

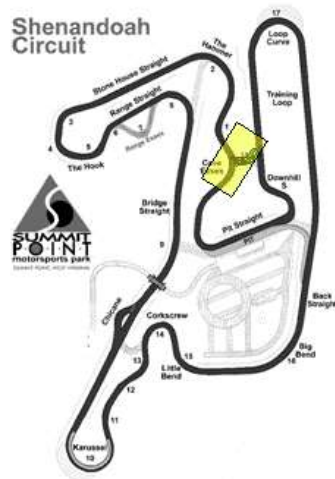


# Summit Point Shenandoah Circuit

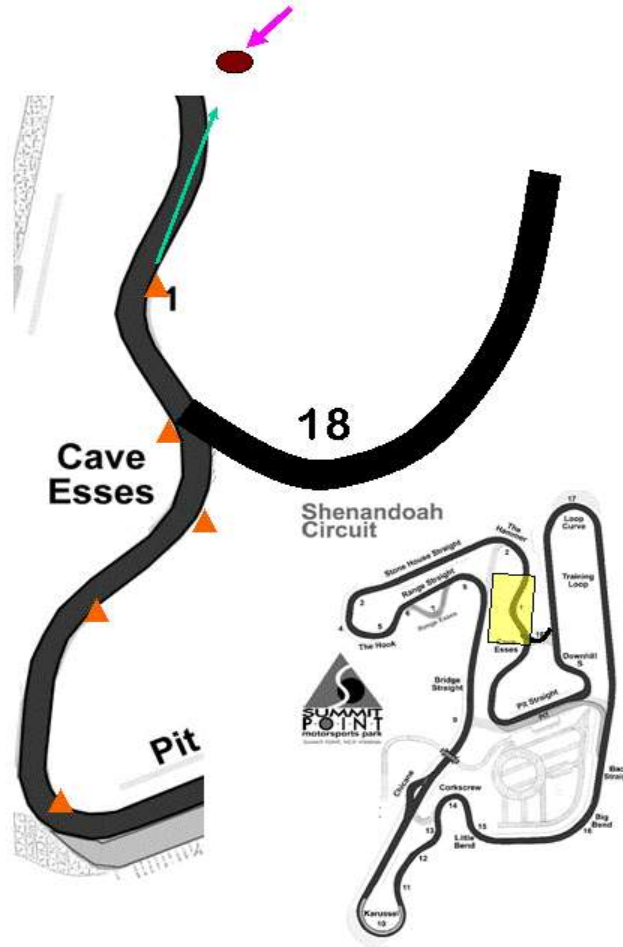
The *Shenandoah Circuit* is a 2.2-mile (3.5 km) road course that first opened in 2005. It is a no holds barred technical challenge that will take years for drivers to master. The track contains a dimensional replica of the Nürburgring-Nordschleife's famous banked *Karussell* turn complete with 20 degrees of banking. The corners contain both positive and negative camber as well as increasing and decreasing radius turns with vertical drops. If you are truly up for a challenge to your car handling abilities, the *Shenandoah Circuit* is truly one of the most technical tracks in the country.



Enter the track from track-right on pit-in and cross over to track-left to late apex T1.

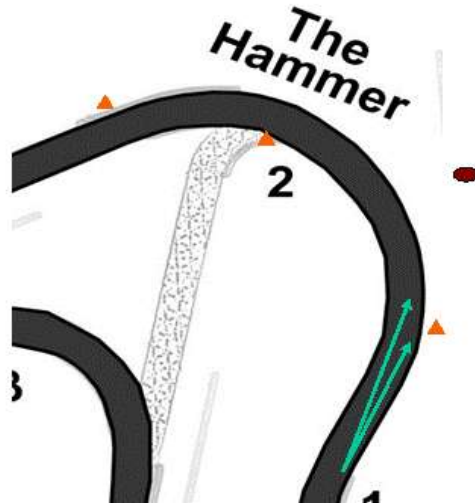


# Cave Esses



In our new T18 configuration, the Cave Esses are truncated to just T1. Enter T1 from T18, a sweeper with fall away camber. Late apex T1, aiming for the little pavilion to enter The Hammer.

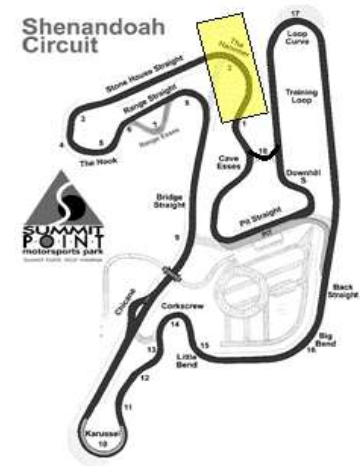
# The Hammer



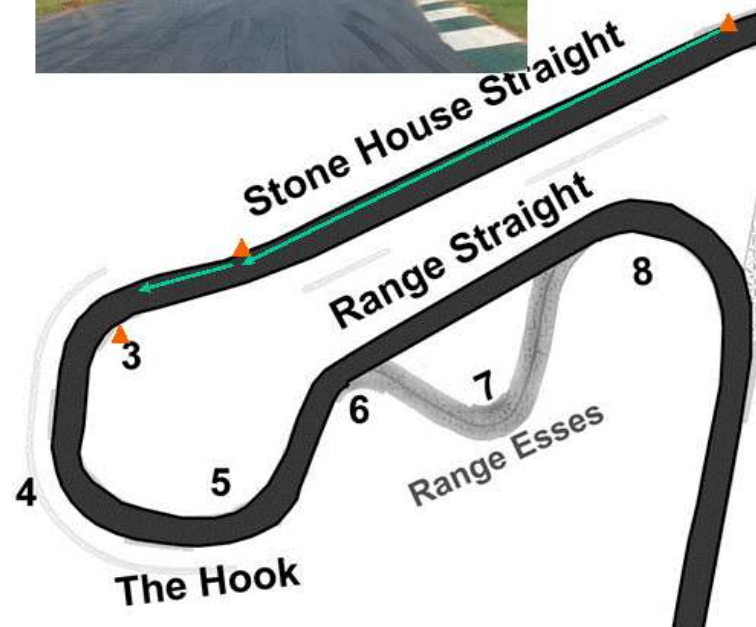
Car placement for entry to the Hammer is on the curb track right. This is a safe line, forcing a late entry to a very late apex corner. However, the 'fast' line is mid to right third track. Whichever entry is used, the entrance line is on the off-camber portion of the track. This is because of the very late apex track left all the way beyond the end of the curbing track left. Patience is the key, staying out on the off camber, slowly coming in the straddle the crown, and finally apexing very late. A lift or left foot tap may aid entry rotation, and careful modulation of power is required to stay turned into the off-camber Hammer.

The available visual cues entering Hammer are red (and white) stacks of tires in the tirewall.

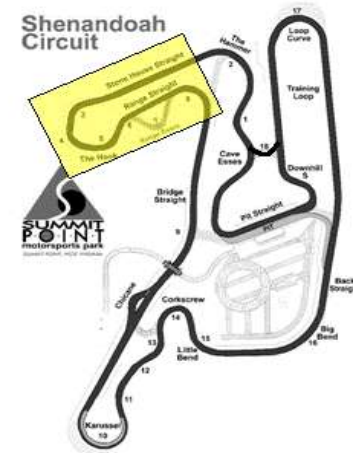
Allow the car to exit full track right entering Stone House straight.



# Stone House Straight



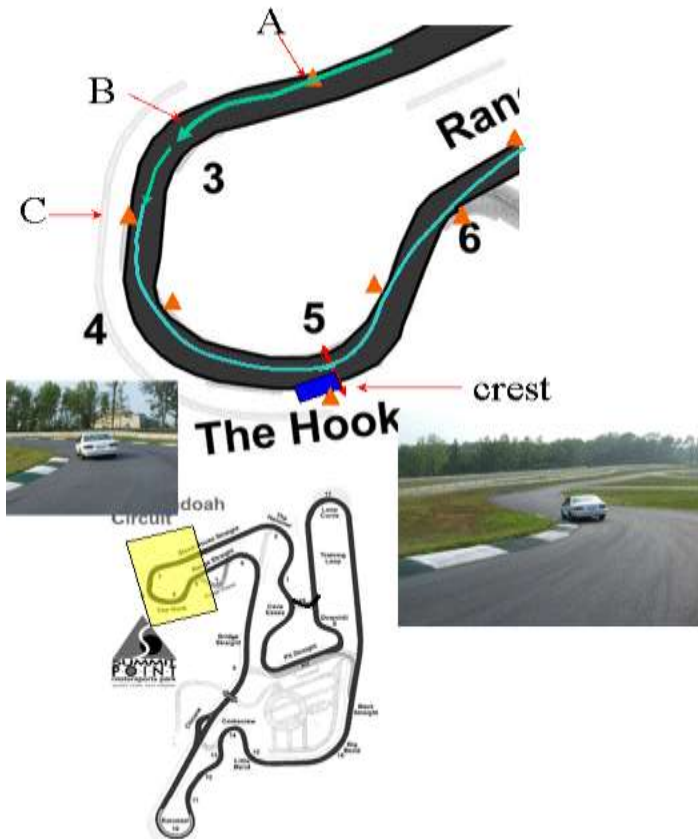
Stone House straight is a passing zone. The line is track right, passing driver's left. The line into the 3,4, Hook complex is very similar to turn 7 entry on the Jefferson Circuit.







# The Hook



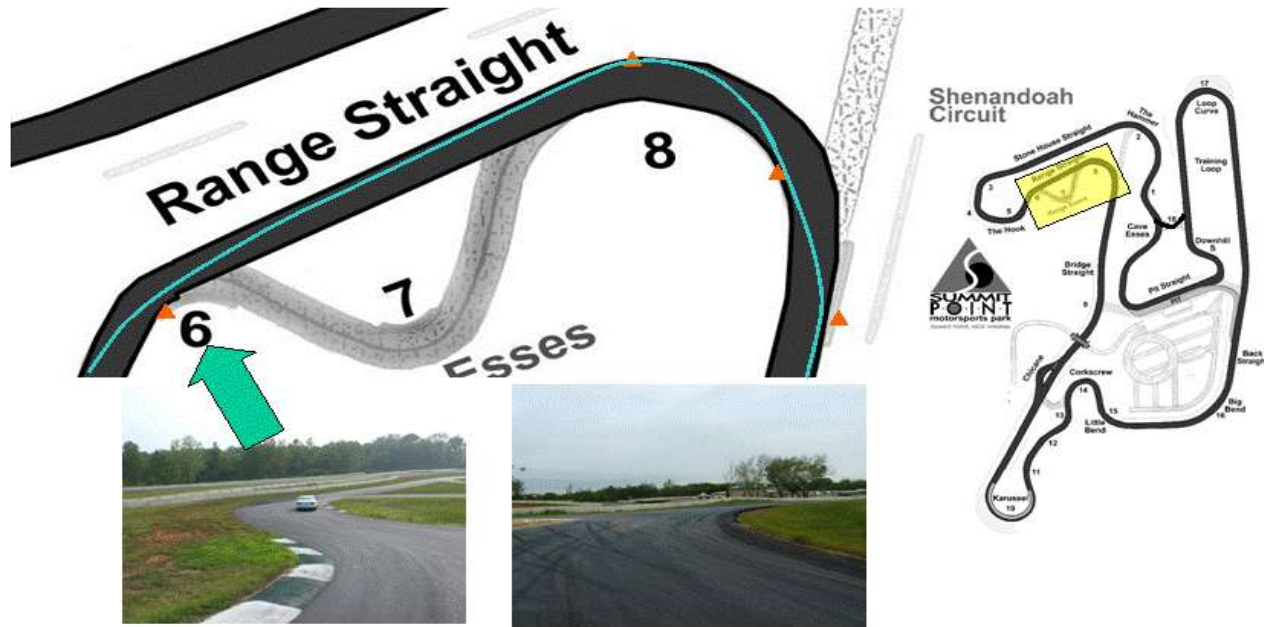
## Turn 3-6 alternative - 2

The previous Stone House Straight is a passing zone so there is extra incentive to use a line fully track right entering the sequence from point A. The A to B to C sequence is not unlike turn 7 entry on Jefferson. Trailbraking will be useful.

Elizabeth and Carl and Don line follows\*;  
*Stay off the left apex at 3, 'curling' into point C at which point turn-in/rotate to apex 4 as shown. Approaching the crest left or tap or left foot brake to turn-in for the Hook Prior to the crest.*

This permits turn-in before unloading over the crest and alignment proceeding downhill for the Range Straight. At and during turn-in the apex is not visible. Properly executed the turn-in is simply a continuation of the turn from point C to the crest. If you pass the crest without turning you will unload and not make the apex.

# Range Straight



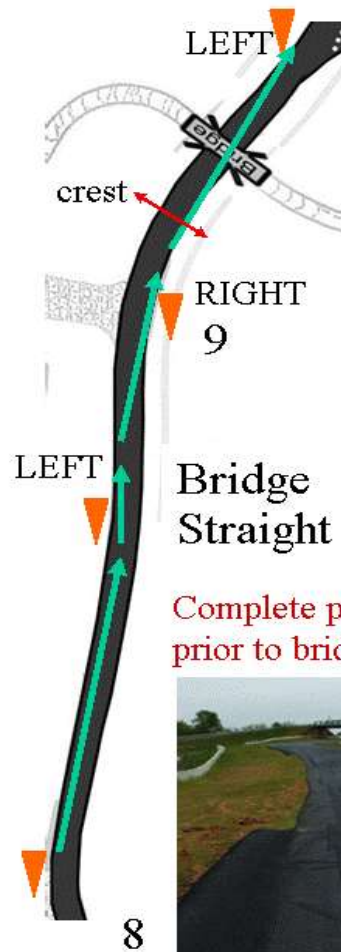
Turn 6, Range Straight, Turn 8.

Turn 8 is increasing radius, slightly off camber. Turn in is after the pavement transition. Apex point is not visible at turn in. Apex is late. Camber changes throughout due to the crown.

Entry to the painfully late apex 8 from track left. Begin the turn in at about the point where your rear tires transition onto the 'old' pavement from the new asphalt of Range Straight. The apex is against the curb track right a good 2/3 around the corner. Begin looking for the track-out point, located at the end of the curbing track left immediately upon turn-in the help in finding the apex.



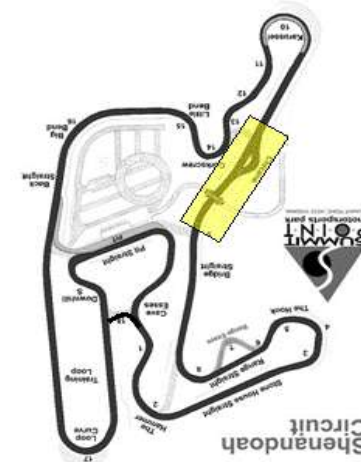
# Bridge Straight



The first half of Bridge Straight is a passing zone. The line out of turn 8 is track left; overtaking cars pass to driver right. Cooperation will be required with the slower car probably staying left and possibly off the apex at the turn 9 allowing the overtaking car the line. Passing **MUST** be completed prior to the bridge to allow for critical track-left placement cresting the hill because the car **WILL** become light. Improper alignment or attempts to make course corrections will spell disaster.

## *Roll video.*

Turn 9 is treated as a kink. Stay left approaching 9, look ahead to the bridge abutment to find a visual reference to enter. From turn 9, under the bridge to the crest is very important. This is the setup into, so far, demonstrably the most hazardous section of the circuit. The visual reference is a tree that lives completely on the other side of Summit Point Road. It will appear slightly off the left side of the track at this point. Head for it anyway





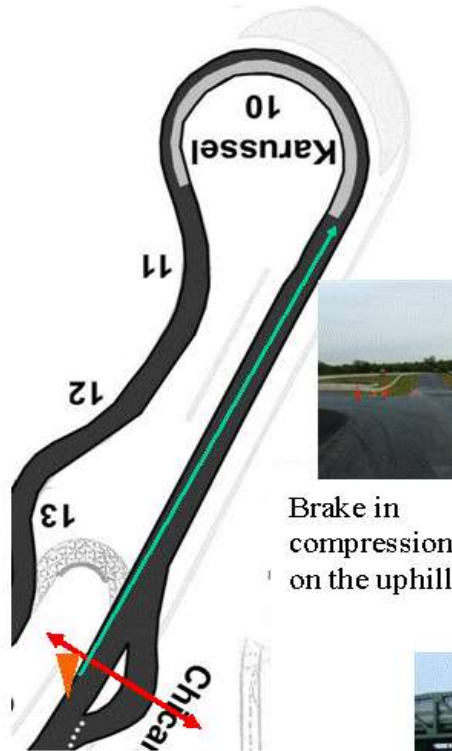
# Bridge Straight Cautions

It is very important to not get lazy on the Bridge Straight. Stay track left until the end of the curbing on the left, arc over to the right and hold it to nearly the end of the curbing on right, come back to the left, pointed at the tree to the left of the garages, and using crest as apex. It is clear with more power that *it is imperative to be pointed in the right direction and to have completed steering before cresting.* Up against the grass track-left is a good place to be.

# Bridge Straight

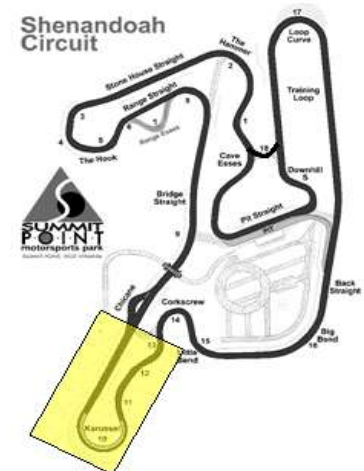
Since turn 9 is a 'kink' this is the last half of the Bridge Straight. It contains what has so far been the most hazardous section of the SC and is the approach to the unique Karussell. That is why all passing on the Bridge Straight must be completed prior to the bridge and why it is very important to be track left, in the proper alignment, and wheels straight before the blind crest.

As you approach the crest and if you use the tree as a visual reference the tree will appear to move right, which works perfectly. From full track left, pop over the crest, keep the wheels straight and you will find yourself still aimed at the tree, angled slightly track right, directly toward the entrance to the Karussell.

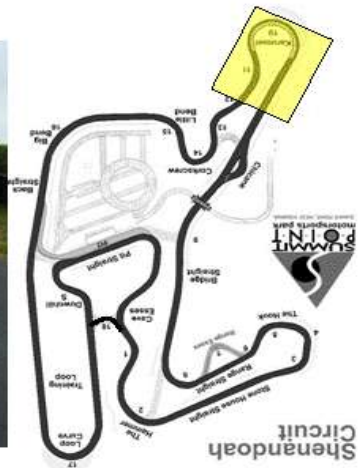
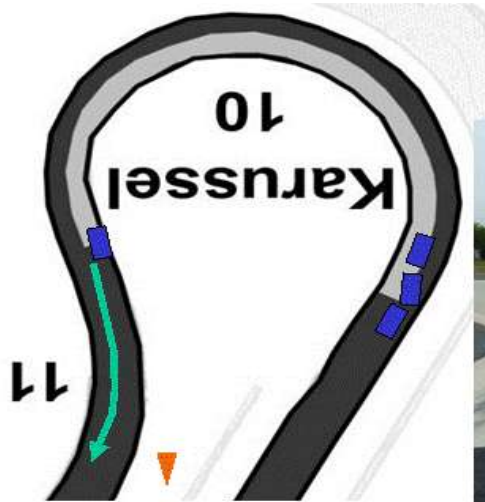


Brake in  
compression  
on the uphill

**Blind Crest**  
**Treat with respect!**



# Karussel



Actual entry into the Karussel banking is from a right offset and you drive the car down into the banking. Exit should be just the opposite albeit less pronounced. Exit leaving the banking slightly before it completely flattens, making sure to stay driver's right of the mid-track crown in the pavement ahead towards turn 11; staying track right or with whatever position the Karussel spits your out. In any case do NOT try to move track left for 11.

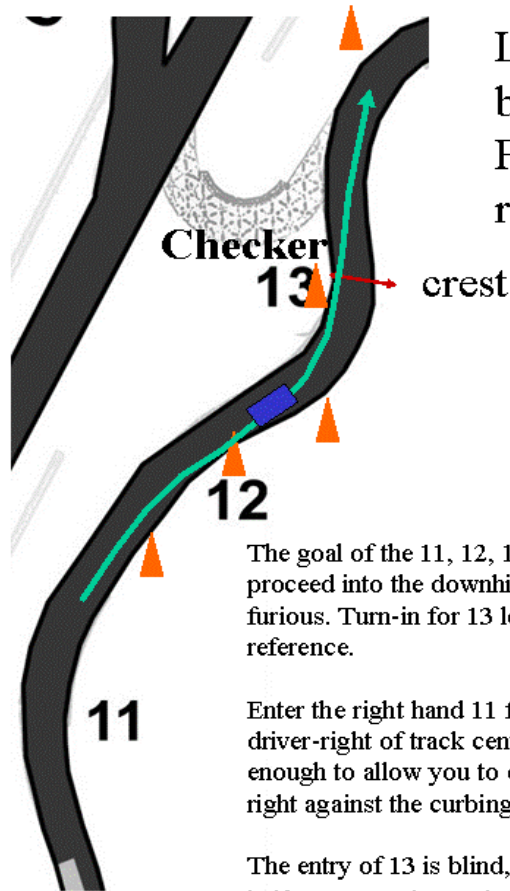
Unlike any other road course in North America, there are, in fact, there 'options' for travel around this 200 degree direction change: the banked concrete surface, as well as the upper and lower flat asphalt surfaces. Transitioning from one 'option' to another is not recommended, as the angles are acute and likely to result in bad scraping noises accompanied by unexpected loss of traction to one or more wheels and all the ugly things generally associated with that ... The principle and correct line is the concrete banking.

There are significant blind spots driving the Karussel. A car one or two lengths ahead generally will be in your blind spot.

Instructors should try the upper or lower section. Be vigilant as cars on the upper section and cars on the banking can lose contact with each other leading to significant difficulty merging at the exit.



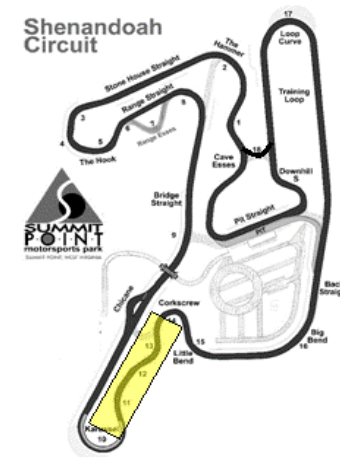
# Karusell Esses



The goal of the 11, 12, 13 sequence is to arrive at the late, blind, 13 apex with a correct attitude to proceed into the downhill off camber entrance to the Corkscrew. This sequence comes fast and furious. Turn-in for 13 looks uphill with the apex beyond your sightline. Pickup the bridge for a reference.

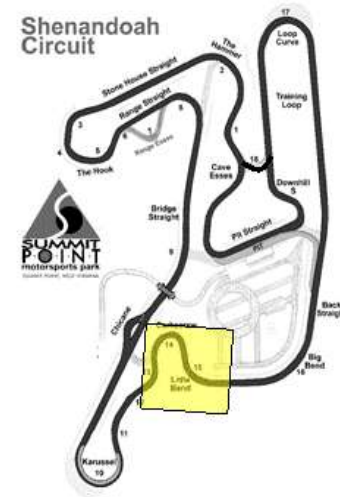
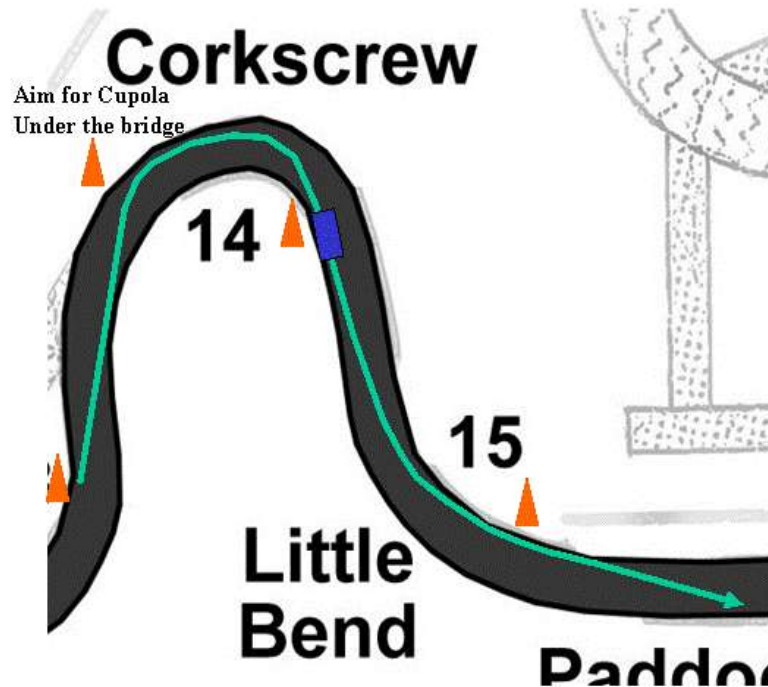
Enter the right hand 11 from whatever point the Karussell has spit you out, hopefully, from just driver-right of track center. Apex is about mid-turn against the curb; track out only a few feet, just enough to allow you to continue the right arc through to the apex of the next right, 12. Hold track right against the curbing a few more yards to the entry of 13.

The entry of 13 is blind, uphill, the apex hidden beyond the crest. The apex is late slightly more than halfway around. Turning in the only far field references are the Bridge, and light poles.





# Corkscrew



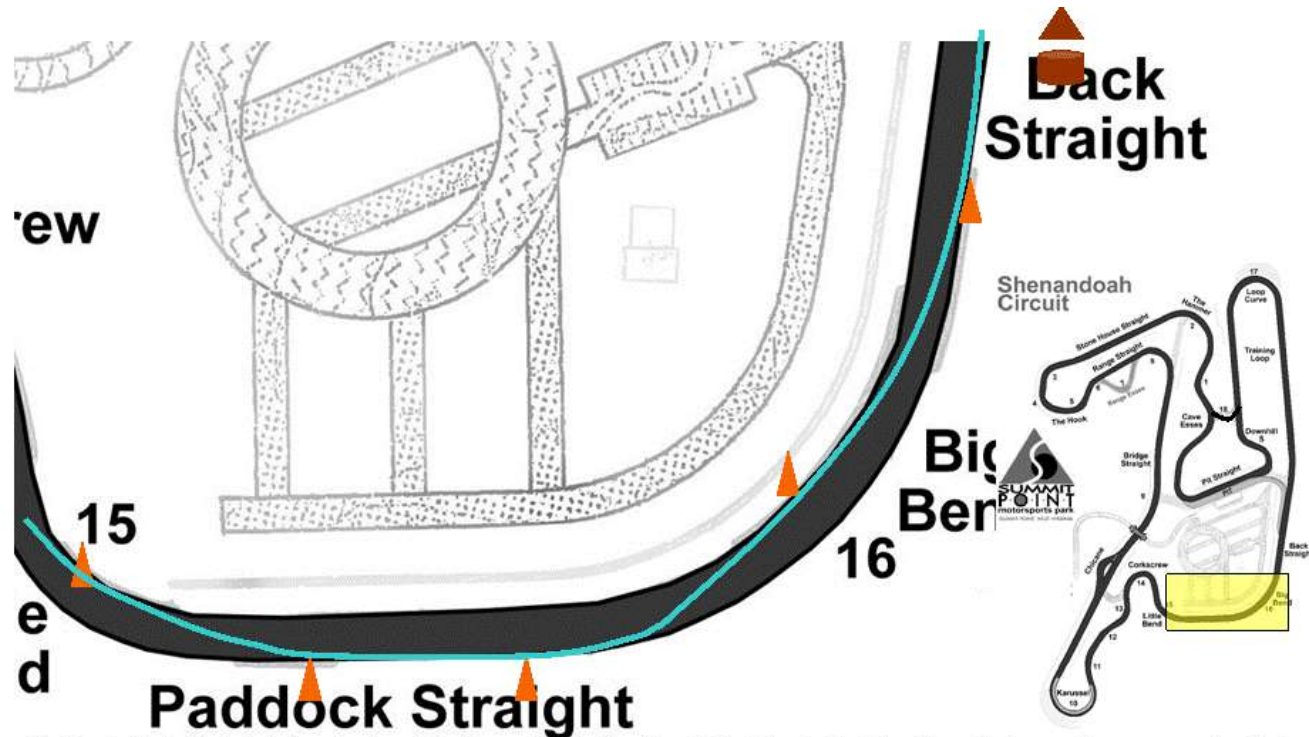
Students in all groups must understand that after the Checker they should **stay on it** until their normal braking/slowing zone for the Carrousel.

Corkscrew entry is downhill to off camber to a very late apex. Oh, and decreasing radius. When you look up technical corner in the dictionary it says: Shenandoah Circuit The Corkscrew. Trailbraking is now part of the curriculum. Corkscrew sets you up for the beginning of the Back Straight. Yes, Little Bend is the beginning of the Back Straight because you (probably) will accelerate all the way from Little Bend to Loop Curve!

This is a difficult turn and especially requires patience with the gas.. Enter deep as shown, rotate. Trail braking to control understeer is an asset. Get the car fully set and rotated towards the second late apex before dropping the hammer.

Track out of Corkscrew is sacrificed to entry to Little Bend. The apex for Little Bend is a tiny bit early as it is increasing radius.

# Paddock Straight



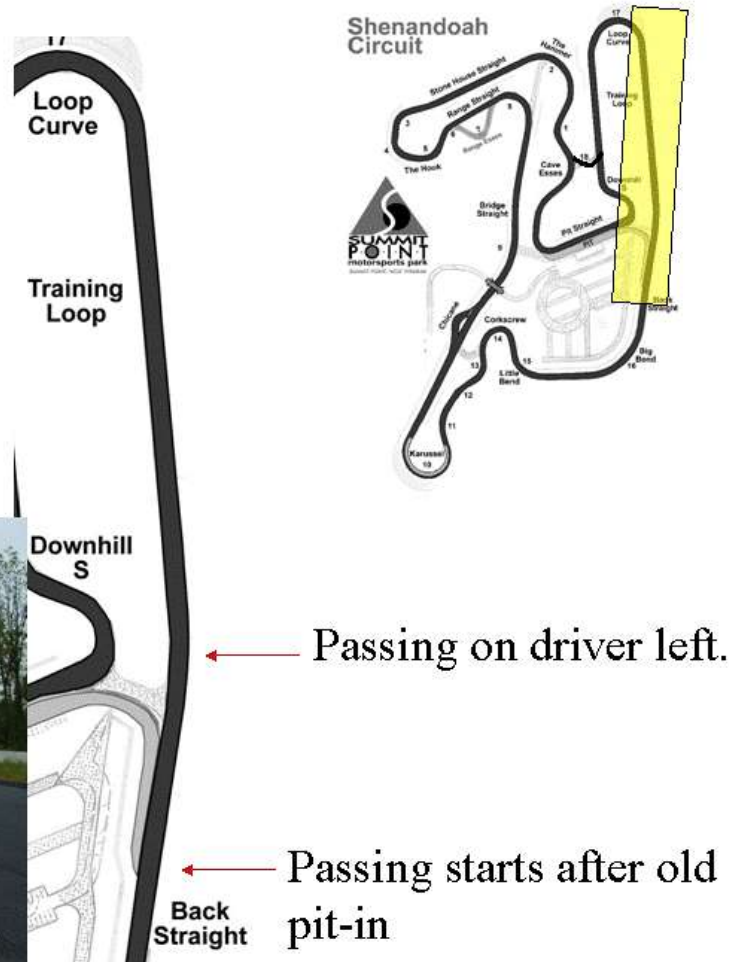
Paddock Straight is just time to breath between Little Bend and Big Bend. Big Bend is a high speed sweeper onto Back Straight.

Big Bend apex is slightly blind due to the Jersey walls around the paddock. At the apex the track out has just come into sight beyond the paddock wall. Use the gazebo as a reference. Be vigilant against early turn in and early apex in Big Bend.

Note that starting with Paddock Straight all the way around Big Bend and down Back Straight the track is bordered by off camber grass followed closely by Jersey walls.

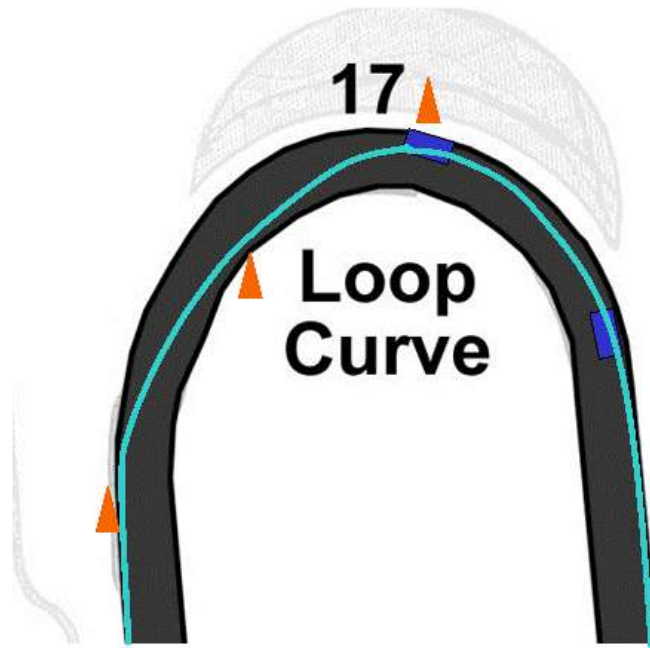
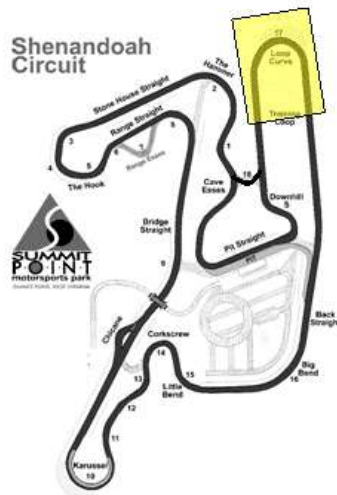
# Back Straight

The Back Straight isn't really straight (like the Bridge Straight isn't really straight), as there is a considerable kink just past the pit wall. Since this is a passing zone, it is important to maintain lane discipline when overtaking or being overtaken. Additionally the pit-in entrance and walls are track left. Therefore passing starts after pit-in, and we will drive the track right line. Passing on driver left.



# Loop Curve

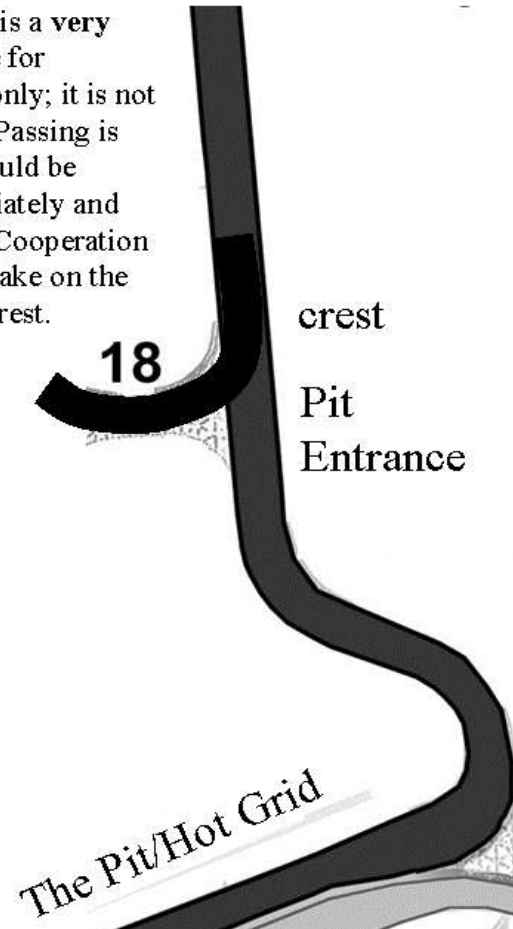
17, Loop Curve is a 180 degree almost constant radius turn. Entry is from track right; however, watch some rough spots and undulations full right towards the end of Back Straight. There are several existant lines, the 'standard' route has the driver follow the radius of the curve from turn-in approximately  $\frac{1}{2}$  way around then sharpen towards an apex approximately  $\frac{2}{3}$  around. Track out track right on 'no name' straight and begin the final passing zone.





# No Name Straight

No Name straight is a **very** short passing zone for advanced groups only; it is not for lower groups. Passing is driver left and should be completed immediately and before the uphill. Cooperation is the required! Brake on the uphill before the crest.





# Ram Site

Ram Site. Look at the camber – the track falls away.

The line is extreme track left approaching the cross-over road, single very late apex; arcing to track out near the end of the curbing on left-hander (Cave-Esses) and a late apex on the right turn before the off-camber left hander which is entered between the middle of the track and two feet from the right side curbing. Extreme late apex and all else remains the same to setup for Hammer.

