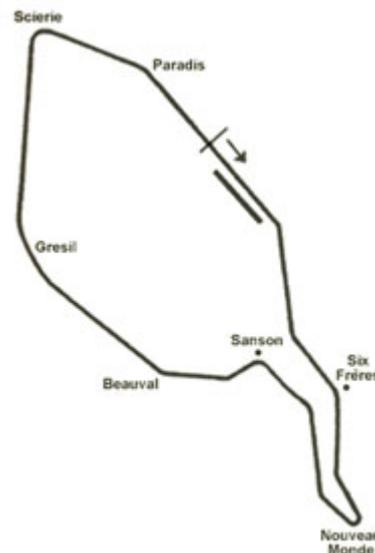


French Grand Prix

Circuit Rouen-les-Essarts



THE 4.065 MILE Rouen-les-Essarts circuit presents quite a mix of turns. It has everything from the dead slow Nouveau Monde hairpin to the flat out right hander of Gresil. To be quick here you need to be smooth more than anything else. Quick stabs on the brakes and accelerator, or excessive steering will definitely slow you down. The corners come in groups with one turn flowing into the next. If you get out of shape in one turn you'll be slow through the rest of them. If you do get a little ragged, it's much better to back off and get it together rather than pressing on. The first lap at Rouen is very dangerous. The grid is three wide and leads into a very fast right hander which is really only wide enough for one and a half cars. Shortly afterwards the Nouveau Monde hairpin is reached, where an accident can very easily happen if you don't leave enough room between yourself and the car ahead. This turn has to be taken very carefully even during a clear lap, and it is not a place to try and overtake. So during the first lap you just want to get around it, and not attempt to win the race by trying to pass half the field here.



CAR SETUP:

Rouen is a mix of slow and fast corners. This means you need a car that has traction out of slow corners, but can also get around the faster corners quickly without developing either understeer or oversteer. The first test is the Gresil right hander. You need to be able to get around this without lifting at all and without using full steering lock. If you can't do this, then tighten up your anti-roll bars until you can.

After you have the anti-roll bars working for you, try adjusting the shocks to give you the most traction out of the turns. If you have either understeer or oversteer out of a turn you'll be slow. In about 50% of the turns you'll be accelerating again by the time you reach the apex, so if your rear end is sliding out, or the front end wants to push off the track, adjust your shocks to stop this. Remember that you shouldn't be pushing the car too hard, it's a fluid motion through the turns. So if the car is sliding because you are pushing too hard, then you should adjust your driving style before you mess with the shocks.

Gearing is not too difficult to get right here. You use all the gears, so an even spacing is important. Set top gear so that you top out just at the end of the long straight following Gresil. Then set fourth gear so that you reach redline just before getting into Gresil. The short straight following (between Scierie and Paradis) can be used to set third gear. You should be hitting red line just before you brake for Paradis. For second, use the right hander following the Nouveau Monde hairpin. You should be close to redline by the time you reach this right hander. Then choose a good first gear ratio that gives you maximum power with the least wheel spin possible.

The right hand turns are all faster than the left hand turns. This may help you when you go for your setup.

LAP TIMES:

Your lap times during the race should be very consistent regardless of your fuel load. Of course as the race progresses and you use up fuel, you will go slightly faster, but not by a huge amount. In the end your fastest laps should be equal or just a couple of tenths off your qualifying lap times. When going for the qualifying lap, you need to make sure you get a clean lap, and probably want to get several warm-up laps before hand to make sure the tyres are warmed up and that you are in a groove to get that perfect fast lap.

GOALS:

You should aim for a qualifying lap of about 1:56.50 to 1:57.50. That should put you pretty far up the grid.

During the race you should aim for 1:57.50 to 1:58.50, depending on fuel loads, for your lap times if you don't encounter traffic.

You won't lose several seconds just by reading this, that takes practice and experience. But, hopefully, this will help you get there faster.

THE RACE:

Rouen is a track of restraint, like Monaco. However there is a little more room for error as if you do push too hard you don't hit a barrier, just some grass. Even so, you need to be smooth, both on and off the throttle; on and off the brakes; and with your steering. Manhandling the car does not work here. The start of the race is quite difficult. Make sure you stay perfectly straight and keep on your side of the track until you are positive there is no-one beside you (usually after turn one or two.) Also be very cautious into the hairpin the first lap. As for overtaking, the obvious place is at the long straight after Gresil. Just draft your opponent and the pull out for the pass. You may also be able to pass on the following short straight into Paradis. The only other place for a pass is on the front straight. Make sure you are past the other car by the time you reach turn one or you'll probably take both of you off. Never try to overtake into the hairpin, it's just far too risky.

TURN ONE:

Entrance speed: approximately 180 mph [290 kph]

Speed through the corner: approximately 140 mph [225 kph]

Arrival time at the corner: 1.97 seconds

Time to negotiate the corner: 3.96 seconds

Exit time of the corner: 5.93 seconds



The first turn is quite tricky to get perfectly right. You almost can't see the apex until you are right on top of it, as the track starts going downhill here. So you need to guess where the apex is and just go for it. You'll be in top gear at almost full speed as you approach this turn.



Line the car up on the left side of the track for the entrance. You will want to hit the apex just before the middle of the turn and hold the car against it for a while as you go through the turn. You do not need to brake much for this turn either. Just as you reach the end of the bails of hay on the left brake fairly hard for a moment, shift down a gear, then ease off the brakes rapidly and get back onto the throttle to balance the car through the turn. You should be aiming for about half throttle to keep the car going through the turn.

Just a beat after braking, turn in gently towards the apex. You want to get your right front wheel right against the curb when you reach the apex. You should be completely off the brakes by the time you reach the apex. As you continue through the turn, you'll have to increase your steering lock slightly to keep the car in near the curb. If you let it drift out too soon, you'll be going wide onto the grass as you exit.



Just after you are half way through the turn, start to ease back onto the throttle more. Then let the car begin drifting away from the curb as you increase to full throttle. You may need a very slight amount of opposite lock as you exit. Keep the power on, unless you go way onto the grass. If you ride the curb a little on the exit, it's not the end of the world. Slowly, but deliberately, move the car over to the right side of the track for the next turn which will be coming up quite soon.

TURN TWO:

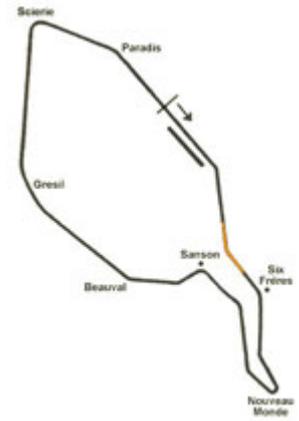
Entrance speed: approximately 160-165 mph [258-266 kph]

Speed through the corner: approximately 108 mph [174 kph]

Arrival time at the corner: 9.54 seconds

Time to negotiate the corner: 4.63 seconds

Exit time of the corner: 14.17 seconds



Turn two is also quite tricky, but for different reasons. You are still going downhill, but can clearly see the apex as you approach it. However, the turn seems to beg you to brake very late, giving you the impression that you'll make it around without incident. Beware of this as, even though you'll make the apex, you will then go off the track onto the grass as you exit because the track falls away to the right on the exit.



The straight between turn one and two isn't long enough to warrant shifting up a gear, so you'll be in fourth, pretty close to redline as you approach this turn. Make sure you get over to the right side of the track before entering the turn. The racing groove will darken slightly as you approach the turn. Then just before it darkens more brake moderately for a moment and shift down a gear. If you brake too hard here, you'll slow down too quickly. After a beat, ease off the brakes, and continue to trail brake all the way into the apex, which you will hit very early on during the turn.

After you have eased off the brakes slightly, wait another beat before beginning to turn in gently for the apex. As mentioned above, you will hit this apex before the middle of the turn. Keep the car right against the curb as you go round. You will need to use both the throttle and the brakes to balance the car. As you approach the apex, you'll be trail braking to help bring the car into the corner, as well as slowing it down gradually enough to keep the highest possible entry speed, while allowing for the off camber exit of this turn. Just before you get to the apex, gently get back on the throttle to prevent the rear wheels from starting to slide down this adverse camber.



As you get back onto the throttle, be careful not to try and apply too much too soon, or you'll end up pushing the car away from the curb and end up running wide onto the grass. Also, remember that the following turn is a right hander, so you will need to be on the left side of the track for its entrance. However, you should be up to full throttle just before you leave the turn. Keep the car right against the curb until the track begins to straighten out. Then let it drift away slightly as you exit, keeping in mind that you need to get back to the left as soon as possible for the next turn.



SIX FRERES:

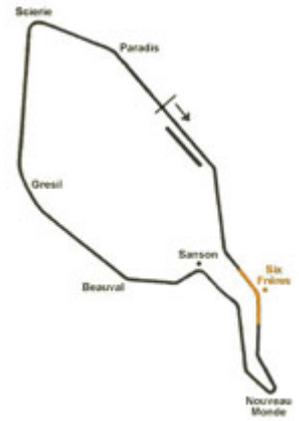
Entrance speed: approximately 140 mph [225 kph]

Speed through the corner: approximately 132 mph [212 kph]

Arrival time at the corner: 16.75 seconds

Time to negotiate the corner: 4.07 seconds

Exit time of the corner: 20.82 seconds



The first named corner, Six Freres, comes right on the exit of turn two. A messy exit from that turn will really hamper your attempts to get into and out of this corner quickly. So if anything, make sure your exit from turn two was smooth. This will allow you to move the car over towards the left side of the track in time for the entrance to Six Freres.



This turn requires no braking, just a good modulation of the throttle as you turn in to hit the apex properly. You should still be in third gear as you accelerate towards the turn. Following the racing groove is a great guide here. Just before hitting red line start to turn in gently, while keeping maximum acceleration. Then get off the throttle and shift up a gear. It is fairly easy to wait too long to turn in there as the entrance is slightly deceptive. So if you're not sure turn in a little earlier rather than later.

Shifting up will allow you to get a faster exit as well as giving more grip to the front wheels for a moment as you back off the throttle to allow the engine to shift gears. This extra grip will help pull you into the apex. Tighten up your steering slightly and try to continue with as much throttle as possible. You are aiming for a late apex here to give the best possible exit speed. If the car starts to understeer, then back off the throttle slightly. But be careful as doing so will produce oversteer. It's a fine balance, but getting it right will allow you to be back to full throttle in a slight drift just past the apex. Like turn one, riding the curb here on exit isn't the worst thing that can happen. Just don't go crazy and end up on the grass. Continue towards the Nouveau Monde hairpin and get the car back to the right side of the track.



THE NOUVEAU MONDE HAIRPIN

Entrance speed: approximately 160 mph [258 kph]

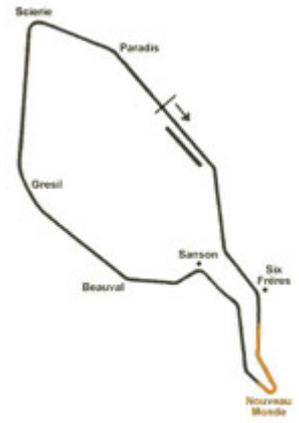
Speed through the left hander: approximately 100 mph [161 kph]

Speed through the hairpin: approximately 25 mph

Arrival time at the corner: 23.75 seconds

Time to negotiate the corner: 9.76 seconds

Exit time of the corner: 33.51 seconds



The Nouveau Monde hairpin really starts with the left hander that precedes it. These two turns are so close that a bad entrance or exit from the left hander will see you losing control in the hairpin. Luckily, one of the best safety features of the 1967 year, the cement filled tyre barrier, is there to totally destroy your car if you do overdo it.



The entrance to the left hander is quite easy. You just need to make sure that you don't wait too long to brake as you cannot use full brakes in this sequence of turns as you will be turning throughout most of the braking zone. With the car in fourth gear, against the right side of the track, wait for the racing groove to darken. This happens just past the lone tree on the right. Brake hard for a moment and shift down two gears. Then ease off the brakes slightly as you add a little throttle. This is very important to prevent the rear end from stepping out and putting you into a slide.

You should start to turn in at about the same time as you begin to reapply the throttle - i.e. a beat or so after getting into second gear. Turn in gently and aim for a late apex. This will line you up on the left side of the track in a good position for the hairpin. Another lone tree on the right side of the track acts as a good marker for when you should be finished slowing down. Once you arrive at this tree, you should be off the brakes, and trying to keep a constant speed with the throttle.

With the car against the curb you will pass an evergreen tree followed by another small tree on the right. This is a great reference point to begin your braking for the hairpin. Be very gently on the brakes here, as you are still turning. If you lock up a rear wheel, you will spin. Also don't be in a hurry to shift into first. If you do it at too high a speed, the sudden change in torque will upset the rear wheel, causing you to spin.



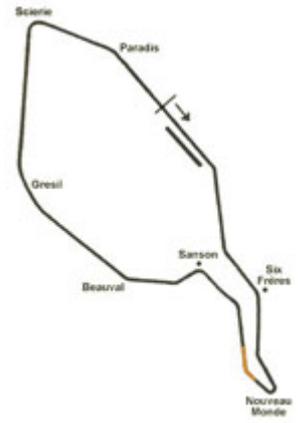
By the time you are about half way down the Firestone sign on the left bank of the track is a good place to shift down to first. You should still be slowing down, and the challenge now is not to lock the fronts up. If you do you won't be able to turn in and you'll go straight on into those cement-filled-tyres. So keep braking gently.



You should turn in when you are right on top of the turn. Apex right in the middle of the turn and keep braking, but to a slightly lesser extent than you have been, right up to the apex. Then immediately start to get back on the throttle. Gently at first or you'll spin the car. Then slowly unwind the wheel as you increase your acceleration. Once in a straight line get back to full throttle as quickly as you can, and shift up to second when you hit red line.

TURN SIX

Entrance speed: approximately 90 mph [145 kph]
Speed through the corner: approximately 100 mph [161 kph]
Arrival time at the corner: 36.17 seconds
Time to negotiate the corner: 2.71 seconds
Exit time of the corner: 38.88 seconds



This right hander is fairly easy, especially after the previous hairpin. It does require a good balance of the throttle to get through without lifting, however. You'll be in second gear by the time you reach the turn in point for this one. Follow the racing groove and turn in at about the same time as you pass the yellow Pepsi sign on the left.



You should turn in gradually, don't turn the wheel much or you'll be riding the curbs at the apex and have to back off. Keeping the throttle on is very important throughout this turn. This corner makes you feel like you will need to back off to make it, but if you are committed and keep the power on you'll be able to make it without lifting.

So after you have started to turn in keep accelerating in second gear. The rear wheels will eventually lose grip and start to slide out. This will happen just before reaching the apex. You'll probably need a few laps to figure out exactly when this starts to happen. Just as they begin to go, shift up to third and get back on the power. This slight break in the power to the wheels will help pull the car around the turn for you. Get back onto the power right away and hit the apex just past the middle of the turn. A little opposite lock may be needed as you exit, but you should be able to keep full power from the time you shift up onwards.



Even though the turn looks insignificant, it is vital to a fast lap time to be able to get through without lifting. So a lot of practice at this turn will pay off.

TURN SEVEN

Entrance speed: approximately 145 mph [233 kph]

Speed through the corner: approximately 95 mph [150 kph]

Arrival time at the corner: 43.37 seconds

Time to negotiate the corner: 4.27 seconds

Exit time of the corner: 47.64 seconds



This left hander is fairly slow and is another turn which requires applying both the brakes and throttle in unison to negotiate quickly. You'll be in third gear as you approach this turn. You shouldn't have to shift up to fourth, as you'll have to shift right back down to second anyway. So make sure your gearing allows you to stay in third.



The racing groove is the best guide here. It gets darker for a small stretch, then lightens again. Just as it is lightening, brake moderately and shift down a gear. Continue on for a beat, then start to turn in. This turn tightens up as you go. This means that you'll have to increase the amount of steering input as you go through the turn. It also means that you'll have to slow down more as you go through the turn. Now you could just slow down enough to keep a constant speed through the entire turn, but then you'd be much slower than if you entered quickly and shed some speed as you progressed through the turn.

You should aim to hit the apex fairly early in the turn. Keep braking as you approach it, but at a progressively slower rate. Once you reach the apex, you should be against the curb. Get back on the throttle to help push the car around the corner. You'll still be braking slightly at this point as well. The combined brakes and throttle will get you into a good drift around the apex. Also you'll probably need to increase your steering input as you go further into the turn.



Once you are about half way through the turn you should be thinking about the exit. Get off the brakes and start to straighten out the wheel. Also begin to apply more throttle. Quickly get back to full power and let the car drift out to the right side of the track. There is a slight right hand bend coming up. Aiming to reach the curb just at the apex of this bend should give you the best exit out of the corner.

SANSON

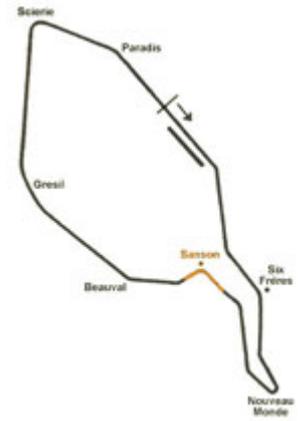
Entrance speed: approximately 130 mph [209 kph]

Speed through the corner: approximately 45 mph [72 kph]

Arrival time at the corner: 51.49 seconds

Time to negotiate the corner: 4.90 seconds

Exit time of the corner: 56.39 seconds



Sanson is the second slowest corner, after the hairpin. The approach is around a small right hand bend, which can make it difficult to get the braking right. Your first instinct is to brake much sooner than necessary because of this bend. However, if you wait until you are past the bend to begin braking there is still enough track left to successfully and quickly negotiate this turn.



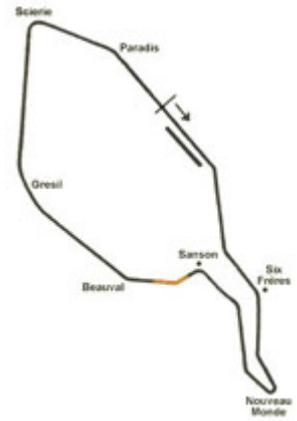
You should have been able to get up to third gear after leaving the previous left hander. Take the right hand bend with a very late apex, placing you right against the curb on the right side of the track. Then when you reach the 100 brake marker (yes this track actually does have a couple of them!) brake quite hard for a moment and shift down to second. Then back off the brakes a little as you don't want to lose the rear end here. The entrance is similar to that of the hairpin, especially as you will be shifting down to first gear.

You can take a straight line as you brake, but that will place you too close to the left side of the track. So steer even so slightly to the right as you brake. Then when you are quite close to the turn, shift down to first and ease off the brakes a little more. You should hit the apex early, but as the turn is so sharp, you'll be leaving it almost immediately after you hit it. Use the throttle to push the car around the apex, and balance the car on the brakes if you need to, in a similar manner to the previous left hander. Then as soon as you start to leave the apex, get off the brakes and start to get back to full throttle as quickly as possible. Straightening the car out quickly will also help you get good traction out of this turn. Don't be in a hurry to get over to the left side of the track either. Even though the next turn is very close you are not going that fast and so have more time than you think.



TURN NINE

Entrance speed: approximately 90 mph [145 kph]
Speed through the corner: approximately 90 mph [145 kph]
Arrival time at the corner: 59.08 seconds
Time to negotiate the corner: 2.20 seconds
Exit time of the corner: 1 minute 1.28 seconds



This right hander is all about momentum. You want to keep as much of it as possible. Don't brake for this turn, and try to back off the throttle as little as possible. You are beginning the long straight that will take you all the way down to Scierie, and being slow out of here will have a negative effect on your final top speed.



Follow the racing groove as it starts to appear on the left side of the track. You should be up to second gear by the time you reach it. Turn in to take the apex in the middle of the turn. Keep the throttle on to help to turn you into the corner. The turn actually has two apexes, in a way, as you hit the first one, then the track straightens for a moment, before turning a little more to complete the turn. Don't worry about the second part of the turn. Hitting the first part correctly is much more important and will line you up right next to the curb between the two bends of the corner.

As you are turning in under full throttle the rear wheels will start to slip away. Just before they do, back off slightly to about half throttle. You want to keep as much speed as possible here. Just before you hit the apex is when you'll be backing off. Then keep the same amount of throttle on as you get towards the second part of the turn. Just before you reach the second bend get back to full throttle and let the car drift out to the left. Don't be too eager to get back to full throttle as you'll go wide and lose a lot of speed. Remember, this track is all about restraint.



BEAUVAL

Entrance speed: approximately 120 mph [193 kph]

Speed through the corner: approximately 112 mph [180 kph]

Arrival time at the corner: 1 minute 3.96 seconds

Time to negotiate the corner: 2.38 seconds

Exit time of the corner: 1 minute 6.34 seconds



The exit of this right hander is extremely important. If you want a good run down to Scierie you need to be quick out of this corner. So it's better to back off a little sooner and be slow into the corner, rather than waiting too long to try and get that extra mile an hour of speed into it and then end up having to wait for ever to get back to full acceleration as you exit.



You will be able to shift up to third gear on the short straight after the previous turn. As you exit that turn, you should have just enough time to get out to the left side of the track before you starting pulling the car back over to the right and into this turn.

Start turning in gently as the racing groove begins to darken. Then as you get closer to the turn and the groove becomes progressively darker, turn in some more to keep near the inside curbs. You want a late apex here for the best possible exit. Just after you start to turn in, ease off the throttle slightly. In the same manner as the previous turn, try to keep as much power on as possible to maintain a steady speed through the turn.



As you hit the apex begin to get back to full power as quickly as possible. Straighten out the wheel as you exit the turn, putting the car into a slight drift to the left and begin to accelerate down the track. A small amount of opposite lock may be required. If you are running wide onto the grass, then your entrance speed is probably too fast. Next time through back off sooner and see if that lets you get on the throttle sooner for the exit without having you run wide onto the grass.



GRESIL

Entrance speed: approximately 170 mph [274 kph]

Speed through the corner: approximately 167 mph [269 kph]

Arrival time at the corner: 1 minute 16.12 seconds

Time to negotiate the corner: 7.16 seconds

Exit time of the corner: 1 minute 23.28 seconds



Gresil is really a peice-of-cake once you get the car set up properly. You should be able to go through here without lifting at all, and without using full steering lock. Being smooth is important as it will let you maintain as much speed as possible. Sawing back and forth on the wheel will scrub off speed.



You should be able to get into top gear just as you are getting into this corner. Then slowly pull the car over towards the curb. Keep it as close to the curb as you can without hitting it. Continue through the turn as smoothly as possible. As you get near the exit, slowly begin to unwind the wheel. Being smooth as you exit will gain an extra mile an hour down the long straight ahead. So straighten the car out as slowly and carefully as possible. That's it, pretty easy really.

SCIERIE

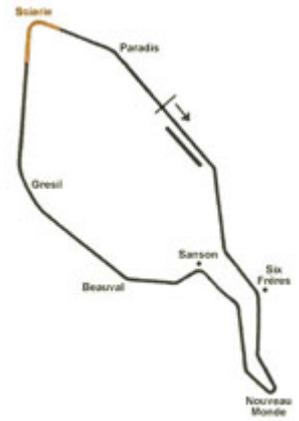
Entrance speed: approximately 190 mph [306 kph]

Speed through the corner: approximately 60 mph [96 kph]

Arrival time at the corner: 1 minute 30.45 seconds

Time to negotiate the corner: 7.67 seconds

Exit time of the corner: 1 minute 38.12 seconds



Scierie is a great corner. You blast down the tree line back straight and emerge into open fields as you brake from about 190 mph down to near 60 mph. It's also the best overtaking opportunity on the track. So with all this, there is, unfortunately, really no time to look at the wonderful scenery.



You will be in top gear going flat out as you arrive at the braking zone for this turn. You should be on the left side of the track for the best entrance. The racing groove will get darker, but you should continue on for a moment before braking. You need to find a reference point in the trees for braking. There is a section of trees that appears slightly lighter than the rest, on the left. This is what I use to begin braking.

When reaching this, you should brake as hard as possible and shift down two gears. Don't be in a hurry to get down to second too soon, as the extra torque could easily upset the rear wheel and send you into a slide or a spin. If you started braking a little too late, there is plenty of run off here. It's better to have to reverse back onto the track than slide into the fence.

Brake progressively harder as you continue in a straight line. This turn seems to try and tempt you into turning in early, but don't. An early turn in will mean you'll have to slow down much more than necessary to make the exit of the turn. So go straight as you brake. Once you are about half way through the braking zone, shift down to second and continue to brake as hard as possible.



You'll start to turn in quite late, just before reaching the Firestone sign on the left. Ease off the brakes a bit here and trail brake into the turn. Get off the brakes just before reaching the apex and let the engine do the rest. You should hit the apex quite soon after you turn in. The turn straightens out slightly here, so hold the car against the curb, and add a little more power. The corner tightens up slightly as you get to the exit, with the apex turning away from you quite quickly. Get back to full throttle as soon as possible after this happens. Keep the car on the left side of the track as you accelerate out of the turn and towards Paradis



PARADIS

Entrance speed: approximately 150 mph [241 kph]

Speed through the corner: approximately 125 mph [201 kph]

Arrival time at the corner: 1 minute 45.34 seconds

Time to negotiate the corner: 3.28 seconds

Exit time of the corner: 1 minute 48.62 seconds



Paradis is quite a fast right hander. Make sure that you take it as such. It leads out onto the front straight which is quite long and can present an overtaking opportunity if you get a good exit. Remember the all important restraint of driving this track. After putting in a good lap, you don't want to ruin it by pushing too hard into Paradis and then running wide, or worse, hitting the hay bails at the exit.

You should be up to third gear as you enter this turn. Don't bother shifting up to fourth as it's just a waste of time. Make sure your gearing allows you to just about stay in third as you come into the turn. The racing groove darkens slightly at the entrance, then lightens again. As it lightens, brake moderately for a moment, then turn in. You should aim to hit the apex at about the middle of the turn. Be careful,



however, as the track jinks out to the left slightly just before it turns right. Don't let this catch you out by turning in too early and running over the curb.



You should be off the brakes as you turn in and getting back on the throttle to balance the car. Then as you are about three quarters of the way through the turn start to increase your acceleration slightly. Get the car to drift out to the left as you exit. Be sure not to get back to full power too soon or you'll go wide. So just increase the power slightly. Then as you reach the edge of the track get back to full throttle and correct for any slight drifting.