

Summit Point's "Chute" / "Hairpin" / "Carousel" Complex

By Bruce MacInnes*

Summit Point's Main Circuit was repaved last fall and this enhances an already wonderful track. The Chute through the Carousel is arguably the most challenging – and misunderstood – segment of Bill Scott's oldest of three racetracks.

At Skip Barber, one of our favorite pastimes is using data to dispel myths. Using our computer cars, we experiment at every track to test "Conventional Wisdom" against the "Tricks of the Week" that we sometimes hear about. This lets us be more informed and helps our drivers at tracks all over the country; physics and the stopwatch always win.

The Chute (a downhill right-hand kink) leads to a sharp left hand hairpin. This links to a deceptively long Carousel. At first glance, even experienced drivers over-slow the fast downhill sweeper to set up for a conventional line into the hairpin. The data, however, shows that it is actually faster to run as quickly as possible through the Chute and then early apex the next left using brake-turning and a soft trail-brake release. Control trail-brake rotation with your brake release and avoid over-rotating your car. Using this faster entry, there will still be enough time to transition to the left to set up for the entry to the Carousel.

Some of the greatest lessons I've ever learned came four years ago when Marco Andretti won our Skip Barber National championship. Michael and Mario came to as many of our races as they could and were full of incredible insight. When we asked Mario what his "Secret to Success" was, he said: "People think the brake is for slowing up and the throttle is for accelerating. They are also used to balance the car." While there is a lot more to learn to drive competitive laps, this concept is a very good starting point.

As with most fast turns, any necessary speed adjustments for the Chute should be made before turn-in. We balance the car with the throttle here. Some good-handling, underpowered cars might take it flat out but the goal is to be able to add power with commitment to make the car hook up. Note: We have actually seen corners that could be taken flat out which led to slower exit speed. If you scrub speed at the apex, all you've proven is

that it takes talent and bravery to go slow... Knowing where to go slow to turn a fast lap is a really good thing and racing is not a drifting competition. Warning: In a turn if you're a pedal-snapper off the throttle or brake at anywhere near the car's limit, you will spin.

Since the repaving, the concrete reference points are gone in the Carousel. Some drivers treat this as one long right-hand turn. With higher horsepower cars I've found it helpful to lighten steering pressure in the middle to set up a later apex into the Esses. This rhythm section leads onto the long, uphill backstretch. Remember that races are won on straights because that's where we spend the most time. Knowing where to go slow, and getting the highest possible exit speed is essential to turning fast laps.

Helpful Hints:

Relax. The calmer you are, the wider your peripheral vision will be. This correlates with better balance. No one sleeps the night before their first race. Experienced drivers have a "Sense of Calm" and wake up for the braking zones.

When it feels good – Watch Out, you may be getting the "Red Mist"

When it feels fast – Look further ahead or slow down. You should be "In the Zone" where everything come at you slowly.

The difference between a good driver and a bad one is when mistakes are caught. Look through the turns –It's not good enough to get close to an apex... You've got to be on the correct angle for a safe exit.

Have a good time - All this is supposed to be Fun.

**Bruce MacInnes has been a Senior Instructor at the Skip Barber Racing School for 30 years. He is a Can-Am winner, set 18 lap records and, as two-time Pro-Formula Ford Champion, was voted "Formula Magazine's Driver of the Year" twice. When not instructing for Skip Barber, he enjoys private coaching – and flying his Vans RV-4 homebuilt aircraft (which he has landed at Summit Point, by the way).*