A Hot Lap of the Virginia International Raceway (VIR) Full Course

Exiting Hog Pen (Turn 17) fully drivers left, stay left of center for the first third of the pit lane length before bending the car gently to the right to negotiate Turn 18, or “the Kink.” Apex the leading car length of the curbing near the end of the tower. Allow the car to drift out to the left at the exit of the “Kink.”

Turn 1: Using the LAST uphill compression to finalize braking, begin one arc turning the wheel to the right. Turn-in is directly across from the beginning of the inside curbing. Fast hands here and it helps to trail the brakes in. Rotation can be initiated by the final release of the brakes. An increasing radius complex, Turn 1 has a single apex the last few car lengths of the inside curbing. The goal is to not have to come back out of the progressive throttle application nor tighten the arc of the steering wheel after initial turn-in. Control the radius of the cars exit path with the throttle, exiting Turn 1 on the left half of the track as the road rises and continuing that arc back over centerline to the right half of the road. Fully accelerate at the earliest possible opportunity and maintain that throttle into and through most of Turn 2. Experience and data collected from a wide variety of cars indicates better results come from apexing the Turn 2 curbing half way.

Entry to NASCAR (Turn 3)
Moving through the fast left sweep, focus only on letting the car track out to the right in order to get the steering wheel as open as possible for entry and braking into the decreasing radius Turn 3, or “NASCAR Bend”. Richard Petty, Curtis Turner, local hero Wendell Scott and David Pearson in the Trans-Am® race of April 1966 all christened this turn by falling off here repeatedly!

Aiming for the worker station in front of the Tech Barn on, drive DEEP into the corner on a diagonal from the apex at the Turn 2 to a point all the way on the right half of the road, close to the new outside curbing. Brake in that approach and decisively but smoothly turn in under some power. Turn-in is two car lengths before a point directly across from the beginning of the inside curbing. Aggressively apex the inside curb for at least two car lengths at a point two-thirds down the length of the curb.

Turn 4 and Turn 5
The goal is to “give up” Turn 4a to position yourself correctly to get a good launch out of Turn 4b. Brake fully and with consistent pressure, trail the brakes in and turn in later to apex the END of the inside curbing at T4a, around the corner. The short straight at the exit of Turn 4a is severely crowned. Try not to overcook or overshoot Turn 4a, or cross the centerline driver’s right, and pinch the entry to Turn 4b! After touching the Turn 4a apex curb at the very end, stay left of center for just an instant longer than you think before turning right decisively into Turn 4b, placing the right front wheel over the area of curbing that projects furthest. Don’t early this right or you’ll have to delay throttle application, as the track falls away after the apex curbing.

Arcing the car through an open parabola, stay against the curbing on the left only for a short time, delaying turn-in for the second right, Turn 5a, by pausing momentarily on the left half of the road in the short straight between T4b and T5a. Turn earlier than you think to cross the crown of the road into the “dip” or “pocket” near the apex of Turn 5a. Use that “dip” after turn-in to breath the throttle (only for a moment and only if necessary to rotate the car to the right) for a tidy exit. Vision is limited so familiarity with the course configuration is vital before trying to “attack” this section of the course. A flick left, then right, then left again leads you onto the straight going under the “Cross Over Bridge.” Exit right against the end of the curb at track out and begin to think about negotiating the tricky and unforgiving “Uphill Esses.”

The Climbing Esses
These “bends in the road” are deceiving in their approach. Because of the elevation changes, cars easily become unsettled at the precise moment that the driver wishes to change direction, mandating precise car placement AND A PRECISE RHYTHM, critical for success. Begin by bending the car to the left at the point where the pavement begins for the North Course cut-through, but do not apex the curbing on the left until the very end and be sure to make the left side of the car parallel with the grassy straight just after. Allow the car to settle and decisively turn to the right as the road rises, apexing the curb at Turn 8a only at the end of the curb. Turn-in should have you cross the center seam of the road just before the beginning of the inside curbing for Turn 8a. As you approach the end of the apex curb, return the steering wheel to the straight ahead position and go over the crest aimed at the tree at the top of the Climbing Esses in the distance. If the car is not pointed straight as it becomes unweighted, the car will not accept throttle changes well at all. If it is, you’re good to go!
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Make a beeline for the middle of the apex curbing at T8b, and follow that curbing around to the left. Build speed while preserving a “shallow” exit from each of the Esses by touching the curbs latest in T8a, the middle in T8b and early and for as long as you can in Turn 9.

Cresting the small jump immediately after Turn 9 apex curbing, continue the arc to get the car back to the right half of the road in preparation for Turn 10, “South Bend”. You should NOT be left of center (unless passing) between the exit of Turn 9 and the entrance of Turn 10. Aligning the right side of the car parallel with the right edge of the track, pick a point for an early to centrally located, several car length long apex on the beveled edge of the curbing, turning in just before you see the beginning of the curbing. Be under mild and progressive power as you turn in. Tracking out to the end of the curb going downhill and always make sure to touch the inside apex curbing at Turn 10, “South Bend.”

Turn 11 and Turn 12 (Oak Tree)

Drive in a straight line diagonally across the track from the right to the left in preparation for Turn 11, the uphill, on-camber right leading up to the slowest corner of the track. Entering Turn 11, place the left front wheel very close to the edge of the road in preparation for a middling, two car length long apex on the curbing, aided by the uphill and on-camber nature of the corner. Conceptually similar to the Turn 6-7 complex at Road Atlanta and predating it by over a dozen years, it is critical to attain an effective “launch” off “Oak Tree Turn” onto the back straight.

After negotiating Turn 11, aim (on a diagonal from the Turn 11 apex curbing) for the two thirds length point of the outside curbing on the left edge of the track, coming into “Oak Tree” under COMPLETE control. With the car fully left of center and while continuing to trail in on the brake, decisively turn in with quick hands and slightly more than you think you have to, being careful with the throttle lest the downhill, off camber exit catch you out. As the steering wheel unwinds, preferably JUST before reaching the apex on the inside curb some of the way around the corner, apply throttle progressively. Your track out should be fairly far down the exit curbing on the left. If you are pointed left of the worker station at the apex, you’re early!

Back Straight, Turn 13, Turn 14 and Turn 15

Passing the South Course pit lane on the left, move gently to the right, taking the first crest on the right against the curb and align the right side of the car parallel with the right side of the road about a car width off the edge. Braking should not occur until you can feel full compression at the bottom (brake marker 2) of the final dip before climbing up the hill into Turn 13. “Bend” the car to the left before the North Course return. Using the compression of going uphill, get the car slowed enough to bend the car left, with the goal being to open the wheel slightly over the crest to relieve lateral loading as you finish your braking.

Entry into Turn 14 should be from the left half of the road. Turn in should be two car lengths before the beginning of the inside curbing. Trail the brakes into the corner and decisively turn in to the right. Ride the curb for some time and do not leave it until the end. The car should not be left of center before aiming directly at the worker station, short shifting up and decisively turning left into Turn 15. Apex this curb two thirds of the way through and feel the compression! Accelerate as fully as you can and hold the apex a little longer than you think you should.

Turn 16a, Turn 16b and Turn 17 (Hog Pen)

As in Turn 13, come away from the right edge and “bend the car” left under braking, using the “level out” of the road to compress braking initially, then bleeding off as you touch the middle third of the apex curbing and follow it around. The beginning of the double apex, constant radius, right hand “Hog Pen” requires that you allow the car to travel straight for just a moment along the end of the Turn 16a apex curb.

Turn in is at a point even with the end of the T16a curb, from the left edge of the road. With 10%-30% throttle, turn in and draw a perfectly symmetrical arc through both Turn 16b and 17, using the compression from elevation changes at the midpoint to “buy” grip. Get the right front ON the middle part of the curbing at Turn 16b, track out to the left half of the road through the length of the outside curbing, not necessarily touching the second right hand inside curbing, the apex for 17. Track out to the mid point of the curbing at the lowest part of the circuit and begin another lap of Virginia International Raceway!

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