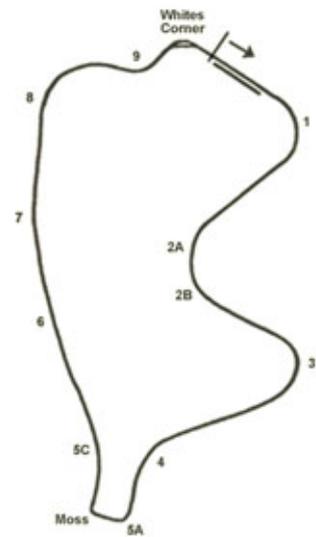




Canadian Grand Prix Mosport Park



THE 2.459 MILE Mosport circuit hosts the Canadian Grand Prix. It is a great circuit with lots of blind corners and elevation changes. Every corner flows right into the next one so your line out of a corner is the most important part of your lap time. A car that doesn't handle well here will make for a very difficult lap, let alone the race. So don't worry about top speed, but work on cornering ability. Passing opportunities are extremely rare at Mosport, making the start of the race and qualifying very important. If you want a chance of winning you really need a front row start, so work on your qualifying skills at this track. The Andretti straight serves as the back straight even though it isn't straight. You could get a good draft down it, but it ends at the crest of the hill and then a turn. Overtaking there is extremely risky even with the most experienced drivers. You may be able to pass going by the pits, but otherwise you'll probably have to pressure the guy ahead into a mistake to get by.



CAR SETUP:

Mosport laps are about the corners. The power advantage of the Lotus doesn't really come into play here. The only place where speed is important is the back straight. Even that requires proper gearing to make sure that you shift just before each dip in the road.

Work on a setup that allows you to get the power down early as you exit turns. If you are sliding all over the place as you exit the turns, you'll be setup badly for entering the next one. Concentrate on your line through each turn. It's better to go a little slower to try and get the right line. This will pay off with faster lap times.

With this in mind, try to dial out the oversteer in your car. Get the grip you need in the corners. Every corner here is important, so don't try and work on just one. The car must work everywhere. Don't go too stiff with the shocks as you'll sacrifice the grip you need. The anti-roll bars can be medium stiffness. Use them to make the car work in the middle of the corners, while the shocks provide the grip at the exits. Every gear is used on this track. However, first is used just for a second when you enter the Moss hairpin, so it can be setup for a good start. Most of the turns are third gear exits, so setup the gearing to reflect this. The back straight should be used to set top gear, as well as spacing the rest of the gears properly. Set up the rest of the gears so that you shift just before you reach one of the dips on the back straight. If you shift just after or in a dip you will be getting excess wheel spins that slows you down and unsettles the car. Finally, the brake bias doesn't need to be too far forward as most of your braking will be done before you really get into the turns.

GOALS:

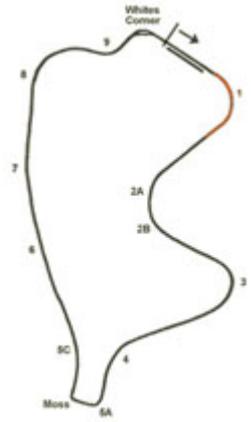
You should aim for a qualifying lap of about 1:21.00 to 1:22.00. That should put you pretty far up the grid. During the race you should aim for 1:21.50 to 1:22.50, depending on fuel loads, for your lap times if you don't encounter traffic.

THE RACE:

Races at Mosport can be extremely exciting for the driver even if nobody passes anyone. Remember that you need the perfect line to go fast. Don't push too hard going into the turns, as the exits are what are important. This can be difficult to do if you are being pushed hard by the car behind you. If you are behind remember that you don't want to go too deep into a corner before braking. This will just result in you spinning off the track. So get the perfect line and then hope the guy ahead slips up and goes wide, allowing you to make your move. The best place to overtake is probably going into turn one. If you are in the right place you may also be able to pass at the end of the back straight.

TURN ONE:

Entrance speed: approximately 130 mph [210 kph]
Speed through the corner: approximately 96 mph [155 kph]
Arrival time at the corner: 3.12 seconds
Time to negotiate the corner: 5.76 seconds
Exit time of the corner: 8.88 seconds



Turn one presents one of the best overtaking opportunities on the track. It is preceded by a small straight which, with a good exit out of the previous turn, will allow you to draft up to the car ahead. There are also several lines that work well going into the turn, so you can try going to the outside or inside to make the pass. Just make sure you are sorted out by mid corner, as that's when you need to be getting back online for the exit.

This turn is a little tricky because it is blind and falls away as you enter it, making you cautious on entry. As long as you keep the car to the left and straight under the initial heavy braking you'll be okay. If you do make a mistake there is a good size gravel trap to run off into. The downward slope of the turn will help rotate the car into the apex. The turn begins to climb uphill at the apex, which will help to keep the car to the right as you exit.



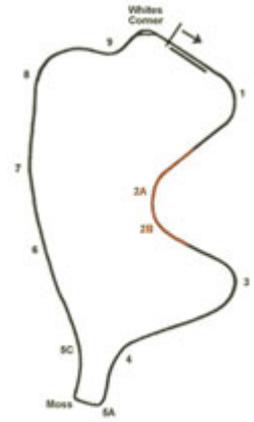
You should be able to stay in third gear as you approach this turn. If you have to shift to fourth for a moment you may want to consider lengthening third a little. Line the car up on the left side of the track and then just as you pass the crest of the hill, brake hard for a moment. Keep the car over to the left and going in a straight line. If you don't you risk losing the rear of the car.



Just about the time you reach the beginning of the armco on the left you should start to turn in. By this time you should be almost finished braking. A little trail braking helps to turn the car into the corner, hitting the curbing a little past the mid point of the turn. Don't keep the brakes on for much longer. Shift up to fourth as you pull the car towards the curbing on the inside. About midway through the turn you should be able to get back on the power. Be gentle at first and use it to straighten the car out. Then as soon as you can begin to get back to full power and let the car drift out to the left as you exit.

TURN TWO:

Entrance speed: approximately 140 mph [226 kph]
Speed through the corner: approximately 100 mph [161 kph]
Arrival time at the corner: 12.50 seconds
Time to negotiate the corner: 7.90 seconds
Exit time of the corner: 20.40 seconds



The turn is another blind entry corner which then falls away from you almost immediately. It is tighter at the beginning and then opens out on exit. The two things to remember here are you don't want to brake too late into the turn as you will fall off the track to the right if you do, and also be careful to keep the car off the dirt on the right as you exit as that will cause you to spin.

You'll be in fourth gear as you approach this turn. Line the car up near the right side of the track. It is very difficult to keep the car on the right because you instinctively want to be on the left because of the risk of falling off the track after cresting the hill. Keep this in mind because getting too far to the left will mean you are very slow. If you need to, brake earlier to stay to the right.

Just before you crest the hill, where the racing groove darkens, brake hard for a moment and shift down a gear. As you crest the hill, back off the brakes and start to turn the car into the corner. Try and keep a constant speed all the while you have the curbing to your left. If you have gone too far to the right, you'll have to ease off everything to keep control of the car.



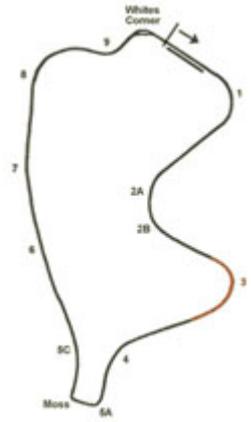
Once you pass the curbing, start to get back on the power. Slowly at first, but then as the track straightens a little you can get back to full power. The track will tighten up again for a moment and the car will begin to push off the racing line. This is a good moment to shift up a gear. As you back off the power to shift up, the car will turn into the corner more and allow you to get back to full power and stay on the racing line once you have finished the shift.



Get the car right against the left edge of the track. If you go too far there is some extra run off to help you get back on track. It's best to clip the edge of the track just as that run off ends and the grass begins. The goal is now to keep full power from now on. Let the car drift out to the right side of the track, reaching the edge just as the curbing ends. Make sure you don't go too far and run wide over the dirt as this could easily spin you.

TURN THREE:

Entrance speed: approximately 135 mph [218 kph]
Speed through the corner: approximately 75 mph [121 kph]
Arrival time at the corner: 21.76 seconds
Time to negotiate the corner: 7.81 seconds
Exit time of the corner: 29.57 seconds



The three is relatively easy after the previous two turns. It is much tighter at the beginning and then opens up on exit. However, you can still brake much later than you would anticipate here. This is an excellent corner for trail braking. Also, a good exit out of this one will provide an opportunity for overtaking a slower car on the next straight.

Get the car over to the left side of the track, and continue on pass the darkening racing groove. After a moment brake heavily and slowly shift down two gears. You don't necessarily have to shift into second, but I like to as it steadies the car a little more. Keep the car to the left as you brake. Make sure you don't turn in too early. If you do you'll be struggling to keep the car on the track as you get midway through the turn.

The racing groove lightens for a moment before becoming dark again. At this point gently begin to turn in and ease off the brakes. The trail braking should do most of the turning for you, and you hardly need to move the wheel at all. Use the throttle to balance the car as you approach the curbing on the inside. Once the car is settled and near the curb, shift back to third.



Start to get the power back on as soon as possible. This will take a while, so don't rush it. As the corner opens up you'll be able to get more power down. If the rear begins to slide, ease off just enough to correct this. Let the car go out to the left as you exit the corner, and don't be in a rush to leave that side of the track. Let the car accelerate for a moment on the left side of the track. This will make your exit much smoother.

TURN FOUR:

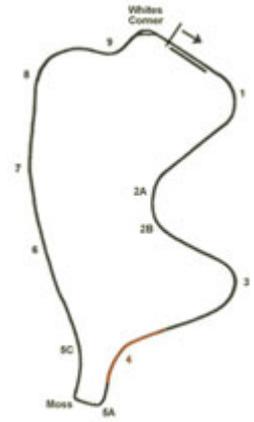
Entrance speed: approximately 138 mph [223 kph]

Speed through the corner: approximately 110 mph [177 kph]

Arrival time at the corner: 33.03 seconds

Time to negotiate the corner: 4.57 seconds

Exit time of the corner: 37.60 seconds



Here we go again, another blind downhill turn. Like all the previous turns it's the exit that is important. This turn begins a sequence of three turns that lead you into the forest and onto the back straight. You don't want to go too deep into this first one under braking as it will make the entry into turn five extremely difficult.



You should be in fourth gear as you approach the turn. Move over towards the right side of the track and just after the racing groove darkens back off the power and brake gently. During a race weekend, the flag marshal is also a really good reference point for braking. Just before you reach him, back off a little and brake. This corner is taken in fourth. Don't shift down as it can upset the car a little.

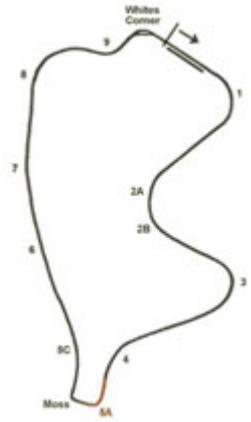
Just before you start the downhill plunge into this corner is a good moment to start to turn in. Move the car over to the curbing as you go down the hill. You want to keep the car right against the curbing on the left. In the replay you'll notice that I slide out to the right a little. This is because I braked a little too late and got some understeer.



Try to get the power back on quickly. You should be able to get back to full power for several moments before the next turn. This added power will keep the car settled as you go down the hill. Easing off could upset the car, so you need to be committed, which means don't brake too late as you enter the turn. As you finish the turn, keep the car towards the left side of the track.

TURN FIVE:

Entrance speed: approximately 125 mph [202 kph]
Speed through the corner: approximately 50 mph [81 kph]
Arrival time at the corner: 38.30 seconds
Time to negotiate the corner: 4.38 seconds
Exit time of the corner: 42.68 seconds



This turn is similar to the rest, as it is blind, but is uphill instead of the previous downhill turns. Just after the apex you crest the top of the hill, so be prepared for that. The rear will get very loose and will want to spin if you are under too much power.



It is very important to have the car under control before you brake for this turn. That means a good exit line from the previous turn. You'll be under full power as you approach this turn. Get the car going in a straight line and begin to move over to the right side of the track. Just before the armco on the left brake hard and shift down to second gear.

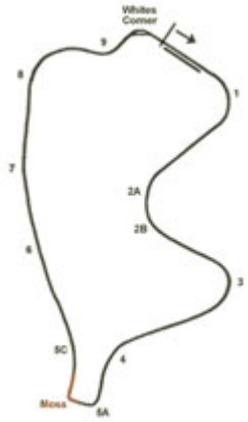
When you begin to brake you are still going downhill. As you begin to climb back up the hill, ease off the brakes a little. The hill will help to slow you down, and if you don't ease off you'll lock the front wheels. Get right next to the curb on the right and follow it around as you crest the hill. If you get too far to the left you run the risk of hitting the armco. As well as slowing you down, the hill will help to push your car over to the right as you climb up it. Remember this as you come to the exit of the turn. You are cresting a hill which is pushing the front of the car to the right and the rear will be getting light. The car will want to spin. This is one reason we stayed in second gear, to control the power of the engine more.



The car will want to go left as you reach the top of the hill. If you positioned yourself correctly through the middle of the turn this will be fine. You will end up perfectly aligned with the left side of the track and in a position to accelerate for a moment towards the Moss hairpin. Get back on the accelerator as you pass the end of the armco barrier on the left, providing those extra few miles an hour before you have to brake for the next right hander.

MOSS HAIRPIN:

Entrance speed: approximately 60 mph [97 kph]
Speed through the corner: approximately 35 mph [56 kph]
Arrival time at the corner: 43.33 seconds
Time to negotiate the corner: 2.52 seconds
Exit time of the corner: 45.85 seconds



The next right hander follows immediately from the previous one and completes the Moss hairpin. It is a fairly simple turn, but is very important to your top speed on the Andretti straight. There is a lot of dirt on the left side of the track at the exit. Make sure you don't clip this with your rear wheels, as a spin is a fairly likely result.



You'll be on the left side of the track in second gear as you approach this turn and should be able to accelerate for a moment before braking. After a beat of acceleration, brake hard and shift down to first, then ease off the brakes and turn in. Let the front wheels do the rest of the braking for you. Just before you get to the apex, shift back into second in preparation for accelerating out onto the back straight.

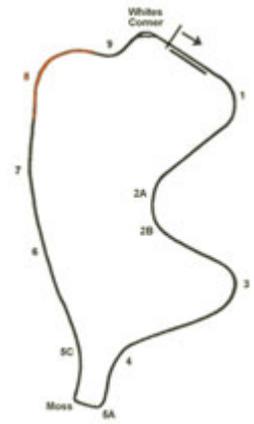
You should aim to get right next to the curbing and apex just past the mid point of the turn. Be careful not to clip the curbs as it will upset the car and not allow you to start accelerating as soon as possible. As you pass the apex, get back on the power. Be gentle at first as you allow the car to move over to the left side of the track. Then once you are in a straight line get back to full power. Keep the car tight against the curb on the left as you accelerate down the back straight. The rear wheels will want to get away from you, but keep them in check by not flooring it too soon.



As you go down the back straight you'll notice that there are several dips in the surface. Try and pick your gears so that you are not shifting right after one of these bumps. If you shift right after a bump you'll be wasting engine power as you spin the wheels at each bump and unsettle the car.

TURN SEVEN:

Entrance speed: approximately 176 mph [284 kph]
Speed through the corner: approximately 98 mph [158 kph]
Arrival time at the corner: 1 minute 3.85 seconds
Time to negotiate the corner: 5.51 seconds
Exit time of the corner: 1 minute 9.36 seconds



After driving flat out through the twisty back straight, you emerge out of the forest and into the open just before turn seven. Turn seven requires the biggest commitment as you come flying over the crest of a hill at around 180mph, almost take off, and then have to brake and turn into a right hander. Two important things to remember here are to be perfectly straight when you crest the hill and not to lock the brakes when you start braking.



You'll be in fifth gear, going flat out as you approach the turn. A slight right hand bend precedes the crest of the hill. After you pass this bend, let the car drift out to the left side of the track. It is really important that you reach the left side of the track and get the car going in a straight line before you reach the crest of the hill. If you crest the hill at an angle you'll probably lose it when you land again. The middle of the track is the worst place to be as there is a slight crown in the middle of the track when you pass the crest of the hill. This will definitely upset you and may even throw you to the left side of the track and out of the race. There is a lot of run off room here, so if you do make an error and can't make the right hander, just try to slow down as much as possible and then get back towards the track.

Keep the power down until just before cresting the hill. Back off a little and go over the hill, trying to stay to the left. The car will get really light, and possibly take off a little. Once the car is firmly planted on the ground again, shift down and brake firmly. Make sure you don't lock the front wheels up, or you'll just go straight off. You don't need to slow down as fast as you think here as you can trail brake all the way into the apex of the turn. As you start to turn in, following the racing line, ease off the brakes. This will help to turn the car into the apex and continue to slow you down. You may also need to use the throttle to keep the rear end under control as it may want to slide out to the left. A little power should keep it behind you.

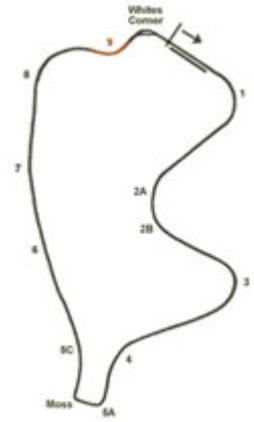


About half way through the turn you should be able to begin to get a lot of power back down. Even so, you might not reach full power before the next turn. Get the car lined up in the middle of the track as you exit. Too much power will push you too far to the left and make the following corner very difficult.

Remember to be committed as you enter this turn and things will be much easier.

TURN EIGHT:

Entrance speed: approximately 112 mph [181 kph]
Speed through the corner: approximately 80 mph [129 kph]
Arrival time at the corner: 1 minute 10.91 seconds
Time to negotiate the corner: 2.97 seconds
Exit time of the corner: 1 minute 13.88 seconds



Turn eight follows immediately from the previous turn, and is much easier. Make sure you don't brake too late here as going wide on the exit will make a fast entrance onto the front straight difficult.

You'll be in fourth gear in the middle of the track as you approach this one. Move the car over to the left following the racing line. There is no real brake marker here, so some experimentation is needed. But try to start braking so that you can shift down to third and hug the inside of the corner all the way through the turn. This is a late apex corner, so aim to reach the curbing just around the mid point of the turn. Any sooner and you'll have to slow down too much to stay to the left as you exit.



Not too much braking is required here. Brake moderately hard for a moment and then ease down to about 80 mph. Use the power to keep the rear end behind you, and then about mid way through the turn start trying to get back to full power. Remember not to let the car push out too much to the left as you exit.

WHITES CORNER:

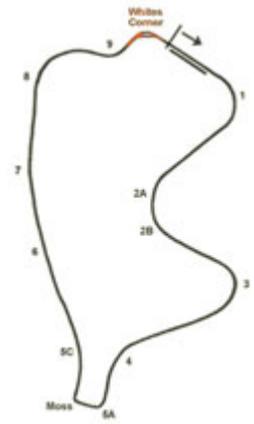
Entrance speed: approximately 95 mph [153 kph]

Speed through the corner: approximately 65 mph [105 kph]

Arrival time at the corner: 1 minute 14.82 seconds

Time to negotiate the corner: 4.03 seconds

Exit time of the corner: 1 minute 18.85 seconds



This final corner is fairly easy and a good exit will provide you with a possible overtaking opportunity going into turn one. There is a slight dip in the track before you start to brake, but it really doesn't affect the car at all.



You'll be in third gear as you exit the previous turn with the car on the left side of the track. Try and accelerate for a moment between the two turns, then just before the armco on the left ends, brake hard and down shift to second gear. Turn in following the racing line and ease off the brakes. You need to get a late apex here so that you can start accelerating as soon as possible onto the front straight.

As you turn in, shift back up to third. This will help prevent the rear wheels from spinning as you exit the turn. Keep a constant speed through the turn. As you come up towards the armco of the pit lane, start to increase the power. Start to let the car drift out to the left side of the track at this point. The track is cambered a little in your favor as you begin to accelerate, but then flattens out going onto the front straight. This is where you are most likely to get wheel spin. Try to get the car going in a straight a line as possible when this happens. As you come onto the front straight let the car go right out to the white line on the left. You should reach the edge of the track about the same time you cross the start/finish line.

