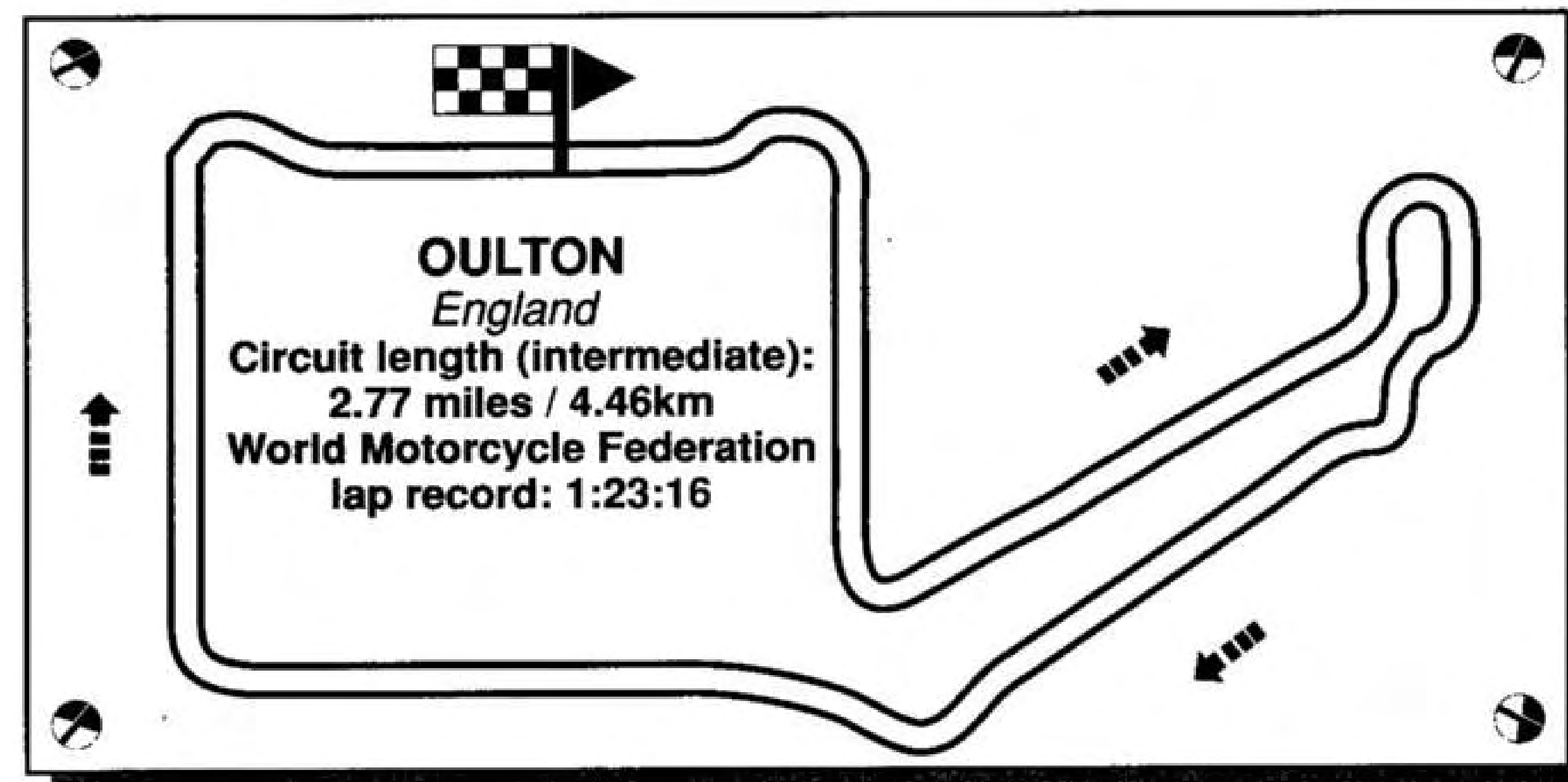
from Island, gas it hard up the hill before dropping back a gear and opening up the throttle for the fast right at Knicker Brook. Bearing left under the footbridge at Clay Hill, keep on the power through the Water Tower sweep right before easing up for the testing Druids righthander.

Then it's an exhilarating rush along the tree-lined back straight, under the Bailey Bridge at half distance, before hitting the brakes hard and coming down three or four cogs for the 110° Lodge Corner righthander.

From Lodge, the track rises steeply under the bridge at Deer Leap. Accelerate hard while cranked left for the start-finish straight, keeping the bars under control as the front end goes light.



TRACK DATA



Special bike requirements: Oulton is relatively straightforward apart from the chassis-twisting Deer Leap section at the end of the lap, but the straights make it advisable to gear up for a reasonable top speed.

Tips: Shortshift through Deer Leap so as not to be in the meaty part of the powerband when the front wheel tries to lift.

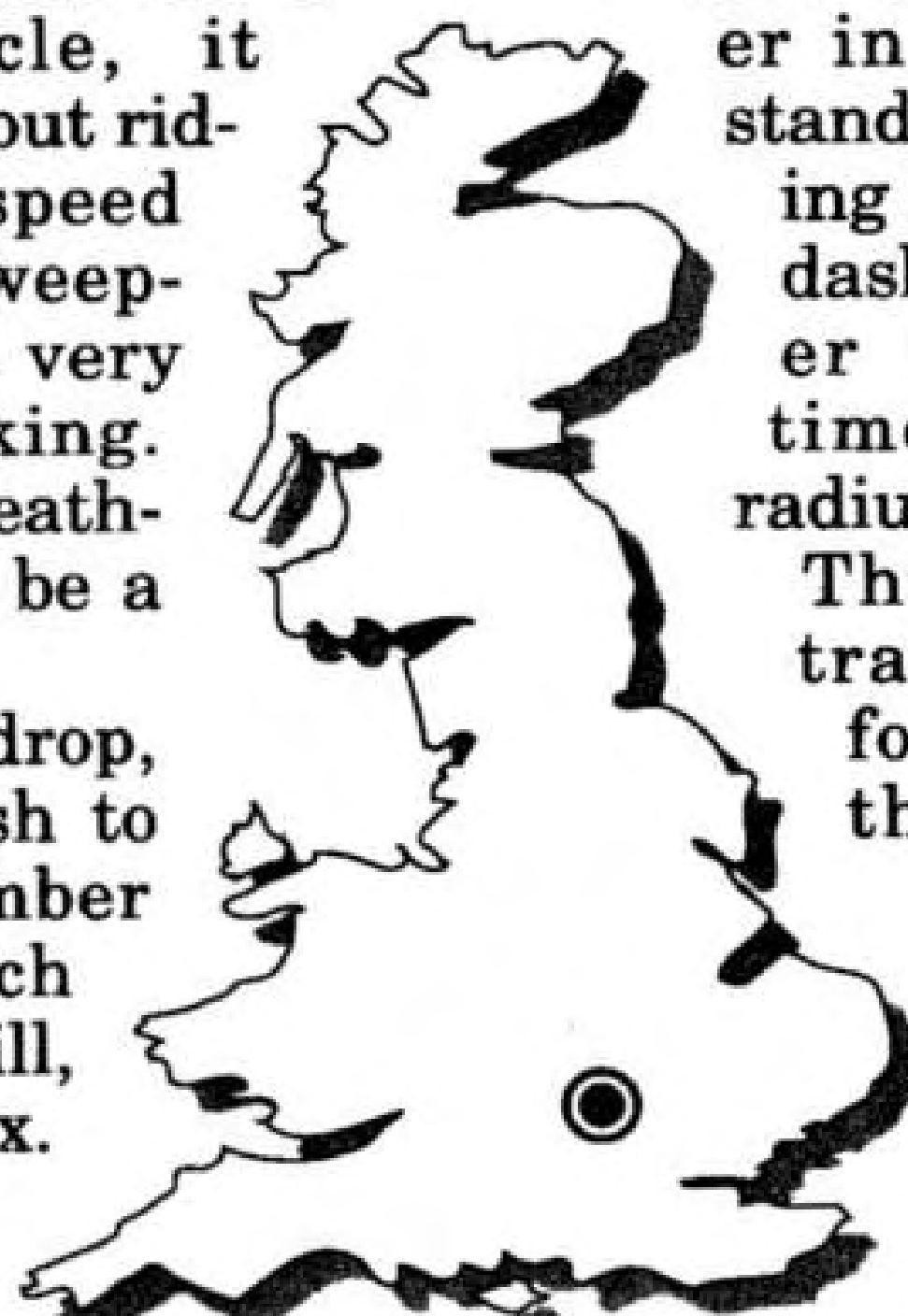
SILVERSTONE

LOCATION


Towcester, England

A classic airfield track, Silverstone sprawls across a flat and often bleak site in the very centre of the English mainland. As a viewing spectacle, it scores few points, but riders addicted to speed and wide-open sweeping bends find it very much to their liking. Winds, and bad weather in general, can be a problem here.

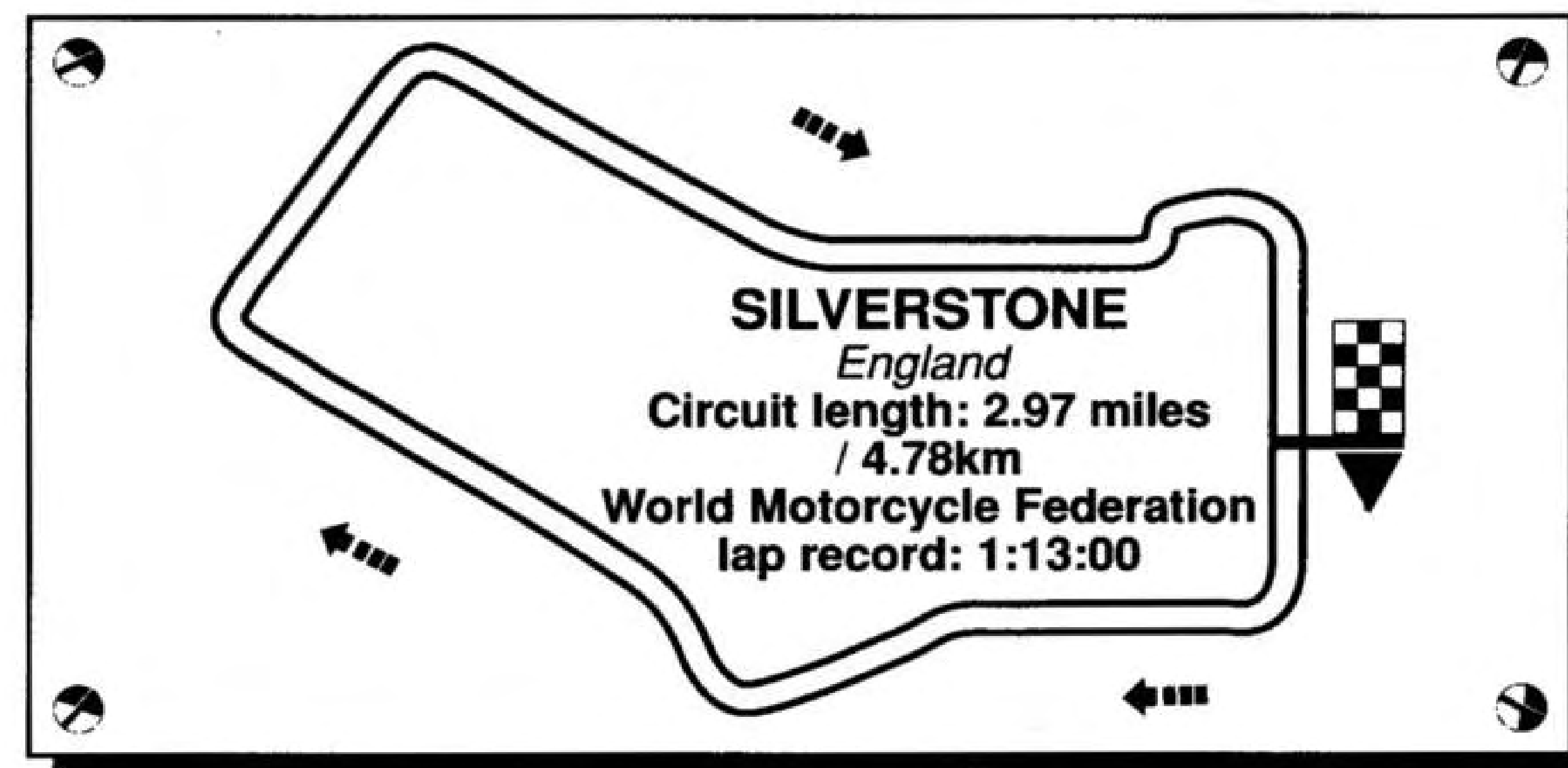
From the flag-drop, it's a straight dash to Copse, an off-camber righthander which falls away downhill, obscuring the apex. As a result, many riders find themselves running wide on the exit. Hard acceleration down the hill into the flat-out left kink at Maggots, before scrubbing off speed for the righthander Becketts, Silverstone's slowest corner.



Out of Becketts, and back up to maximum speed through the gradual left sweep of Chapel on to Hangar Straight. Down to third, holding a tight line round the Stowe righthander, a longish 120° curve with no single apex. No time to wave to your mother in the Stowe grandstand; you're too busy piling on the power for the dash up to Club, another righthander, this time 90° constant radius.

Through Club, good traction is important for the uphill drive through the Abbey kink, halfway down the back straight. Under the bridge, flat out in top, then brake hard and drop down three gears for the wide Woodcote righthander leading back onto the start-finish straight. Keep it tight here, or risk running out of road on the outside. 

TRACK DATA



Special bike requirements: high gearing and big carb jets are *derigueur* at Silverstone. Steering dampers should be set to maximum to prevent weaves and wobbles on the incredibly fast bends.

Tips: the high number of right handers means that the left side of your tyres hardly ever reach its full working temperature, so watch it around the lefthander at Maggots. The wind can blow hard enough to lift your tyres off the ground - and it rains a lot too. Keep your wet tyres option open.

BRANDS HATCH

LOCATION

Near Dartford, Kent, England

One of the world's most famous tracks, Brands Hatch is another 'stadium' type circuit (like Hockenheim). The 'Club' circuit, used for less major races, is all entirely visible from just about any vantage point in the main arena; for more important meetings, the full circuit is brought into play, carrying the bikes through a wood before bringing them back into general view at Clark Curve.

From the startline on Brabham Straight, third gear will see you into Paddock Hill, an extremely tricky adverse camber downhill righthander with a blind apex - just about the worst combination a track designer can throw at a racer. Compounding the difficulty is a vicious bump mid-corner, and if that wasn't enough, the track then disappears underneath your wheels

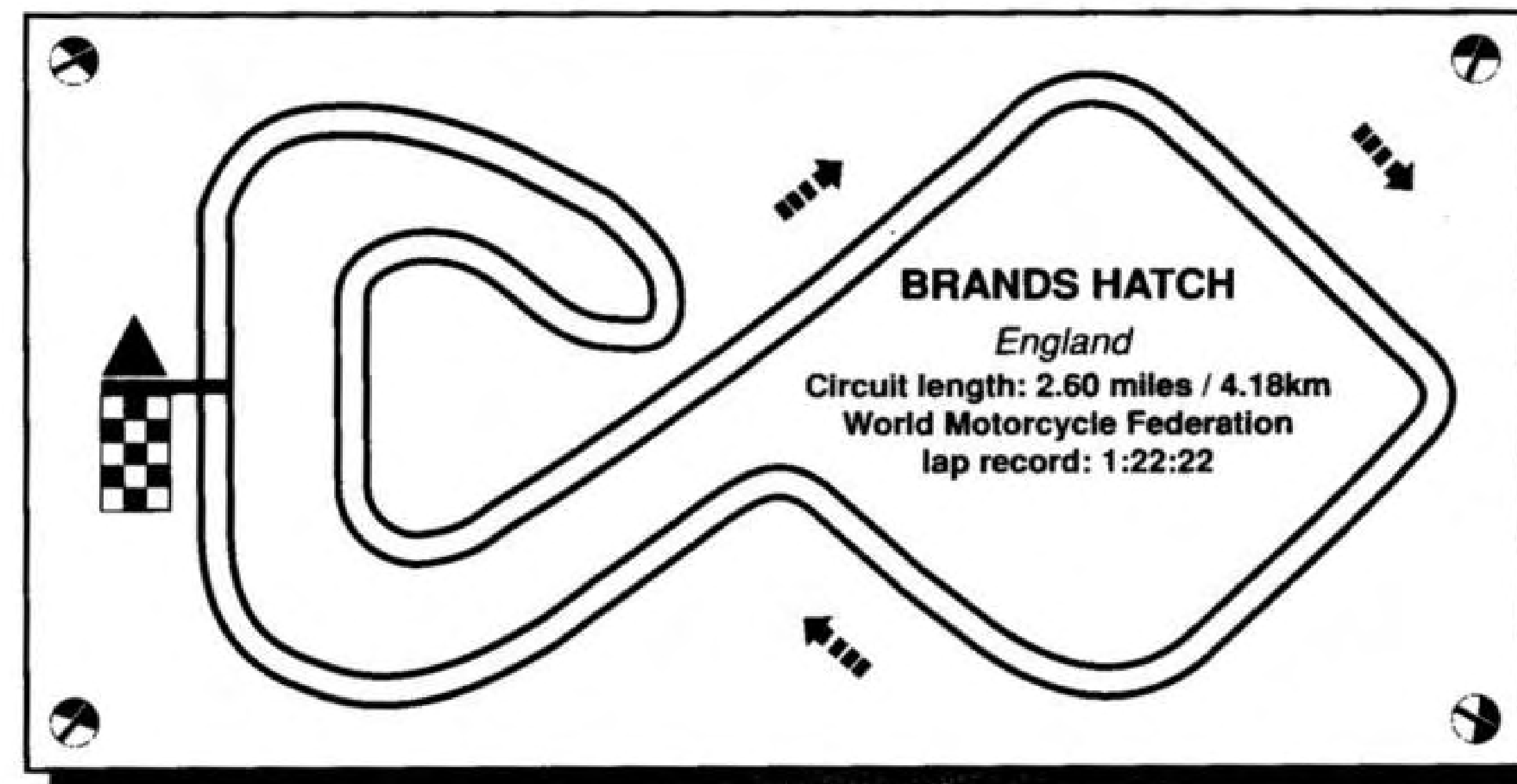


in a stomach-churning, suspension-bottoming depression.

Then it's up hill towards Druids, a righthand hairpin. Brake late, but not too heavily, as the surface can be slippery. Maximum lean around here, drifting out to the left on the exit before moving back right for Graham Hill Bend, an adverse camber lefthander leading onto Cooper Straight (which actually curves to the left). You may be able to get fifth gear before notching back one or two cogs for the uphill lefthander, Surtees.

Under the bridge on the big straight that leads out into the country, front wheel going light as the track dips down again at Pilgrims Drop before going under another bridge. Hard on the brakes and down two or three gears for Hawthorn, a very fast uphill right. Back up through the gears, then slowing for Westfield, a bumpy righthander, back on the gas and down into the dip at Dingle

TRACK DATA



Dell, uphill through a 90° right, then a short straight before a slowish 90° left (Stirlings).

Sliding the back end through the exit of Stirlings, onto the final straight leading back under

the bridge into the Club circuit, dropping down two gears for the awkward double-apex Clark righthander before accelerating over the finish line.

Special bike requirements: Shorter gearing suits this circuit.

Tips: Go steady around Paddock Hill, short-shifting on the exit to keep the bike balanced if necessary. Guard against sneaky overtaking moves around Druids by taking a centre line on the entry. Watch out for damp patches in the wooded sections.

OLIVERS MOUNT

LOCATION


Scarborough, England

Oliver's Mount is a switch-back track running over a hillside. As a result, there are many elevation changes along its near 2.41 mile length. The track's narrow and bumpy character, and the continuing presence of trees and street lights on the trackside, have earned it a reputation as the British mainland's own Isle of Man TT course. As at the real TT, several riders have met tragic and untimely ends at Scarborough.

From the start, accelerate through the gears to Mere Hairpin, keeping to the inside line to avoid being overtaken under braking. The hairpin is a first gear corner, tight and slow; then back up the gearbox, negotiating the left kink halfway along Quarry Hill before coming down a gear for the right-left Esses. Bank hard

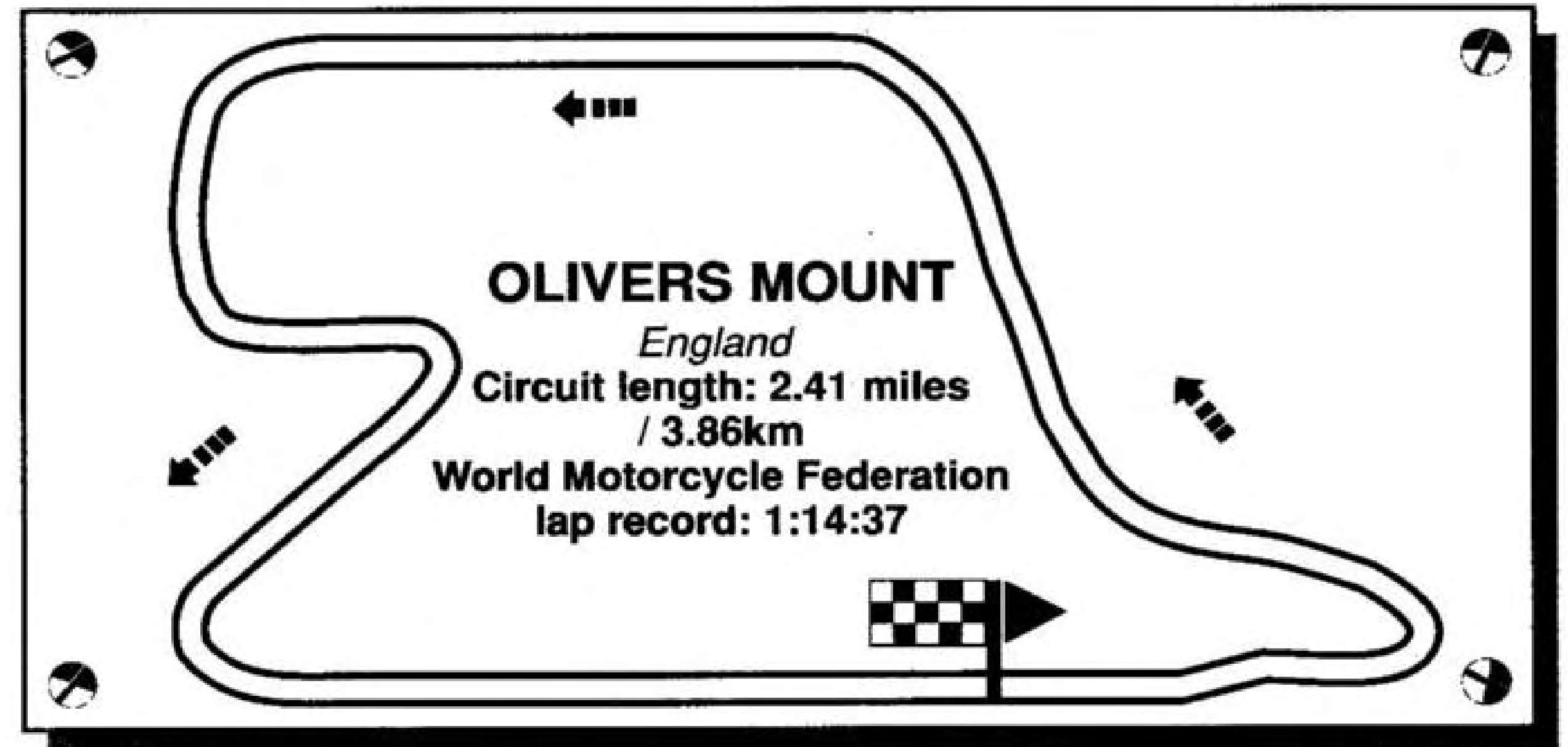
right, then notch up a gear during the transition to the hard left to avoid upsetting the bike's balance.

Now you're on the top straight, with the sea visible in the distance on the right. From being flat-out at two-thirds distance, come down four gears for the double lefthander (Memorial). The second element is tighter than the first, so you may have to drop right down to bottom gear here. A short squirt then to another tight lefthander, then hard on the gas towards the Mount right-hand hairpin.

Downhill, curving left, and up to fourth or fifth gear for another hairpin (Mountside), this time turning left onto the long but very bumpy and undulating downhill start-finish straight. Keep in the middle of the road, and be prepared for the front wheel coming well off the deck when you cross an especially nasty bump before the finish line. 



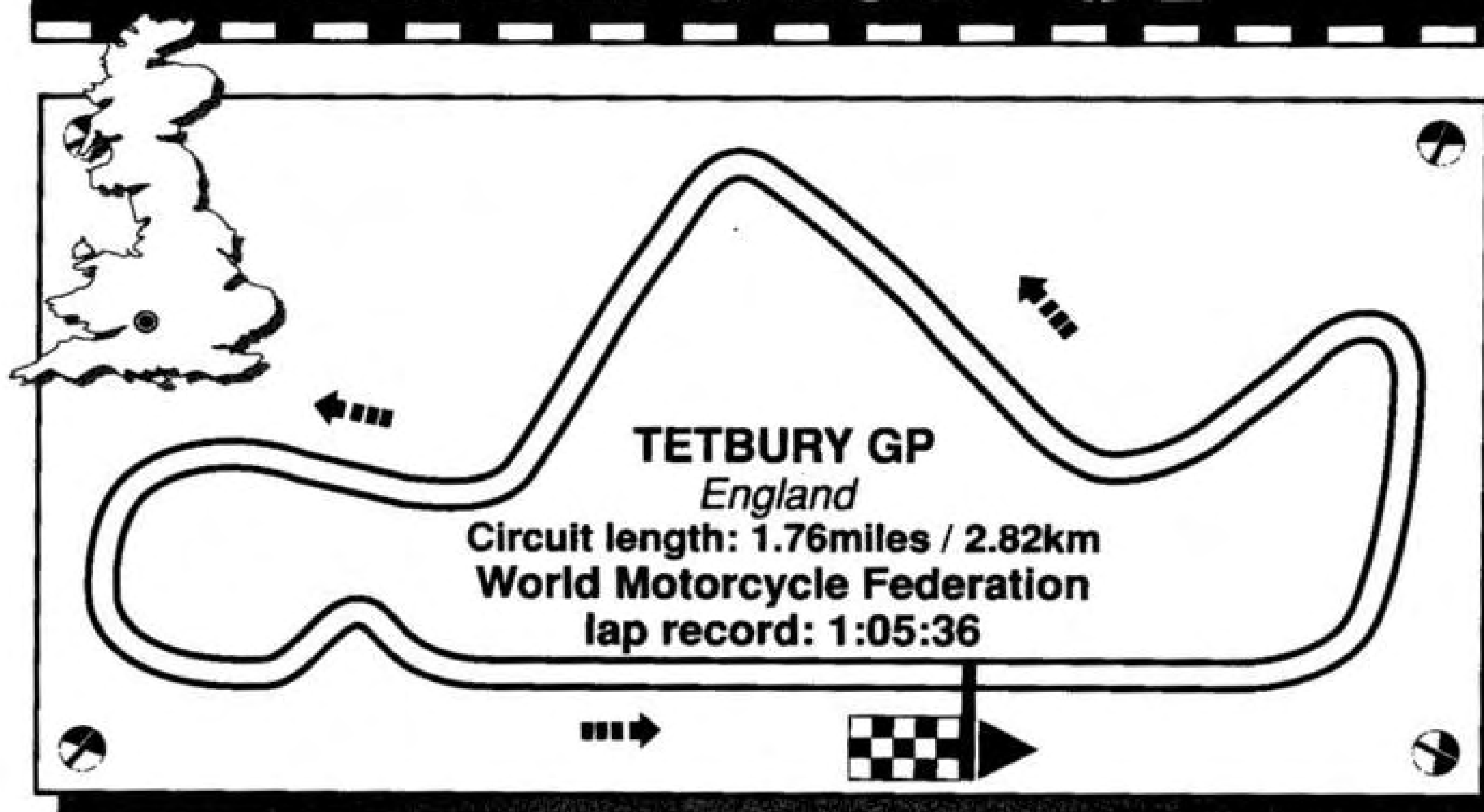
TRACK DATA



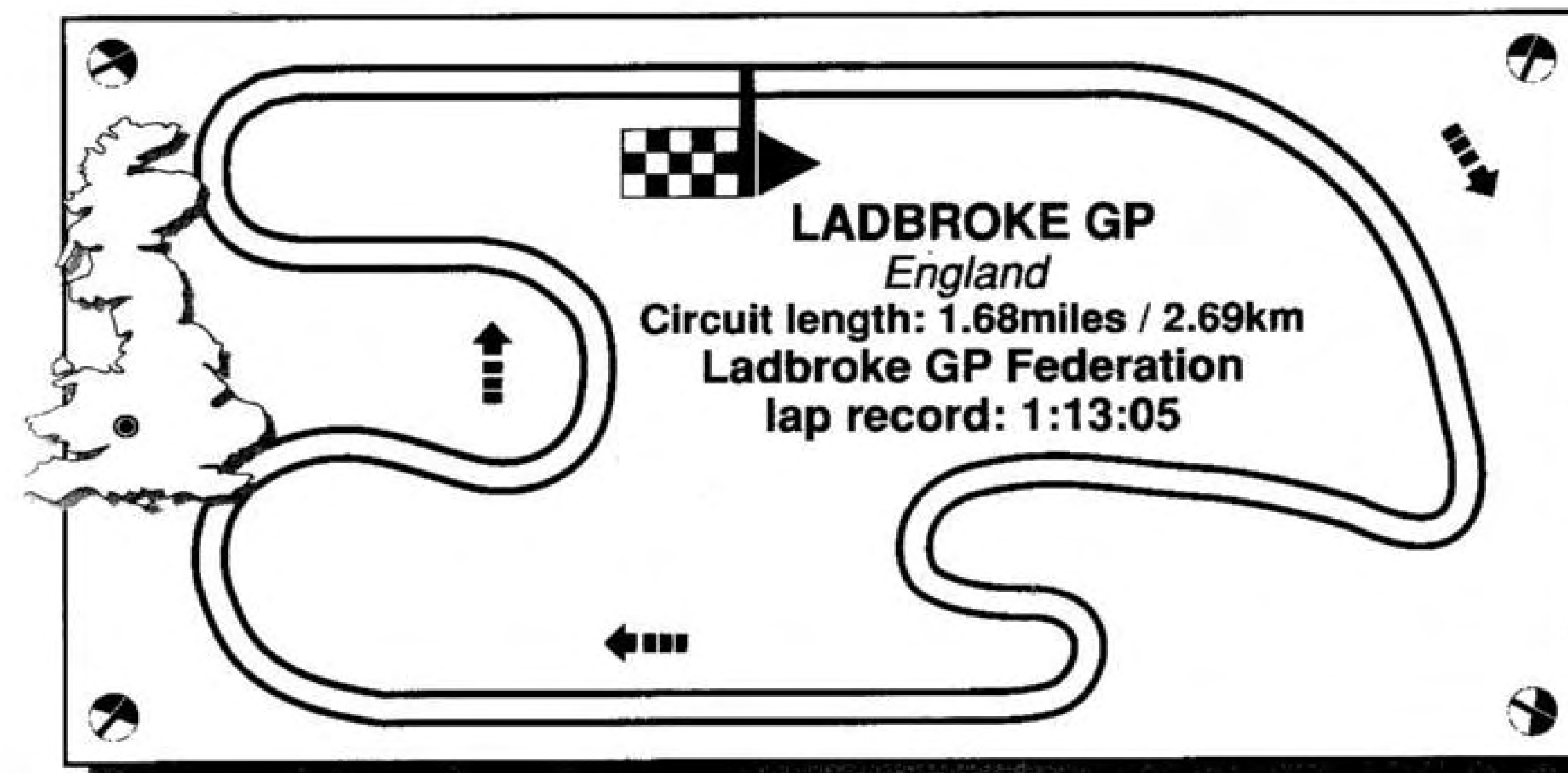
Special bike requirements: Jack the back end up to put more weight over the front wheel for exiting Scarborough's many slow hairpins and corners. Maximum damping on the suspension for the bumps.

Tips: Try different lines through the hairpin; the wider line will maintain your speed, but there's a greater risk of being overtaken. Fog from the sea can reduce visibility on some sections. The downhill stretch between the two hairpins is usually slippery. Overtaking on Scarborough's ultra-narrow track is tricky and risky.

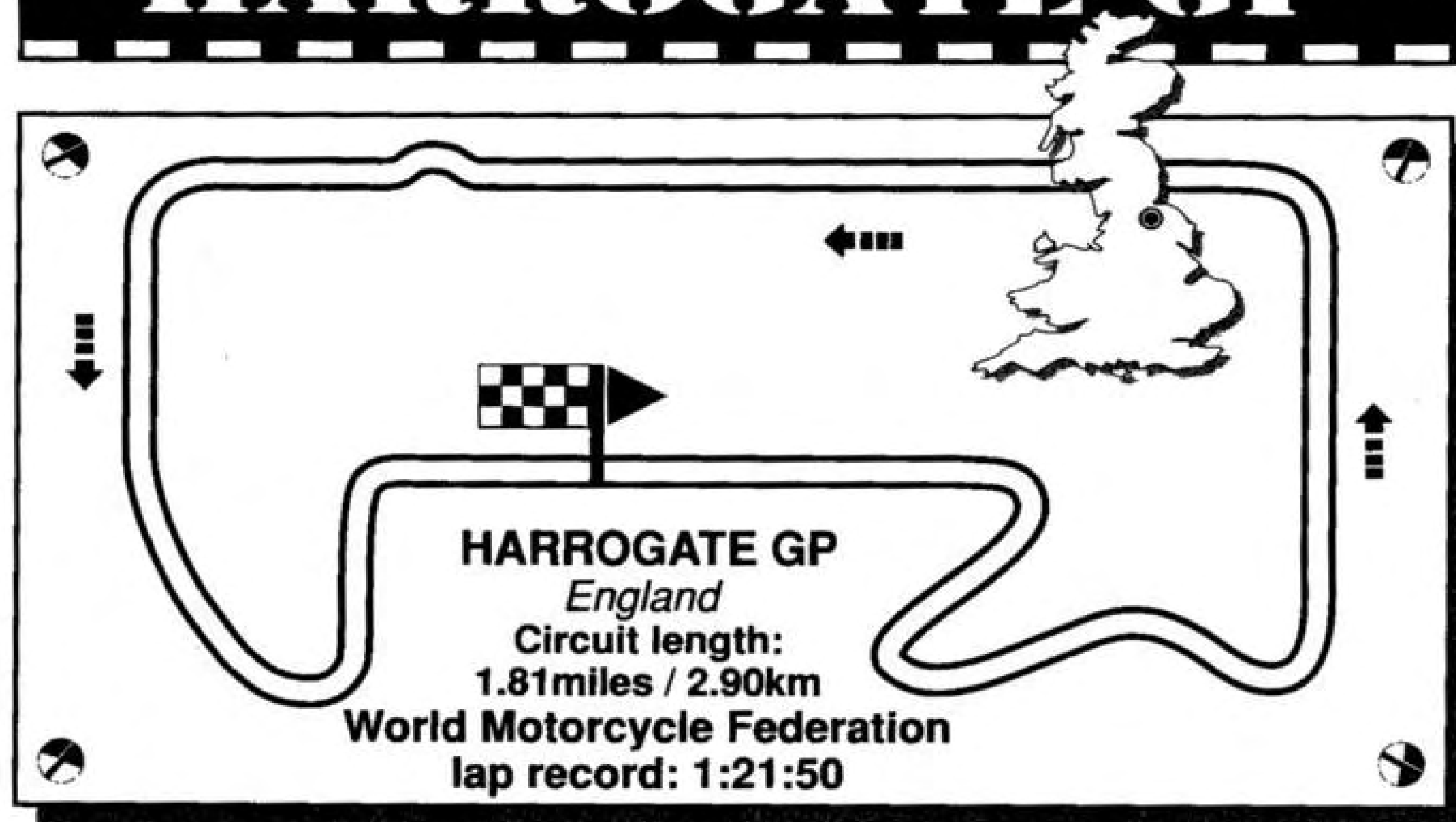
TETBURY GP



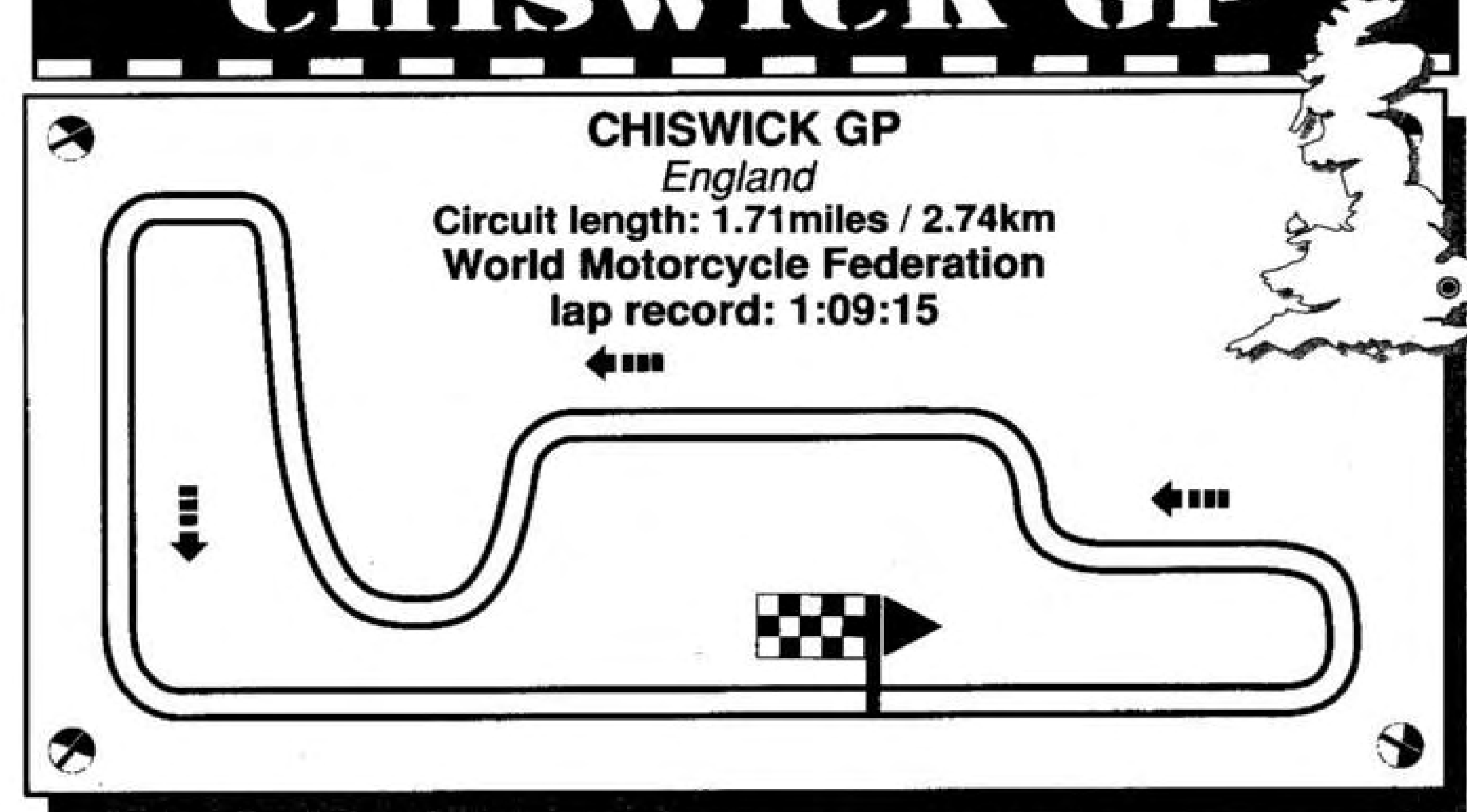
LADBROKE GP



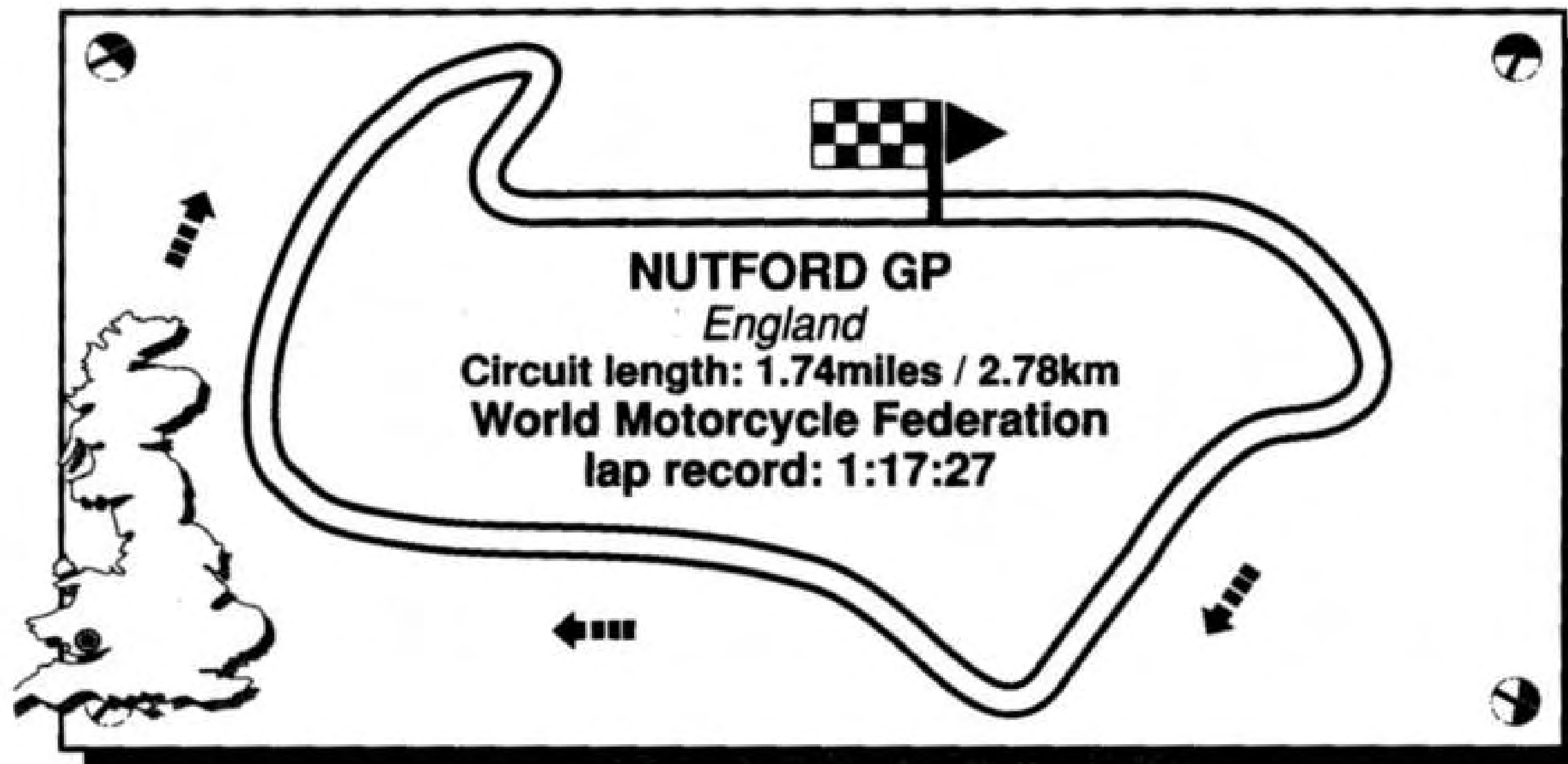
HARROGATE GP



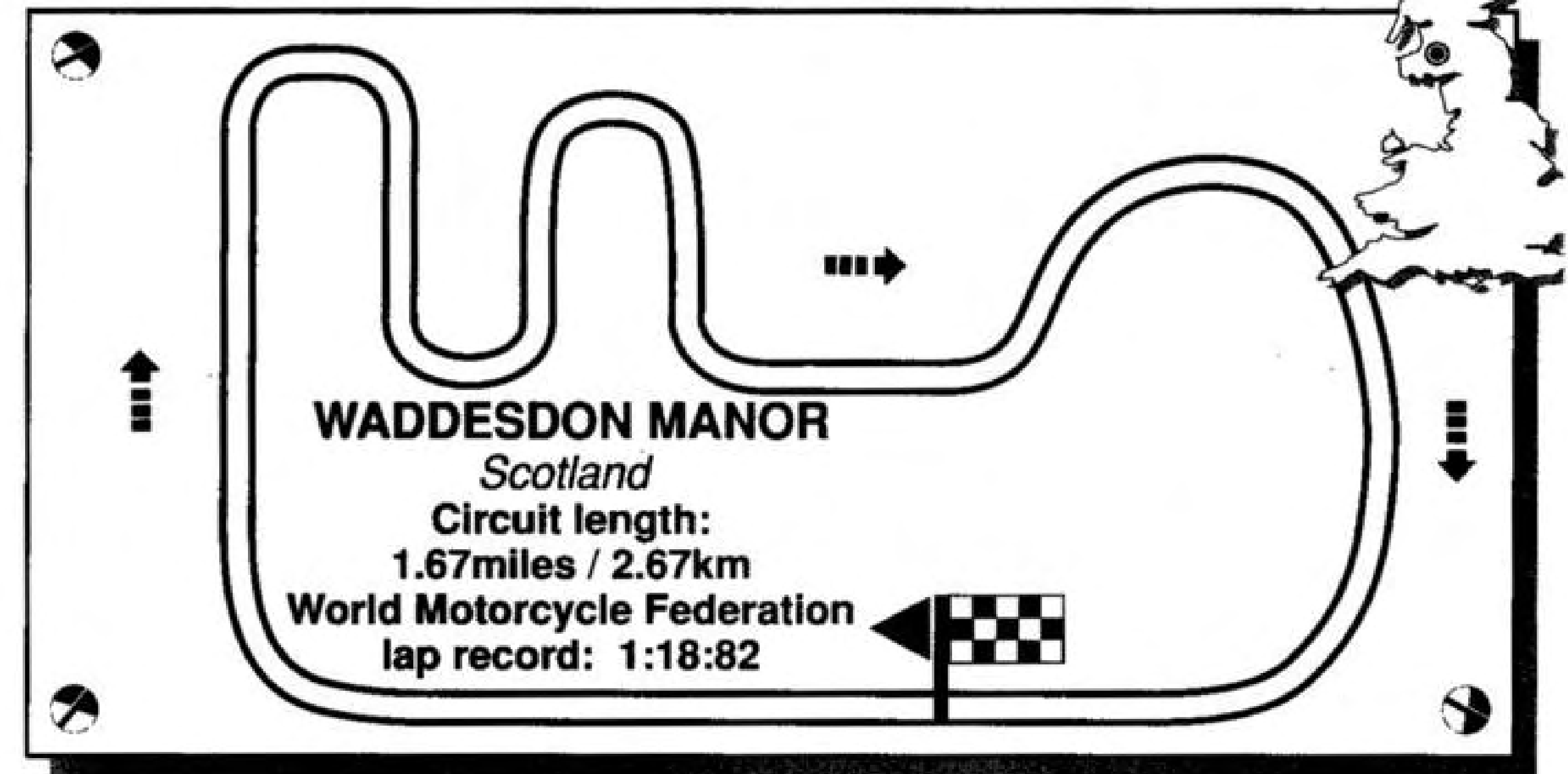
CHISWICK GP



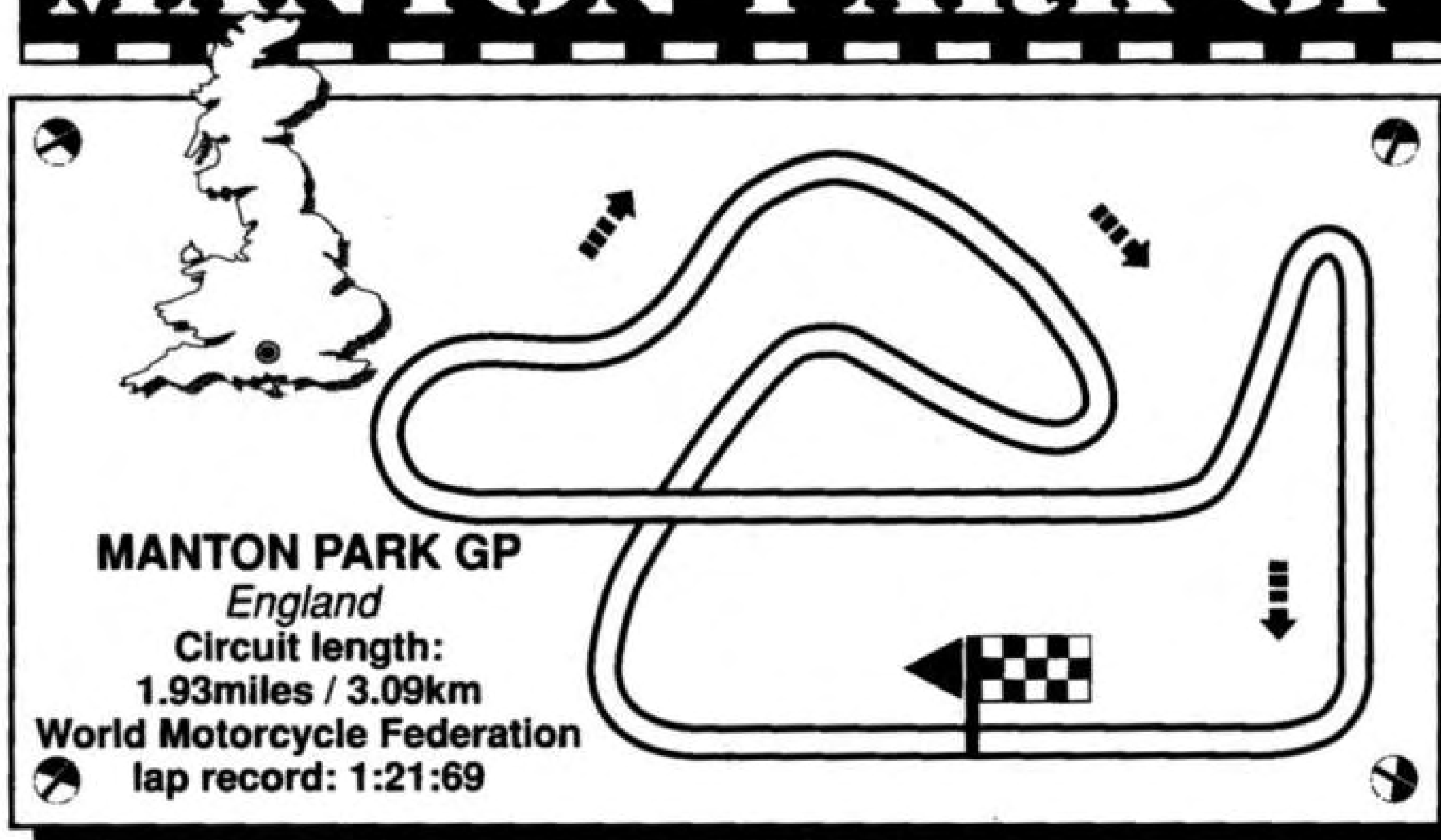
NUTFORD GP




WADDESDON MANOR



MANOTON PARK GP



FORMULA ONE RULES

All 750cc four stroke bikes are eligible, and there are virtually no restriction on tuning. for either the engine or the chassis/suspension parts. The basic engine unit must be homologated, ie recognised as a production model, but other than that, anything goes. Carburettors, compression ratios, gearing wheels, tyres etc can all be changed, so long as the engine capacity does not exceed 750cc. 

MOTORCYCLE DATA

HONDA RV750 SPECIFICATIONS

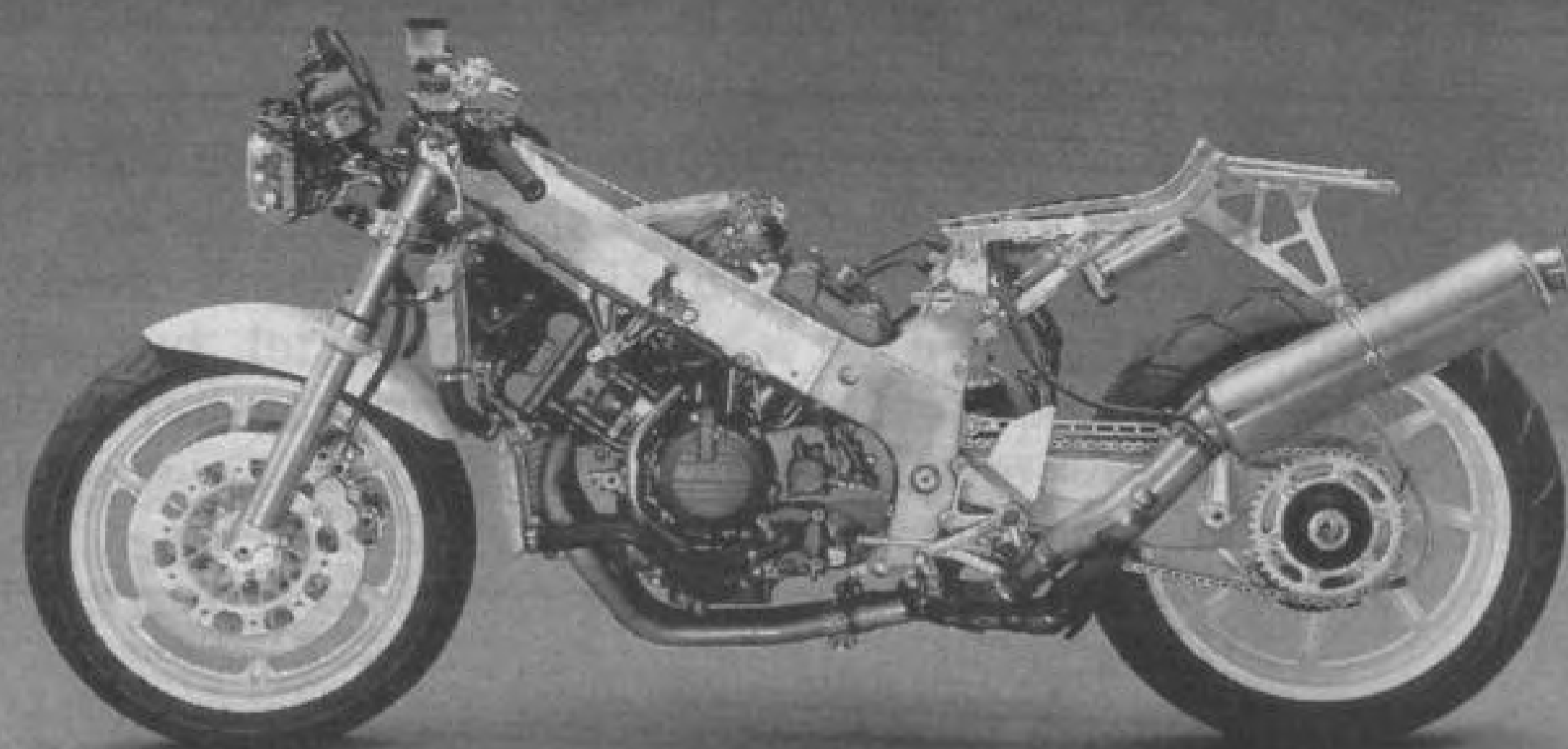
The *RVF750* is a purpose-built racing motorcycle, constructed in very limited numbers by the Honda Racing Corporation in Japan, for use by contracted riders. It is available in both Formula 1 and Endurance specifications. The Endurance machine has to run through the night in 24 hour races, so is fitted with lights and a full electrical charging system; Formula 1 races are much shorter, so the F1 bike does not need lights. It is thus able to run 'total loss' electrics, with no heavy generating equipment, making it lighter and faster than the Endurance-spec machine.

The *RVF*'s engine is a liquid-cooled four-stroke V4 with a displacement of

748cc, Bore and stroke dimensions are 70mm x 48.6mm, and there are sixteen valves in the head. Quad cams are gear-driven, both for timing accuracy and to avert the possibility of camchain stretch or breakage.

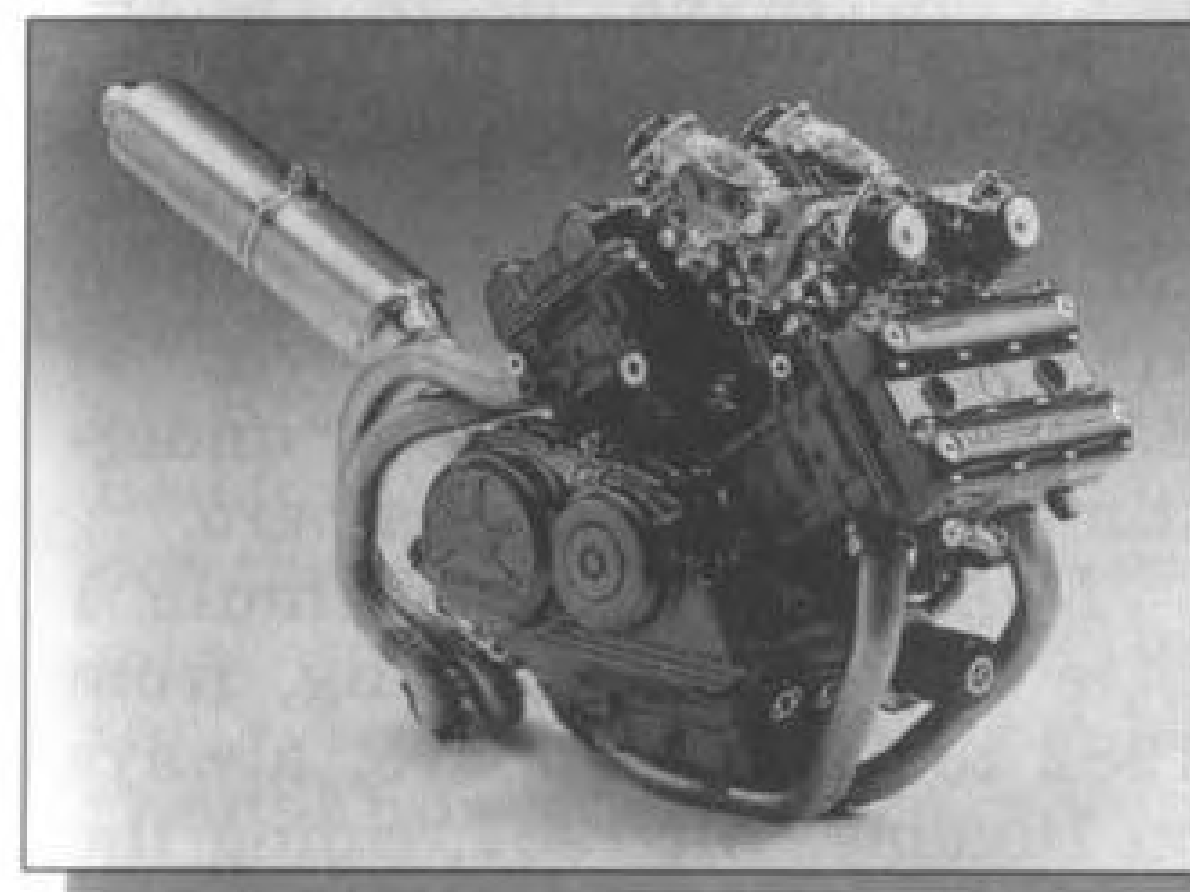
All the pistons and valvetrain are ultra-lightweight for reduced reciprocating weight. The conrods are made of titanium, the crankcases of magnesium, again for lightness and strength. Induction is by four 34mm venturi Keihin constant vacuum carburettors. Estimated horsepower is 145bhp at 12,500rpm.

The *RVF*'s frame is fabricated from box-section aluminium in a 'beam' configuration, with the engine acting as a stress-bearing member. Front forks are Showa telehydraulics, adjustable for



MOTORCYCLE DATA

preload and compression/rebound damping. The single-sided aluminium rear swingarm is controlled by a similarly adjustable Showa monoshock suspension unit.



Wheels are lightweight HRC 17 inch magnesium alloy front and rear, fitted with Michelin radial slicks and triple floating brake discs. Brake calipers are by Nissin, quad-piston front, dual piston rear. The *RVF*'s overall weight is less than 370 pounds. Top speed (depending on gearing): 180mph.


HONDA VFR750R (RC30) SPECIFICATION

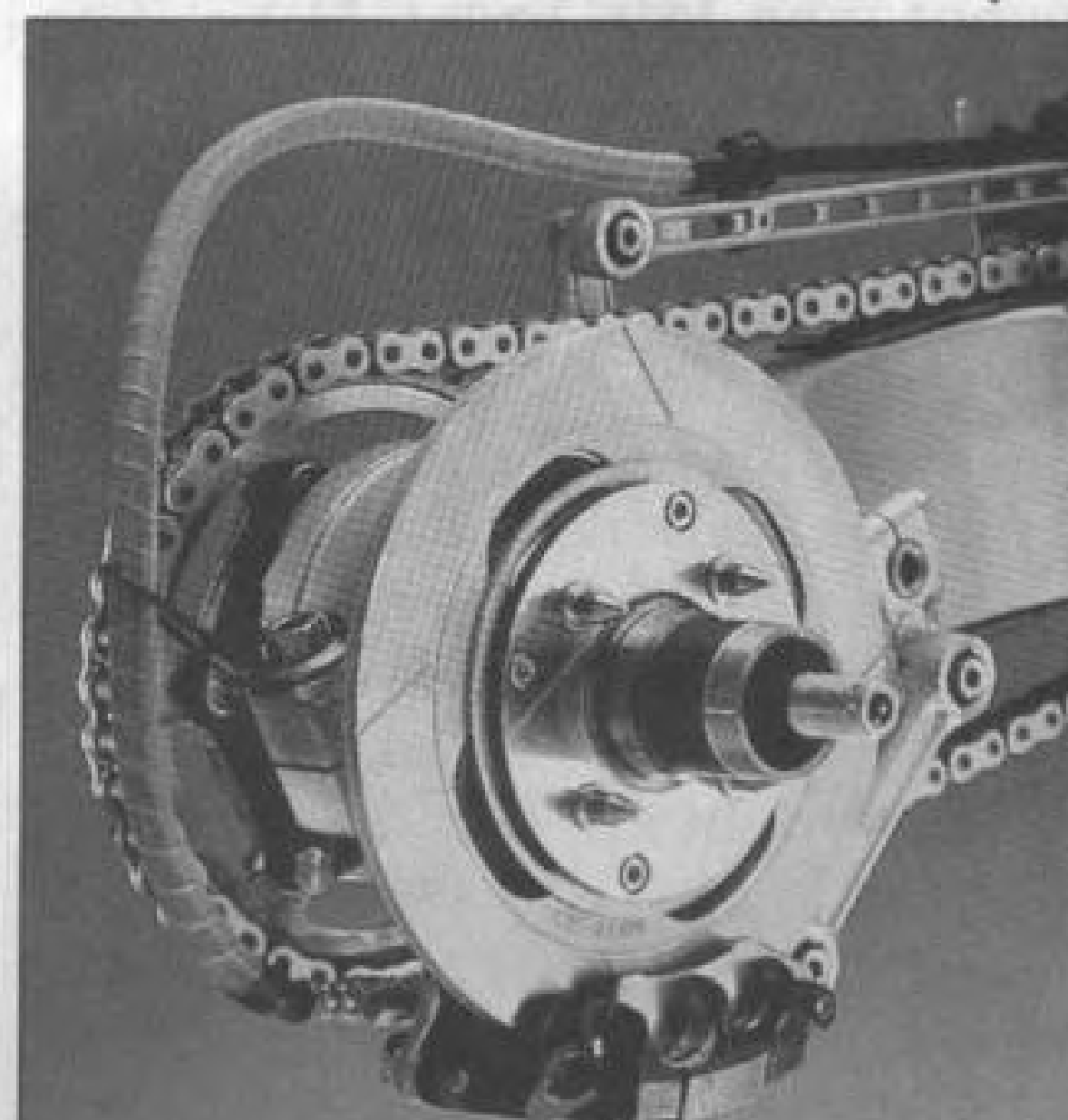
The *VFR750R* - more popularly known by Honda R&D department's '*RC30*' codename - was the first of a new breed of mega-exotic 750cc streetbikes. In the opinion of many pundits, it remains the best of the breed, even in the face of stiff competition from Yamaha, Suzuki and Kawasaki.

Handmade in small quantities, the *RC30* went on sale in the UK in early 1988, at a price nearly twice that of the most expensive 'ordinary' 750. Its original billing as the street legal version of the *RVF750* racer was scoffed at by sceptics, but those sceptics had to eat their words when motorcycle testers around the world

confirmed everything Honda claimed for it - and added more praise of their own.

The basic specification of the *RC30* engine and chassis in general runs very close to that of the *RCF*. The *RC30* uses an 18 inch rear wheel instead of a 17 inch, but the quality of the rest of the parts used in the *RC*'s construction in no way betrays the fact that it is to all intents and purposes a production line motorcycle.

In the engine department, bore and stroke are identical to the *RVF*'s. It retains the titanium conrods and magnesium cases of the *RVF*, along with many other racer-derived tricks and details. Naturally, the cams, exhaust and carburettors are all set up in a softer state of tune for easy street use. Nonetheless, the motor is still rated at a very healthy 110bhp in stock trim, good for a genuine 155mph on the road, and this figure can be hoisted considerably by the addition of race kit parts from HRC's comprehensive catalogue. The availability of these parts has made the *RC30* the favourite choice of club racers, endurance teams and Formula 1 racers worldwide. 



RIDER PROFILES

JOEY DUNLOP

William Joseph Dunlop MBE - known to millions of Formula 1 fans as *Joey*, or simply '*Yer Man*' - is without question one of the most skilful motorcycle riders of all time.

A specialist in public road-based circuits, *Joey's* expertise on the notoriously difficult and dangerous Isle of Man TT course is legendary. The story goes that he learned the tree and wall-lined 37.75 mile course by circulating endlessly in a truck without brakes - a useful incentive for finding the right racing line, to be sure.

Up to and including the '88 event, the late great Mike 'The Bike' Hailwood's record of 14 TT victories was keeping him one ahead of *Dunlop's* 13 wins. But with several entries in the '89 TT programme, *Joey* was expected to establish himself as the greatest TT rider of them all. A win in the '89 Formula 1 TT race would be his seventh consecutive victory, an unparalleled achievement in TT history. His fastest lap of the Island course is 19 m 5.8s, representing an astonishing average speed of 118.54mph.

The soft-spoken 37-year-old Ulsterman seems an unlikely motorcycling maestro. Even after winning a race, he is a shy, self-effacing man of few words. Off the track, he runs a pub in his quiet home town of Ballymoney, where he is understandably regarded as a hero.

Dunlop won the Formula 1 title five years running, from 1982 to 1986 inclusive, always on Hondas. In 1987, riding the then uncompetitive RC30-prototype, he was edged into second



spot by the Bimota Yamaha ace Virginio Ferrari. 1988 saw Carl Fogarty take the title on the Honda RC30; again, *Joey* took the runner-up position.

1989, probably *Joey Dunlop's* retirement year, began disastrously with an horrific accident at Brands Hatch's infamous Paddock Hill bend. This spill put the likeable Irishman in hospital with multiple injuries; bitterly ironic, considering the thousands of flat-out racing miles he has safely covered on the infinitely more dangerous Isle of Man course, that he should meet with such misfortune on a purpose-built race facility like Brands.

If he can recover from his injuries in time, there would be no more fitting or popular end to a glorious career than another Formula 1 world title for the 'Irish Wolf'.

CARL FOGARTY

Going into the 1989 season, the reigning Formula 1 world champion was yet to reach his 24th birth-

day. Son of the vastly experienced Isle of Man Ducati specialist, *George Fogarty*, *Carl Fogarty* began his riding career in junior motocross. Whilst still a teenager, he was given a chance to ride his dad's old Formula 2 Ducati 600, and immediately showed his enormous latent talent by riding at a pace that proved a little embarrassing for *Fogarty Senior*!

Moving into the highly competitive world of 250cc two-stroke racing, *Carl* broke lap records on just about every major British racetrack. Despite achieving a string of wins and notable placings in really big races against named riders of far higher reputative, recognition continued to elude him. The glamour classes seemed to be




RIDER PROFILES

based around the bigger, street-bike-based 750cc four strokes.

So, encouraged by his father, *Carl* switched to an RC30 and put his entry in for the 1988 Formula 1 series. At the Isle of Man round, the 22 year old Blackburn rider shocked everyone with a stunning display of courage and skill that earned him a great 4th place. A ninth at Assen in Holland was followed by disappointment in Portugal, when his still privately entered Honda broke down in the restarted Vila Real race.

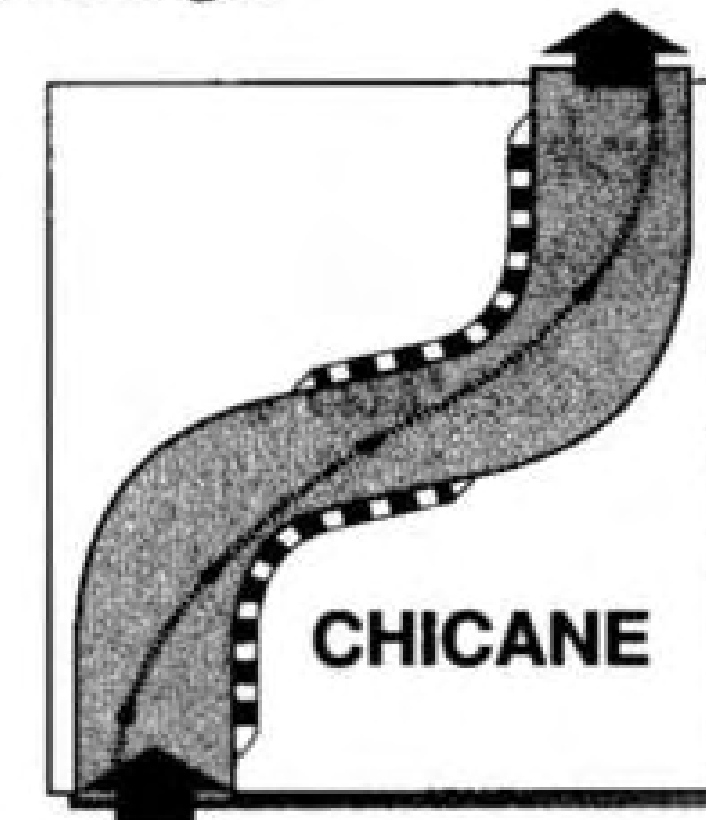
At Kouvola in Finland, the tide began to turn again with a hard-won 4th place, but the path

to the F1 title really opened up with *Fogarty's* first series win at Dundrod in Northern Ireland, the nearest thing to a 'home' circuit for Joey Dunlop. Another win at Pergusa, Sicily's road circuit, and a fifth in the last round at Donington Park finally stitched it up for the richly talented Lancastrian.

With a best lap at the Isle of Man of just under 116mph, *Carl Fogarty* looks set for a brilliant career that should certainly include 500cc Grand Prix racing. For the '89 Formula 1 campaign, armed with a full supply of Honda race kit parts for his RC30, he will be the man to beat. 

RIDING PROFESSIONALLY GLOSSARY OF TERMS

rowed, and usually featuring two rapid direction changes



CHICANE

Contact Patch

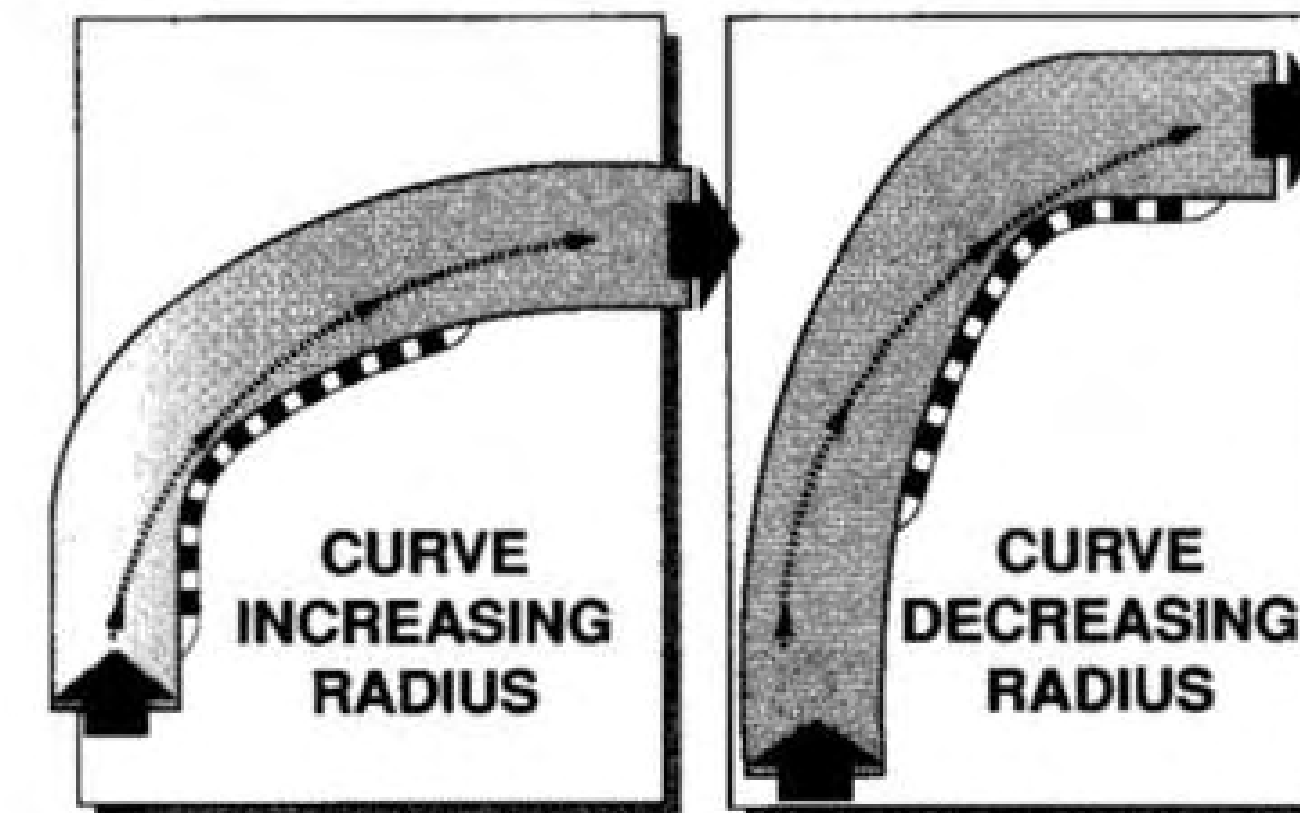
That section of the tyre that is in actual contact with the track surface at any one time

Curve - Increasing Radius

A curve which 'opens out' on the exit, allowing the rider to accelerate earlier and harder

Curve - Decreasing Radius

Less friendly curve, tightening on exit, requiring extreme care with throttle



Highside

A type of accident in which the rider is thrown over the highest side of the bike, following the unexpected regaining of

traction at a point during a slide

Lean Angle

The angle made between a motorcycle and the road during a cornering manoeuvre. Can be as high as 55 degrees from the vertical in dry conditions

Lowside

A less violent accident than the highside, in which the motorcycle tyres lose their grip during a banking manoeuvre and the rider falls a relatively short distance to the road.

Powerband

The spread of revs in which an engine produces most power (see RC30 Specifications). Stay in powerband for best acceleration in gears.


Redline

The end of the powerband; entering the red zone beyond the powerband will stress and possibly damage your engine.

Shortshifting

Changing up to the next gear slightly before the start of the main powerband - a useful way to keep the rear wheel under control when accelerating on a difficult surface

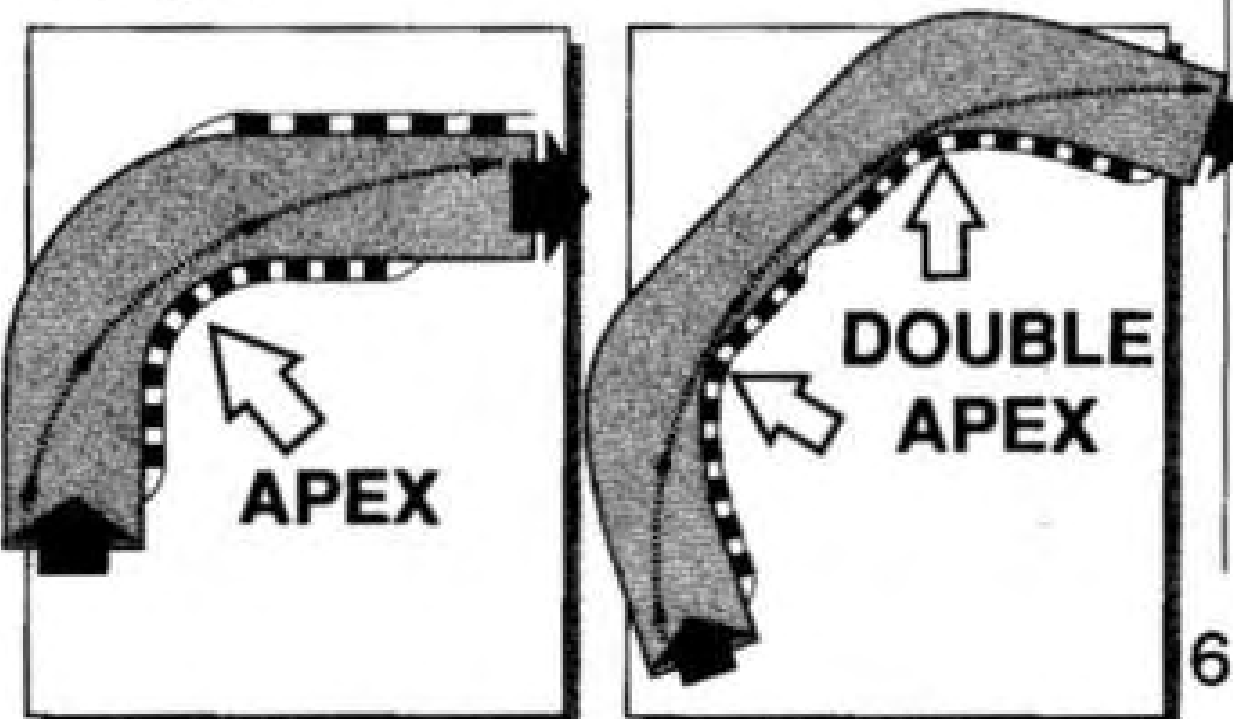
Steering damper

An adjustable hydraulic or friction-activated device, mounted between the motorcycle frame and the handlebars, designed to damp out any tendency for the bars to waggle uncontrollably in the middle of fast bends. 

GLOSSARY OF TERMS

Apex

A point on the inside of a curve which would be touched ('clipped') by a bike taking the ideal line through that curve. Some larger bends may have more than one apex



Camber

The slight upward curve to the centre of the road surface (adverse or negative camber - the road surface falls away to the left on a lefthand bend, or to the right on a righthander, making the corner in question much more difficult to negotiate)

Carburettor Jetting

Using different carb jet sizes to modify the air/fuel mixture going into the engine

Chicane

A testing track section, usually nar-

CREDITS

Design and Program - *Ed Hickman*

Graphics - *Ralph Hickman*

Music - *Nick Moorbath*

Manual text - *Tony Middlehurst*

Manual Design,

Typesetting and Graphics

- *Artistix (0705) 252125*

Technical advice - *Michael Lock*

Publisher - *Paul Hibbard*

Product Manager - *Pete Moreland*

GAME CHARACTERISTICS DESCRIBED IN THE DOCUMENTATION
MAY VARY ON SOME COMPUTERS

GAME COPYRIGHT© ED HICKMAN 1989

MANUAL COPYRIGHT© MICROPROSE SOFTWARE 1989

2 MARKET PLACE,

TETBURY, GLOUCESTERSHIRE, GL8 8DA

TEL: 0666 54326 FAX: 066654331 TLX: 43422MPS UK G